

**GW - 028**

**MONITORING  
REPORT**

**2004 Annual GW  
Report Vol. 1  
(02/25/2005)**



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February 25, 2005

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CERTIFIED MAIL/RETURN RECEIPT

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### RE: Navajo Refining's RY 2004 Annual Groundwater Monitoring Report

Dear Roger,

Enclosed, please find the 2004 Groundwater Monitoring Report for Navajo Refining in Artesia New Mexico. This report is submitted as per Navajo's Discharge Permit GW-028 dated April 17, 2003.

If there are any questions, please call me at 505-748-3311.

Respectfully,

**NAVAJO REFINING COMPANY**

Jefferson L. Byrd  
Sr. Environmental Specialist

Encl.

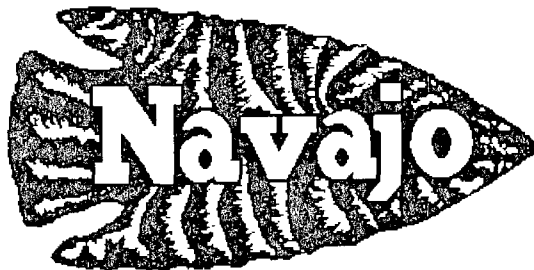
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**2004 ANNUAL GROUNDWATER REPORT**

**for**

**NAVAJO REFINING COMPANY  
ARTESIA, NEW MEXICO**



**Prepared for:**

**NEW MEXICO ENERGY, MINERAL and NATURAL RESOURCES  
DEPARTMENT**

**OIL CONSERVATION DIVISION  
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**ATTACHMENT A** – 2004 QUARTERLY RECOVERY WELL PRODUCTION REPORTS

**ATTACHMENT B** – 2004 ANNUAL AND SEMI-ANNUAL LABORTORY ANALYTICAL REPORTS

**ATTACHMENT C** – 2004 NCL/TEL LABORATORY ANALYTICAL REPORTS

**ATTACHMENT D** – 2004 EVAPORATION PONDS GROUNDWATER ANALYTICAL REPORTS

**ATTACHMENT E** – 2004 RO REJECT LABORATORY ANALYTICAL REPORTS

**ATTACHMENT F** – 2004 IRRIGATION WELL MONTHLY LABORATORY ANALYTICAL REPORTS

**ANNUAL GROUND WATER REPORT**  
**Navajo Refining Company**  
**Artesia, New Mexico**

**1.0 SUMMARY**

The amount of free-phase product on the groundwater is being effectively reduced. The recovery well product production in the plant has been drastically reduced. Two recovery wells on Bolten Road (RW-13 and RW-14) continue to catch and remove the hydrocarbon plume. No free-phase hydrocarbon has been detected in monitoring wells down gradient from the Bolten Road recovery wells since 2003. The dissolved phase plume appears to be mostly stable or diminishing.

## 2.0 RECOVERY WELLS

For 2004, Navajo pumped approximately 5,686,019 gallons of water out of our recovery wells and 181,765 gallons of product. The amount that came from each well is detailed in TABLE 2-1. Recovery wells 16, 17, and 18 are included on this table, even though they are currently only used for monitoring. The wells are monitored on a weekly basis and sampled annually. The results of this sampling are provided in Section 3.0. Navajo has a dedicated technician that operates these wells. All gauging and pumping information is compiled on weekly reports. These reports are then used to create Quarterly Reports, which are provided in ATTACHMENT A.

All water that is pumped out of these wells is sent to our waste water plant to be treated with other refinery waters. Product is taken to the API oil/water separator and is eventually introduced back into the refinery for reprocessing. In 2004, the amount of product recovered fell for the third year in a row. Also, due to the relatively thin layer of product on the surface of most of the wells, a portion of the product volume is also recovered water. In some cases this has been determined to be almost 90% via a "bucket test". This trend has occurred for the last few years. This is attributed to the fact that there is just not as much product left to be recovered and we are pumping more water to get that product. Most of the trenches (#'s 1, 2, 3, 4, 7, 9, 10, 11, 12, 16, 17, and 18) were shut down for most of 2004 or earlier because there was not any product in them to recover. Recovery wells 16, 17, and 18 have never had any product in them. The Bolton Road Trenches (RWs-11, 12, 13, and 14) that have water, are run continuously except for maintenance or end of line sampling to ensure no potential product plume gets past these trenches. Recovery trenches 11 and 12 rarely have any fluids in them. This is believed to be partly due to the fact that the shallow ground water bearing unit is not contiguous. We installed a monitoring well (MW-57) directly down gradient of #11 to ensure that a product plume is not getting under the trench. No product has developed in MW-57 at this time. We check all trenches once a week. If product is found, the pumps will be turned on. We also let the water pumps create a cone of depression to help any product to migrate to the pumps. In addition to the trenches, we check monitoring wells KWBs-4, 5, 6, and 8 for the presence of hydrocarbons. If any are found in these wells, it is remove via a submersible pump, or hand bailer. These wells also have a passive bailer placed into them to help remove the sheen layer which is currently present.

**TABLE 2-1 RECOVERY WELL PRODUCTION**

**TABLE 2-1  
RECOVERY WELL PRODUCTION**

|                    | Volume of Hydrocarbons Recovered<br>(gallons) |                     |                     |                     |                | Volume of Water Recovered<br>(gallons) |                     |                     |                     |                  |
|--------------------|-----------------------------------------------|---------------------|---------------------|---------------------|----------------|----------------------------------------|---------------------|---------------------|---------------------|------------------|
|                    | 1 <sup>st</sup> Qtr                           | 2 <sup>nd</sup> Qtr | 3 <sup>rd</sup> Qtr | 4 <sup>th</sup> Qtr | Total 2004     | 1 <sup>st</sup> Qtr                    | 2 <sup>nd</sup> Qtr | 3 <sup>rd</sup> Qtr | 4 <sup>th</sup> Qtr | Total 2004       |
| RW-1               | 109                                           | 0                   | 0                   | 0                   | 109            | 207,600                                | 13,200              | 16,800              | 14,400              | 252,000          |
| RW-2               | 71                                            | 0                   | 0                   | 0                   | 71             | 43,200                                 | 36,000              | 50,400              | 40,800              | 170,400          |
| RW-3               | 0                                             | 0                   | 0                   | 0                   | 0              | 0                                      | 0                   | 0                   | 0                   | 0                |
| RW-4               | 0                                             | 0                   | 0                   | 0                   | 0              | 15,600                                 | 22,800              | 313,200             | 25,200              | 376,800          |
| RW-5               | 276                                           | 271                 | 360                 | 0                   | 907            | 0                                      | 0                   | 0                   | 0                   | 0                |
| RW-6               | 2,086                                         | 18,047              | 27,474              | 28,734              | 76,341         | 0                                      | 0                   | 0                   | 0                   | 0                |
| RW-7               | 0                                             | 0                   | 0                   | 0                   | 0              | 0                                      | 0                   | 0                   | 0                   | 0                |
| RW-8               | 1,825                                         | 499                 | 1,068               | 2,223               | 5,615          | 138,000                                | 193,200             | 236,400             | 211,200             | 778,800          |
| RW-9               | 0                                             | 0                   | 0                   | 0                   | 0              | 0                                      | 0                   | 0                   | 0                   | 0                |
| RW-10              | 0                                             | 0                   | 0                   | 0                   | 0              | 0                                      | 0                   | 0                   | 0                   | 0                |
| RW-11              | 0                                             | 0                   | 0                   | 0                   | 0              | 0                                      | 0                   | 0                   | 0                   | 0                |
| RW-12              | 0                                             | 0                   | 0                   | 0                   | 0              | 0                                      | 0                   | 0                   | 0                   | 0                |
| RW-13              | 5,782                                         | 6,184               | 10,084              | 3,077               | 25,127         | 144,000                                | 72,000              | 96,600              | 79,800              | 392,400          |
| RW-14              | 9,860                                         | 6,247               | 7,987               | 4,136               | 28,230         | 747,963                                | 827,959             | 1,163,942           | 915,954             | 3,655,818        |
| RW-15 <sup>1</sup> | 28,696                                        | 14,854              | 1,783               | 32                  | 45,365         | 0                                      | 0                   | 0                   | 0                   | 0                |
| RW-16              | 0                                             | 0                   | 0                   | 0                   | 0              | 0                                      | 0                   | 0                   | 0                   | 0                |
| RW-17              | 0                                             | 0                   | 0                   | 0                   | 0              | 0                                      | 0                   | 0                   | 0                   | 0                |
| RW-18              | 0                                             | 0                   | 0                   | 0                   | 0              | 0                                      | 0                   | 0                   | 0                   | 0                |
| Chase <sup>2</sup> | 0                                             | 0                   | 0                   | 0                   | 0              | 0                                      | 0                   | 0                   | 0                   | 0                |
| <b>TOTAL</b>       | <b>48,705</b>                                 | <b>46,102</b>       | <b>48,756</b>       | <b>38,202</b>       | <b>181,765</b> | <b>1,296,363</b>                       | <b>1,183,326</b>    | <b>1,886,949</b>    | <b>1,319,381</b>    | <b>5,686,019</b> |

<sup>1</sup> Formerly noted as "Toolpushers"

<sup>2</sup> Dewatering sump located at Chase's pecan farm east of Bolten Road operated as needed.

### 3.0 SEMI ANNUAL AND ANNUAL

TABLE 3-1 shows the constituents which had levels above the WQCC standards in the offsite wells. You will notice that the wells had concentrations of four metals above the WQCC standard. We have only been analyzing the wells for these constituents since the issue of our Discharge Permit GW-028 dated April 17, 2003. It is believed that these analytes are naturally occurring at these levels and are not a result of our contamination. This theory is supported by the fact that the levels are consistent between wells for two consecutive years. The laboratory analytical data sheets are provided in ATTACHMENT B.

Monitoring well MW-58, which is located down gradient from KWB-2R, as seen in FIGURE 3-1 or FIGURE 3-2, had the highest concentration of BTEX. A benzene concentration isopleth is provided on FIGURE 3-3. This is probably due to a slug of free-phase product which was noted in KWB-2R during 2002. The product was removed from KWB-2R while it was observed in the well. This well will be monitored regularly to ensure that product does not go undetected. If product was to develop in MW-57, steps will be taken to remove it.

A graph depicting benzene, ethyl benzene, and xylenes is shown in FIGURE 3-4. These constituents show that the concentrations are increasing over time. A graph of the benzene concentration in MW-28 is provided in FIGURE 3-5. The benzene concentration appears to be increasing over time in MW-28 also. This is most likely due to the dissolved phase plume which is migrating down gradient from the recovery wells RW-5 and RW-6.

The recovery wells which do not have free-phase product in them were also sampled and analyzed during the Annual sampling event. Recovery well RW-3 (located immediately north of the Refinery's Waste Water Plant) and RW-11 (the southern most trench along Bolton Road), contained elevated levels of BTEX, with a benzene concentration of 560 and 490 ppb respectively. None of these were indicative of free-phase product existing. Recovery wells RW-16 and RW-17 had low levels of benzene at 12 and 6.7 ppb respectively. These trenches are located on the north end of the plant and have not ever had free-phase product.

We also continue to see the leading edge of the dissolved phase plume reaching KWB-7 and KWB-11. These monitor wells are both east of Bolton Road which is down gradient as seen in FIGURE 3-1 (*Annual Groundwater Gradient Map*). If you remember, we sited the recovery wells on Bolton Road knowing that part of the plume was past this point. In the past, we have had samples that had low levels of COC. It is believed that due to the excessive rain throughout the year that neither of these wells had detectable COC.

Monitor wells KWB-4 and KWB-6 currently do not contain measurable amounts of hydrocarbons. We have installed passive bailers into each of these wells to remove the product as needed. We also pump these wells when necessary to keep up with the product. We began this in 2002 and seem to have effectively removed the product. Initially the bailers were being emptied daily. Now, the bailers are emptied every two to three months and the hydrocarbon layer has been reduced to a sheen or less.

The three new trenches (16, 17, and 18) that were installed at the same time as 15 (Tool Pushers), have never accumulated any product. These trenches are located as follows: 1) on the northeast corner of the refinery property on our farm, 2) along Eagle Draw just east of the North Colony Landfarm, and 3) just west of our former trickling filter. The latter two were installed as part of the North Colony Landfarm clean-up. These trenches are checked weekly for any accumulation of product. At this time, no product has been measured in these trenches. If product is found, they will be pumped, and if warranted, hard piped into our recovery system.

The recovery of product and remediation of groundwater under the refinery is progressing favorably. The drop in thickness of product around the North Colony Landfarm and Tetra-Ethyl Lead Impoundment and the reduction of product found in monitoring wells, are testament to the recovery system's effectiveness. Also there is no product to recover from a number of the wells.

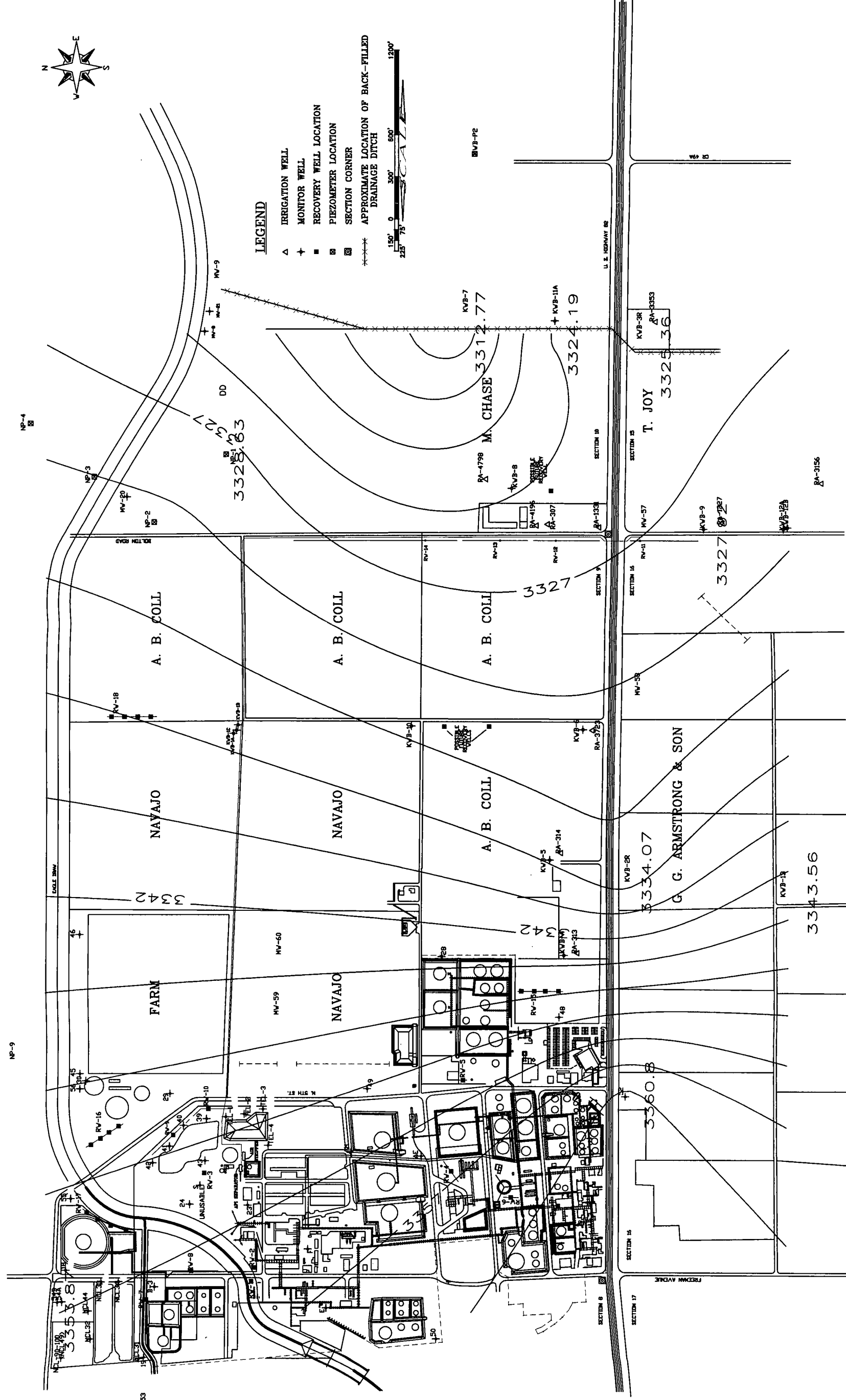
TABLE 3-1 ANNUAL AND SEMI-ANNUAL ANALYSIS RESULTS



TABLE 3-1  
ANNUAL and SEMI-ANNUAL ANALYSIS RESULTS

| WQCC     | Date       | METALS (mg/l) |      |         |           | VOLATILES (µg/l) |              |         |                         |         | ANIONS (mg/L) |         |
|----------|------------|---------------|------|---------|-----------|------------------|--------------|---------|-------------------------|---------|---------------|---------|
|          |            | Boron         | Iron | Lead    | Manganese | Benzene          | Ethylbenzene | Xylenes | Methyl tert-butyl ether | Toluene | Chloride      | Sulfate |
|          |            | 0.75          | 1    | 0.05    | 0.2       | 10               | 750          | 620     |                         | 750     | 250           | 600     |
| KWB-1A   | 3/14/2000  | BDL           | BDL  | BDL     | BDL       | BDL              | 3.74         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 9/19/2000  | BDL           | BDL  | BDL     | BDL       | BDL              | 3.74         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/10/2001  | BDL           | BDL  | BDL     | BDL       | 2.71             | 3.15         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 7/19/2001  | BDL           | BDL  | BDL     | BDL       | 22.8             | 7.6          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/22/2003  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 9/30/2003  | 0.95          | 0.9  | BDL     | 0.256     | BDL              | BDL          | BDL     | BDL                     | BDL     | 233           | 2160    |
|          | 10/15/2004 | 0.931         | 2.08 | BDL     | 0.261     | BDL              | BDL          | BDL     | BDL                     | BDL     | 395           | 2480    |
| KWB-1C   | 9/19/2000  | BDL           | BDL  | BDL     | BDL       | BDL              | 3.43         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/10/2001  | BDL           | BDL  | BDL     | BDL       | 1.73             | 2.3          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 7/19/2001  | BDL           | BDL  | BDL     | BDL       | 3.16             | 1.01         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/10/2001 | BDL           | BDL  | BDL     | BDL       | 1.03             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/22/2003  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 9/30/2003  | 0.781         | 2.03 | BDL     | 0.357     | BDL              | BDL          | BDL     | BDL                     | BDL     | 272           | 2210    |
|          | 10/15/2004 | 0.884         | 1.97 | BDL     | 0.33      | BDL              | BDL          | BDL     | BDL                     | BDL     | 321           | 2360    |
| KWB-2R   | 9/19/2000  | BDL           | BDL  | BDL     | BDL       | 932              | 1129         | 348     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/10/2001  | BDL           | BDL  | BDL     | BDL       | 1341             | 888          | 61.1    | BDL                     | BDL     | BDL           | BDL     |
|          | 7/19/2001  | BDL           | BDL  | BDL     | BDL       | 2464             | 668          | 67.3    | BDL                     | BDL     | BDL           | BDL     |
|          | 10/10/2001 | BDL           | BDL  | BDL     | BDL       | 1750             | 1410         | 754     | BDL                     | BDL     | BDL           | BDL     |
|          | 1/10/2002  | BDL           | BDL  | BDL     | BDL       | 39               | 7.8          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 3/14/2002  | BDL           | BDL  | BDL     | BDL       | 7200             | 5800         | 12700   | BDL                     | 5400    | BDL           | BDL     |
|          | 7/15/2002  | BDL           | BDL  | BDL     | BDL       | 6900             | 9800         | 12900   | BDL                     | 2800    | BDL           | BDL     |
|          | 9/30/2003  | 0.421         | 3.3  | 0.0132  | 0.784     | 1600             | 1200         | 730     | BDL                     | 29      | 480           | 492     |
|          | 6/29/2004  | BDL           | BDL  | BDL     | BDL       | 1500             | 2400         | 2.5     | 410                     | BDL     | BDL           | BDL     |
|          |            |               |      |         |           |                  |              |         |                         |         |               |         |
| KWB-3a   | 9/19/2000  | BDL           | BDL  | BDL     | BDL       | 1.23             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/10/2001  | BDL           | BDL  | BDL     | BDL       | 1.23             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 7/19/2001  | BDL           | BDL  | BDL     | BDL       | 14.5             | 4.06         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/22/2003  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
| KWB-3R   | 9/30/2003  | 0.316         | 3.26 | BDL     | 0.0737    | 20               | 31           | 18      | BDL                     | BDL     | 396           | 2660    |
|          | 6/29/2004  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/19/2004 | 0.445         | 1.94 | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | 449           | 2680    |
| KWB-7'   | 4/10/2001  | BDL           | BDL  | BDL     | BDL       | 3.39             | 3.98         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 1/10/2002  | BDL           | BDL  | BDL     | BDL       | 1.86             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 7/9/2002   | BDL           | BDL  | BDL     | BDL       | 53.1             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 9/23/2002  | BDL           | BDL  | BDL     | BDL       | 7.86             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/22/2003  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/28/2003 | BDL           | BDL  | BDL     | BDL       | 22               | 10           | 13      | BDL                     | 5.4     | BDL           | BDL     |
|          | 6/29/2004  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | 35                      | BDL     | BDL           | BDL     |
| KWB-9    | 9/19/2000  | BDL           | BDL  | BDL     | BDL       | 2.19             | 5.43         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/10/2001  | BDL           | BDL  | BDL     | BDL       | 33.6             | 11.7         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 7/19/2001  | BDL           | BDL  | BDL     | BDL       | 28.9             | 9.48         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/22/2003  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/6/2003  | 0.403         | 1.62 | BDL     | 0.011     | 7.1              | BDL          | BDL     | BDL                     | BDL     | 349           | 1,260   |
|          | 6/29/2004  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/19/2004 | 0.435         | 1.19 | BDL     | 0.0194    | BDL              | BDL          | BDL     | BDL                     | BDL     | 227           | 1290    |
| KWB-10   | 9/30/2003  | 0.3           | 1.67 | 0.0574  | 0.609     | 23               | 20           | 11      | BDL                     | BDL     | 164           | 8       |
|          | 10/15/2004 | 0.319         | 1.27 | 0.0739  | 0.464     | BDL              | BDL          | BDL     | BDL                     | BDL     | 151           | 6       |
| KWB-11A' | 4/10/2001  | BDL           | BDL  | BDL     | BDL       | 6.57             | 5.67         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 7/9/2002   | BDL           | BDL  | BDL     | BDL       | 1.24             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 9/25/2002  | BDL           | BDL  | BDL     | BDL       | BDL              | 2.17         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/22/03    | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/28/2003 | BDL           | BDL  | BDL     | BDL       | 9.1              | 9.2          | 11      | BDL                     | 4.5     | BDL           | BDL     |
|          | 6/29/2004  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | 14                      | BDL     | BDL           | BDL     |
|          |            |               |      |         |           |                  |              |         |                         |         |               |         |
| KWB-12a  | 9/19/2000  | BDL           | BDL  | BDL     | BDL       | 2.39             | 5.79         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 7/9/2002   | BDL           | BDL  | BDL     | BDL       | 1.94             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 9/25/2002  | BDL           | BDL  | BDL     | BDL       | 6.35             | 2.31         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/22/2003  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          |            |               |      |         |           |                  |              |         |                         |         |               |         |
| KWB-13'  | 1/10/2002  | BDL           | BDL  | BDL     | BDL       | 1.04             | BDL          | BDL     | BDL                     | 1.04    | BDL           | BDL     |
|          | 12/18/2003 | BDL           | BDL  | BDL     | BDL       | 8.62             | BDL          | 3.65    | BDL                     | 1.84    | BDL           | BDL     |
|          | 4/25/2003  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/28/2003 | BDL           | BDL  | BDL     | BDL       | 18               | 13           | 15      | BDL                     | 7.6     | BDL           | BDL     |
|          | 6/29/2004  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          |            |               |      |         |           |                  |              |         |                         |         |               |         |
| MW-18    | 1/11/2001  | BDL           | BDL  | BDL     | BDL       | 16.4             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/18/2001  | BDL           | BDL  | BDL     | BDL       | 1.04             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 1/10/2002  | BDL           | BDL  | BDL     | BDL       | 3.93             | 4.24         | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/22/2003  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/6/2003  | 0.465         | 1.55 | BDL     | 0.114     | BDL              | BDL          | BDL     | BDL                     | BDL     | 193           | 1,150   |
|          | 6/29/2004  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/6/2004  | 0.498         | 1.34 | BDL     | 0.113     | BDL              | BDL          | BDL     | BDL                     | BDL     | 203           | 1120    |
| MW-28    | 6/28/2000  | BDL           | BDL  | BDL     | BDL       | 10.85            | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 9/19/2000  | BDL           | BDL  | BDL     | BDL       | 27.6             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 1/11/2001  | BDL           | BDL  | BDL     | BDL       | 30.5             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 4/18/2001  | BDL           | BDL  | BDL     | BDL       | 8.1              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 7/31/2001  | BDL           | BDL  | BDL     | BDL       | 67.2             | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/11/2001 | BDL           | BDL  | BDL     | BDL       | 114              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 3/14/2002  | BDL           | BDL  | BDL     | BDL       | 1800             | 185          | 154     | BDL                     | BDL     | BDL           | BDL     |
|          | 7/15/2002  | BDL           | BDL  | BDL     | BDL       | 1760             | 143          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 9/25/2002  | BDL           | BDL  | BDL     | BDL       | 982              | BDL          | 238     | BDL                     | BDL     | BDL           | BDL     |
|          | 12/19/2002 | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | 1750    | BDL           | BDL     |
|          | 4/29/2003  | BDL           | BDL  | BDL     | BDL       | 362              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/6/2003  | 1.45          | 1.84 | 0.00863 | 0.0721    | 1700             | 220          | 280     | BDL                     | 39      | 167           | 1,360   |
|          | 10/19/2004 | 1.45          | 1.13 | 0.0125  | 0.0688    | 690              | 55           | 170     | BDL                     | 21      | 163           | 978     |
| MW-29    | 1/25/2003  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/7/2003  | 1.39          | 1.01 | BDL     | 0.434     | BDL              | BDL          | BDL     | BDL                     | BDL     | 400           | 1,870   |
|          | 10/6/2004  | 0.725         | 1.32 | BDL     | 0.313     | BDL              | BDL          | BDL     | BDL                     | BDL     | 395           | 1,160   |
|          |            |               |      |         |           |                  |              |         |                         |         |               |         |
| MW-45    | 9/19/2000  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | 4.72    | BDL           | BDL     |
|          | 1/11/2001  | BDL           | BDL  | BDL     | BDL       | BDL              | 0.79         | 4.19    | BDL                     | 1.97    | BDL           | BDL     |
|          | 4/18/2001  | BDL           | BDL  | BDL     | BDL       | BDL              | 1.8          | 6.68    | BDL                     | 1.64    | BDL           | BDL     |
|          | 7/31/2001  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | 2.59    | BDL                     | 1.45    | BDL           | BDL     |
|          | 10/11/2001 | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | 13.7    | BDL                     | BDL     | BDL           | BDL     |
|          | 1/10/2002  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | 12.8    | BDL                     | BDL     | BDL           | BDL     |
|          | 3/14/2002  | BDL           | BDL  | BDL     | BDL       | 6.58             | 1.36         | 15.82   | BDL                     | BDL     | BDL           | BDL     |
|          | 7/15/2002  | BDL           | BDL  | BDL     | BDL       | 10.3             | 2.67         | 4.93    | BDL                     | 1.37    | BDL           | BDL     |
|          | 9/25/2002  | BDL           | BDL  | BDL     | BDL       | 11.8             | BDL          | 17.04   | BDL                     | BDL     | BDL           | BDL     |
|          | 12/18/2003 | BDL           | BDL  | BDL     | BDL       | 21.7             | 4.67         | 14.53   | BDL                     | 2.03    | BDL           | BDL     |
|          | 1/24/2003  | BDL           | BDL  | BDL     | BDL       | BDL              | BDL          | BDL     | BDL                     | BDL     | BDL           | BDL     |
|          | 10/14/2003 | 0.519         | 1.3  | 0.0119  | 0.394     | BDL              | BDL          | BDL     | BDL                     | BDL     | 320           | 1,960   |
|          | 10/6/2004  | 0.57          | 1.48 | BDL     | 0.305     | BDL              | BDL          | BDL     | BDL                     | BDL     | 375           | 1,710   |
|          |            |               |      |         |           |                  |              |         |                         |         |               |         |

FIGURE 3-1 FIRST SEMI-ANNUAL GROUNDWATER GRADIENT MAP



|                                                             |                    |  |           |  |    |  |           |  |             |                       |                                                                    |  |           |  |    |  |           |  |             |                                                                                                                                          |                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |
|-------------------------------------------------------------|--------------------|--|-----------|--|----|--|-----------|--|-------------|-----------------------|--------------------------------------------------------------------|--|-----------|--|----|--|-----------|--|-------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|
| NOTES<br>TRENCHES _____<br>POSSIBLE FUTURE TRENCHES - - - - | REFERENCE DRAWINGS |  |           |  |    |  |           |  |             |                       | DRAWING TITLE                                                      |  |           |  |    |  |           |  |             |                                                                                                                                          | <div><div>NAVAJO REFINING CO.<br/>ENGINEERING DEPARTMENT<br/>P.O. DRAWER 159<br/>ARTESIA, NEW MEXICO</div></div> |  |  |  |  |  |  |  |  |
|                                                             |                    |  |           |  |    |  |           |  |             |                       | FIGURE 3-1<br>GROUNDWATER<br>POTENTIOMETRIC MAP<br>NAVAJO REFINING |  |           |  |    |  |           |  |             |                                                                                                                                          |                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |
|                                                             | NO.                |  | REVISIONS |  | BY |  | CHK. DATE |  | APPR. APRR. |                       | ND.                                                                |  | REVISIONS |  | BY |  | CHK. DATE |  | APPR. APRR. |                                                                                                                                          |                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |
|                                                             |                    |  |           |  |    |  |           |  |             |                       |                                                                    |  |           |  |    |  |           |  |             |                                                                                                                                          |                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |
|                                                             |                    |  |           |  |    |  |           |  |             |                       |                                                                    |  |           |  |    |  |           |  |             |                                                                                                                                          |                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |
|                                                             |                    |  |           |  |    |  |           |  |             |                       |                                                                    |  |           |  |    |  |           |  |             |                                                                                                                                          |                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |
|                                                             |                    |  |           |  |    |  |           |  |             | 0 2004, JUNE READINGS |                                                                    |  |           |  |    |  |           |  |             | DRAWN BY<br>DLW<br>DATE<br>3-17-95<br>CHECKED BY<br>JGM<br>APPR BY<br>ILS<br>SCALE<br>AS SHOWN<br>DRAWING NUMBER<br>90-44-D<br>REV.<br>0 |                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |

FIGURE 3-2 SECOND SEMI-ANNUAL GROUNDWATER GRADIENT MAP



FIGURE 3-3 BENZENE CONCENTRAION ISOPLETH



FIGURE 3-4 KWB-2R ANALYTICAL RESULTS GRAPH



FIGURE 3-4  
KWB-2R

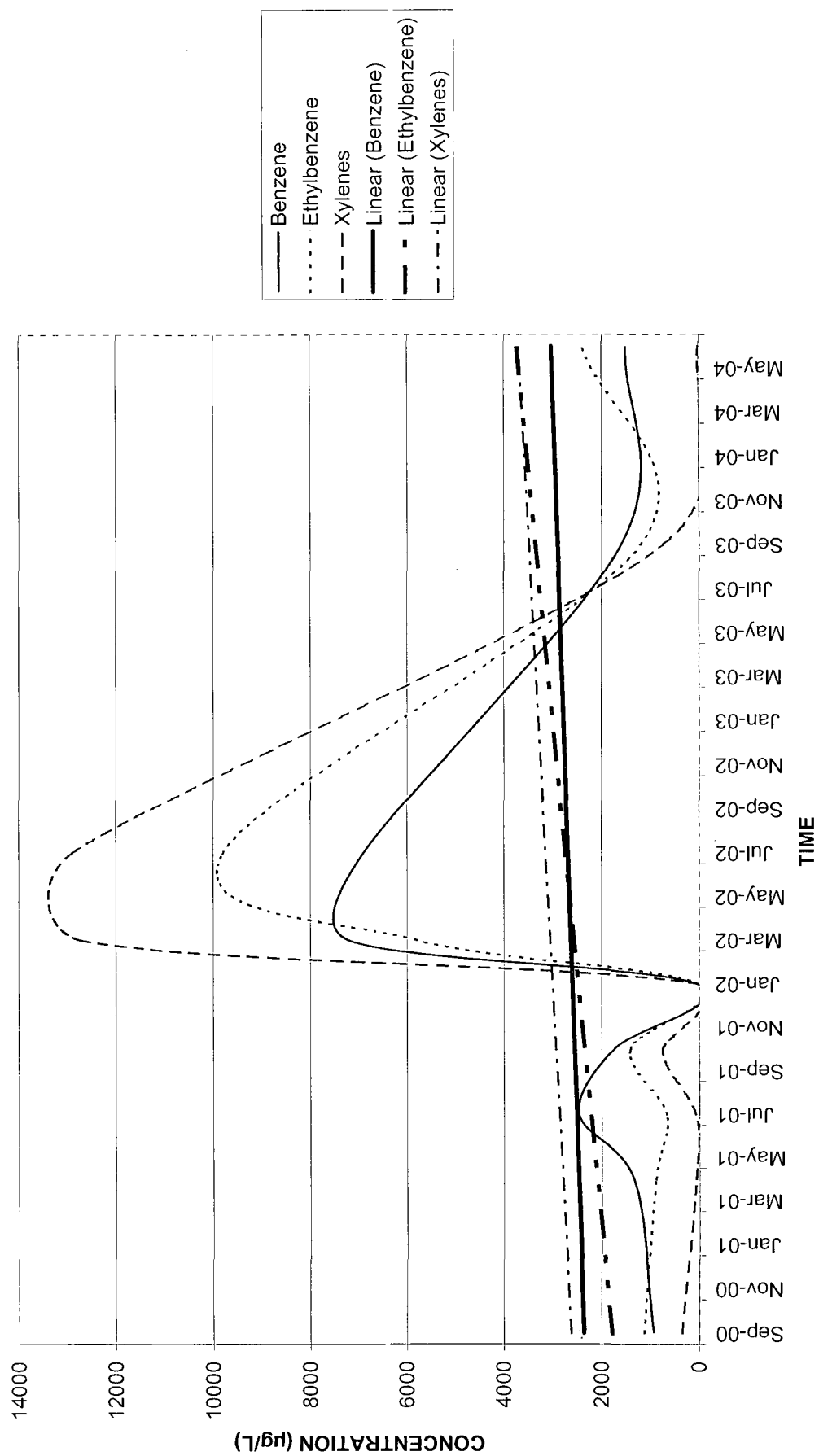
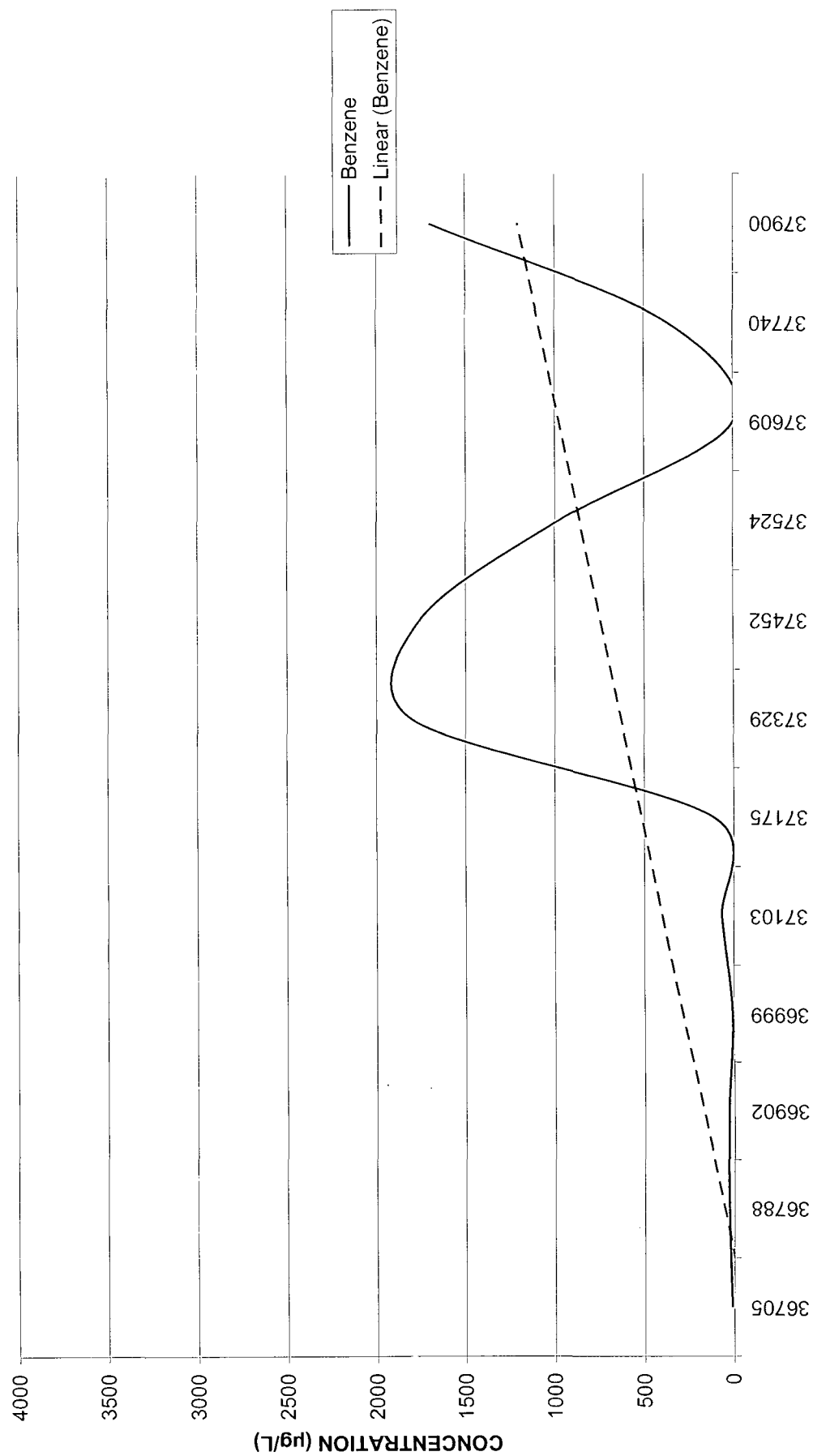


FIGURE 3-5 MW-28 ANALYTICAL RESULTS GRAPH

FIGURE 3-5  
MW-28



*Scale use m-yr.*

#### 4.0 NCL/TEL

TABLE's 4-1 thru 4-4 contain the field observations for the fifteen monitoring wells sampled. This is the second year that Dissolved Oxygen (D.O.) and Oxidation-Reduction Potential (ORP) have been collected. These parameters, along with pH, Temperature, and Conductivity are all taken with a flow-thru cell. A 12-volt submersible pump is used to pump water through the cell. The cell is a closed system with an influent and effluent port. The probes are submersed in the water with a minimal amount of air left in the cell. Continuous readings of all of the field parameters are taken as the water passes through the cell.

TABLE 4-5 contains the analytical results for the monitoring wells. The three metals; boron, iron, and manganese had several results above the WQCC level. It is believed that they are at naturally occurring levels because the concentration is not statistically different between the wells or past analysis results, as can be seen in the TABLE. Monitoring well NCL-34 has shown a fluctuation in BTEX concentrations. A graph of benzene, ethyl benzene, and xylenes is provided in FIGURE 4-1. As this graph shows, these constituents have had an overall decline over the years. Benzene has ranged from 5,010 ppb in 1997 down to 957 ppb in 2002 and now back to 2,300 ppb in 2004. This may be due to water level fluctuations.

Monitoring wells TEL-2 and TEL-3 have both been declining over the last several years and illustrated in FIGURE's 4-2 and 4-3, respectively. These wells are generally down gradient from the TEL impoundment. These wells have exhibited free-phase product on them over the years. However, the thickness of product has been declining from 2 to 3 feet ten to fifteen years ago to less than an inch in recent years.

Monitoring well TEL-4, has been showing a decrease in BTEX concentration, as illustrated in FIGURE 4-4. This well is the up gradient well for the TEL impoundment. As previously stated, it is believed that this is due to a historic plume resulting from the former tank farm which was located in the same vicinity as the current Alky and CCR units. All of the laboratory analytical data sheets for the 2004 sampling events are provided in ATTACHMENT C.

No significant free-phase hydrocarbon plume exists around the plant and therefore no isopleth was created. Monitoring well TEL-3 has had a consistent layer of hydrocarbon while none of the other TEL monitoring wells contained any. This is the only monitoring well to contain hydrocarbons throughout the year.

TABLE 4-1 SUMMARY OF FIELD OBSERVATIONS (NCL/TEL First Quarter)

TABLE 4-1  
SUMMARY OF FIELD OBSERVATIONS  
First 2004 Quarterly Sampling

| WELL # | CONDUCTIVITY | TEMPERATURE | pH   | DO (%) | ORP     | ELEV. TO TOP OF CASING | GROUND WATER ELEVATION | TD   | DEPTH TO H2O | DEPTH TO FLUID | THICKNES S OF PRODUCT | CORR. DEPTH TO H2O | WELL VOLUME | MINIMUM VOLUME EVACUATED | Comments       |
|--------|--------------|-------------|------|--------|---------|------------------------|------------------------|------|--------------|----------------|-----------------------|--------------------|-------------|--------------------------|----------------|
| TEL 4  | 3054         | 20.8        | 6.79 | 1.50   | -358.50 | 3363.31                | 3354.45                | 27.2 | 8.86         | 8.86           | 0                     | 8.86               | 3.0         | 9                        | slight odor    |
| TEL 3  | 2827         | 20.1        | 6.92 | 4.20   | -342.20 | 3361.45                | 3355.28                | 27.2 | 6.26         | 6.16           | 0.1                   | 6.17               | 3.4         | 11                       | slight odor    |
| TEL 2  | 2976         | 20.9        | 6.93 | 11.20  | -372.90 | 3362.23                | 3355.53                | 27.2 | 6.70         | 6.70           | 0                     | 6.70               | 3.3         | 11                       | lvy odor       |
| TEL 1  | 3572         | 20.3        | 7.10 | 3.40   | -307.20 | 3361.34                | 3355.79                | 27.2 | 5.55         | 5.55           | 0                     | 5.55               | 3.5         | 11                       | clear          |
| MW-53  | 2250         | 22.9        | 6.93 | 0.01   | -70.10  | 3367.87                | 3353.79                | 20.5 | 14.08        | 14.08          | 0                     | 14.08              | 1.0         | 4                        | clear          |
| MW-54A | 1905         | 20.1        | 6.75 | 11.20  | -141.90 | 3365.66                | 3352.99                | 31.3 | 12.67        | 12.67          | 0                     | 12.67              | 3.0         | 10                       | clear, odor    |
| MW-55  | 3082         | 20.7        | 6.83 | 1.60   | 122.20  | 3363.97                | 3353.19                | 26.5 | 10.78        | 10.78          | 0                     | 10.78              | 2.6         | 8                        | clear, no odor |
| MW-59  | 2994         | 20.5        | 6.81 | 1.80   | -255.40 | 3361.21                | 3357.53                | 30.1 | 3.68         | 3.68           | 0                     | 3.68               | 4.3         | 13                       |                |
| MW-60  | 3215         | 20.7        | 6.78 | 4.90   | -129.70 | 3362.42                | 3357.00                | 30.2 | 5.42         | 5.42           | 0                     | 5.42               |             |                          |                |
| NCL-32 | 2505         | 20.7        | 6.88 | 8.90   | 140.80  | 3363.72                | 3352.72                | 19.7 | 11.00        | 11.00          | 0                     | 11.00              | 1.4         | 5                        | oil sheen      |
| NCL-33 | 2110         | 21.5        | 6.60 | 3.30   | -5.20   | 3364.74                | 3353.86                | 19.7 | 10.88        | 10.88          | 0                     | 10.88              | 1.4         | 5                        | clear          |
| NCL-34 | 2350         | 21.9        | 6.71 | 2.80   | -283.40 | 3364.74                | 3353.39                | 19.3 | 11.36        | 11.35          | 0.01                  | 11.35              | 1.3         | 4                        | clear          |

TABLE 4-2 SUMMARY OF FIELD OBSERVATIONS (NCL/TEL Second Quarter)

TABLE 4-2  
Summary of Field Observations  
Second 2004 Quarterly Sampling

| WELL # | CONDUCTIVITY | TEMPERATURE | pH   | DO (%) | ORP     | ELEV. TO TOP OF CASING | GROUND WATER ELEVATION | TD   | DEPTH TO H2O | DEPTH TO FLUID | THICKNES S OF PRODUCT | CORR. DEPTH TO H2O | WELL VOLUME | MINIMUM VOLUME EVACUATED | Comments       |
|--------|--------------|-------------|------|--------|---------|------------------------|------------------------|------|--------------|----------------|-----------------------|--------------------|-------------|--------------------------|----------------|
| TEL 4  | 3865         | 19.7        | 6.66 | 9.90   | -359.90 | 3363.31                | 3355.61                | 27.2 | 7.70         | 7.70           | 0                     | 7.70               | 3.2         | 10                       | slight odor    |
| TEL 3  | 3260         | 18.6        | 6.68 | 8.30   | -353.70 | 3361.45                | 3356.10                | 27.2 | 6.06         | 5.24           | 0.82                  | 5.35               | 3.6         | 11                       | slight odor    |
| TEL 2  | 2918         | 19.8        | 6.81 |        | -373.10 | 3362.23                | 3355.39                | 27.2 | 6.84         | 6.84           | 0                     | 6.84               | 3.3         | 10                       | hvy odor       |
| TEL 1  | 3681         | 19.6        | 6.86 |        | -291.60 | 3361.34                | 3355.51                | 27.2 | 5.83         | 5.83           | 0                     | 5.83               | 3.5         | 11                       | clear          |
| MW-53  | 2100         | 19.2        | 6.95 | 0.10   | -80.30  | 3367.87                | 3357.62                | 20.5 | 10.25        | 10.25          | 0                     | 10.25              | 1.7         | 6                        | clear          |
| MW-54A | 1634         | 18.7        | 6.71 | 6.70   | -58.40  | 3365.66                | 3355.08                | 31.3 | 10.58        | 10.58          | 0                     | 10.58              | 3.4         | 11                       | clear, odor    |
| MW-55  | 1776         | 19.7        | 6.91 | 6.10   | 114.40  | 3363.97                | 3354.76                | 26.5 | 9.21         | 9.21           | 0                     | 9.21               | 2.8         | 9                        | clear, no odor |
| MW-59  | 2886         | 19.9        | 6.98 | 3.10   | -258.90 | 3361.21                | 3358.06                | 30.1 | 3.15         | 3.15           | 0                     | 3.15               |             |                          |                |
| MW-60  | 2950         | 19.7        | 6.86 | 11.90  | -206.60 | 3362.42                | 3358.11                | 30.2 | 4.31         | 4.31           | 0                     | 4.31               |             |                          |                |
| NCL-32 | 2450         | 20.1        | 6.72 | 9.30   | 135.60  | 3363.72                | 3354.75                | 19.7 | 8.97         | 8.97           | 0                     | 8.97               | 1.8         | 6                        | oil sheen      |
| NCL-33 | 2231         | 19.7        | 6.68 | 17.30  | -135.70 | 3364.74                | 3356.13                | 19.7 | 8.61         | 8.61           | 0                     | 8.61               | 1.8         | 6                        | clear          |
| NCL-34 | 2195         | 21.6        | 6.72 | 6.70   | -331.00 | 3364.74                | 3355.62                | 19.3 | 9.12         | 9.12           | 0                     | 9.12               | 1.7         | 5                        | clear          |



TABLE 4-3 SUMMARY OF FIELD OBSERVATIONS (NCL/TEL Third Quarter)

TABLE 4-3  
Summary of Field Observations  
Third 2004 Quarterly Sampling

| WELL # | CONDUCTIVITY | TEMPERATURE | pH   | DO (%) | ORP     | ELEV. TO<br>TOP OF<br>CASING | GROUND<br>WATER<br>ELEVATION | TD   | DEPTH<br>TO H2O | DEPTH TO<br>FLUID | THICKNES<br>S OF<br>PRODUCT | CORR.<br>DEPTH TO<br>H2O | WELL<br>VOLUME | MINIMUM<br>VOLUME<br>EVACUATED | Comments       |
|--------|--------------|-------------|------|--------|---------|------------------------------|------------------------------|------|-----------------|-------------------|-----------------------------|--------------------------|----------------|--------------------------------|----------------|
| TEL 4  | 2192         | 20.4        | 6.91 | 148.00 | 308.50  | 3363.31                      | 3353.39                      | 27.2 | 9.92            | 9.92              | 0                           | 9.92                     | 2.8            | 9                              | slight odor    |
| TEL 3  | 3155         | 19.5        | 6.83 | 0.00   | -351.20 | 3361.45                      | 3353.75                      | 27.2 | 7.81            | 7.68              | 0.13                        | 7.70                     | 3.2            | 10                             | slight odor    |
| TEL 2  | 2413         | 20.1        | 6.96 | 0.20   | -367.10 | 3362.23                      | 3353.99                      | 27.2 | 8.24            | 8.24              | 0                           | 8.24                     | 3.1            | 10                             | hyv odor       |
| TEL 1  | 2546         | 19.9        | 7.07 | 0.40   | -319.20 | 3361.34                      | 3353.71                      | 26.9 | 7.63            | 7.63              | 0                           | 7.63                     | 3.1            | 10                             | clear          |
| MW-53  | 2232         | 21.3        | 7.25 | 1.20   | 79.40   | 3367.87                      | 3356.89                      | 20.5 | 10.98           | 10.98             | 0                           | 10.98                    | 1.6            | 5                              | clear          |
| MW-54A | 2192         | 19.4        | 6.88 | 1.00   | -172.80 | 3365.66                      | 3354.48                      | 31.3 | 11.18           | 11.18             | 0                           | 11.18                    | 3.3            | 10                             | clear, odor    |
| MW-55  | 3278         | 20.1        | 6.88 | 0.80   | 51.00   | 3363.97                      | 3354.85                      | 26.5 | 9.12            | 9.12              | 0                           | 9.12                     | 2.8            | 9                              | clear, no odor |
| MW-59  | 3092         | 20.3        | 6.89 | 1.00   | -246.70 | 3361.21                      | 3354.04                      | 35.1 | 7.17            | 7.17              | 0                           | 7.17                     | 4.6            | 14                             |                |
| MW-60  | 3334         | 19.9        | 6.80 | 0.80   | -174.90 | 3361.15                      | 3353.02                      | 35.1 | 8.13            | 8.13              | 0                           | 8.13                     | 4.4            | 14                             |                |
| NCL-32 | 2578         | 20          | 6.96 | 0.90   | -153.40 | 3363.72                      | 3354.45                      | 19.8 | 9.27            | 9.27              | 0                           | 9.27                     | 1.7            | 6                              | oil sheen      |
| NCL-33 | 2226         | 20.1        | 6.74 | 17.60  | -180.40 | 3363.28                      | 3353.70                      | 20.5 | 9.58            | 9.58              | 0                           | 9.58                     | 1.8            | 6                              | clear          |
| NCL-34 | 2247         | 21.6        | 6.77 | 0.30   | -327.30 | 3364.74                      | 3354.39                      | 19.3 | 10.35           | 10.35             | 0                           | 10.35                    | 1.5            | 5                              | clear          |

TABLE 4-4 SUMMARY OF FIELD OBSERVATIONS (NCL/TEL Fourth Quarter)

TABLE 4-4  
Summary of Field Observations  
Forth 2004 Quarterly Sampling

| WELL # | CONDUCTIVITY | TEMPERATURE | pH   | DO (%) | ORP    | ELEV. TO TOP OF CASING | GROUND WATER ELEVATION | TD    | DEPTH TO H2O | DEPTH TO FLUID | THICKNES S OF PRODUCT | CORR. DEPTH TO H2O | WELL VOLUME | MINIMUM VOLUME EVACUATED | Comments          |
|--------|--------------|-------------|------|--------|--------|------------------------|------------------------|-------|--------------|----------------|-----------------------|--------------------|-------------|--------------------------|-------------------|
| TEL 4  | 2995         | 21.4        | 6.86 | 1.0    | -319.7 | 3363.31                | 3354.82                | 27.2  | 8.49         | 8.49           | 0                     | 8.49               | 3.1         | 10                       | slight odor       |
| TEL 3  | 3218         | 20          | 6.96 | -0.2   | -346.8 | 3361.45                | 3354.38                | 27.2  | 7.18         | 7.05           | 0.13                  | 7.07               | 3.3         | 10                       | slight odor       |
| TEL 2  | 3188         | 20.7        | 7.02 | -0.2   | -361.4 | 3362.23                | 3354.65                | 27.2  | 7.58         | 7.58           | 0                     | 7.58               | 3.2         | 10                       | hvy odor          |
| TEL 1  | 3083         | 20.5        | 7.27 | 1.0    | -280.7 | 3361.34                | 3354.84                | 26.9  | 6.50         | 6.50           | 0                     | 6.50               | 3.3         | 10                       | clear             |
| MW-53  | 1976         | 22.2        | 7.61 | 2.3    | 94.7   | 3367.87                | 3358.54                | 20.5  | 9.33         | 9.33           | 0                     | 9.33               | 1.8         | 6                        | clear             |
| MW-54A | 2370         | 20.3        | 7.05 | 0.8    | -162.2 | 3365.66                | 3356.26                | 31.3  | 9.40         | 9.40           | 0                     | 9.40               | 3.6         | 11                       | clear, odor       |
| MW-55  | 2913         | 19.9        | 7.45 | 2.9    | 93.0   | 3363.97                | 3355.83                | 26.5  | 8.14         | 8.14           | 0                     | 8.14               | 3.0         | 9                        | clear, no odor    |
| MW-59  | 3204         | 20.8        | 7.00 | 2.3    | -273.6 | 3361.21                | 3356.70                | 30.1  | 4.51         | 4.51           | 0                     | 4.51               | 4.2         | 13                       | clear, odor       |
| MW-60  | 3581         | 19.9        | 6.96 | 0.4    | -216.7 | 3361.15                | 3355.25                | 30.2  | 5.90         | 5.90           | 0                     | 5.90               | 4.0         | 12                       | clear, odor       |
| NCL-49 | 3448         | 20.5        | 7.38 | 0.4    | 69.5   | 3363.72                | 3349.48                | 32.1  | 14.24        | 14.24          | 0                     | 14.24              | 2.9         | 9                        | oil sheen w/ odor |
| NCL-32 | 2120         | 20.3        | 7.26 | 1.3    | -87.9  | 3364.74                | 3357.16                | 19.37 | 7.58         | 7.58           | 0                     | 7.58               | 314.9       | 945                      | oil sheen         |
| NCL-44 | 2179         | 20.5        | 6.85 | 0.5    | -273.2 | 3364.74                | 3357.55                | 19.8  | 7.19         | 7.19           | 0                     | 7.19               | 2.1         | 7                        | clear             |
| NCL-33 | 2042         | 21.11       | 6.85 | 2.8    | -88.0  | 3363.23                | 3355.43                | 20.5  | 7.80         | 7.80           | 0                     | 7.80               | 2.1         | 7                        | clear             |
| NCL-34 | 2249         | 22.3        | 6.87 | 0.2    | -343.4 | 3364.74                | 3356.16                | 19.3  | 8.58         | 8.58           | 0                     | 8.58               | 1.7         | 6                        | clear             |

TABLE 4-5 NCL/TEL GROUNDWATER WELL ANALYTICAL DATA

| TABLE 4-5<br>NCL/TEL GROUNDWATER WELL ANALYTICAL DATA |            |               |        |         |       |         |                  |         |              |         |          |               |     |     |
|-------------------------------------------------------|------------|---------------|--------|---------|-------|---------|------------------|---------|--------------|---------|----------|---------------|-----|-----|
| WQCC                                                  | Date       | METALS (mg/L) |        |         |       |         | Volatiles (µg/L) |         |              |         |          | ANIONS (mg/L) |     |     |
|                                                       |            | Aluminum      | Boron  | Copper  | Iron  | Lead    | Manganese        | Benzene | Ethylbenzene | Xylenes | Chloride | Sulfate       |     |     |
| NCL-32                                                | 12/9/1997  | BDL           | 0.0927 | BDL     | 0.409 | BDL     | 0.647            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 9/30/2002  | BDL           | 0.278  | 0.338   | 0.231 | BDL     | 0.848            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-32                                                | 12/26/2002 | BDL           | 0.25   | BDL     | 0.85  | BDL     | 0.606            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 8/11/2003  | BDL           | 0.285  | 0.0056  | 1.05  | BDL     | 0.899            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-32                                                | 11/4/2003  | BDL           | 0.268  | 0.00736 | 1.05  | BDL     | 0.884            | 9.1     | 5.6          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 1/12/2004  | BDL           | 0.292  | 0.693   | 2.69  | BDL     | 0.95             | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-32                                                | 4/12/2004  | 0.457         | 0.234  | 0.00222 | 0.367 | BDL     | 0.792            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 11/4/2004  | 0.209         | 0.222  | BDL     | 1.86  | BDL     | 0.645            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-33                                                | 12/10/1997 | 5.88          | 0.229  | BDL     | 7.61  | 0.0138  | 0.198            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 10/1/2002  | 2.83          | 0.511  | 3.33    | 3.18  | BDL     | 0.086            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-33                                                | 12/27/2002 | 0.961         | 0.434  | BDL     | 1.44  | BDL     | 0.14             | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 8/12/2003  | 0.592         | 0.531  | 0.00611 | 2.31  | BDL     | 0.132            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-33                                                | 11/6/2003  | 0.0255        | 0.471  | BDL     | 2.3   | BDL     | 0.0832           | 11      | 6.8          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 11/2/2004  | 0.0447        | 0.631  | BDL     | 4.34  | BDL     | 0.0867           | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-34                                                | 4/13/2004  | 0.0177        | 0.597  | 0.00253 | 2.08  | BDL     | 0.074            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 7/19/2004  | 0.0121        | 0.491  | BDL     | 1.53  | BDL     | 0.0782           | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-34                                                | 11/4/2004  | BDL           | 0.565  | BDL     | 2.15  | BDL     | 0.0719           | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 12/10/1997 | 43.8          | 153    | BDL     | 31.2  | 0.0619  | 0.47             | 5010    | 2500         | 1950    | BDL      | BDL           | BDL | BDL |
| NCL-44                                                | 12/10/1997 | 0.564         | 0.137  | BDL     | 0.901 | BDL     | 0.564            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 9/30/2003  | 0.53          | 0.301  | 1.12    | 1.89  | BDL     | 0.622            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-44                                                | 12/26/2002 | BDL           | 0.244  | 0.538   | 0.352 | BDL     | 0.328            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 9/30/2002  | BDL           | 0.287  | 0.521   | 0.741 | BDL     | 0.346            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-49                                                | 12/9/1997  | 0.324         | BDL    | 0.669   | BDL   | BDL     | BDL              | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 9/30/2002  | BDL           | 0.244  | 0.352   | BDL   | BDL     | 0.328            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-49                                                | 12/26/2002 | BDL           | 0.21   | BDL     | 0.941 | BDL     | BDL              | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 8/1/2003   | 0.0267        | 0.256  | 0.00704 | 0.941 | BDL     | BDL              | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-49                                                | 11/4/2003  | BDL           | 0.257  | 0.00672 | 1     | BDL     | BDL              | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 1/12/2004  | 0.0132        | 0.281  | 0.31    | 2.53  | BDL     | BDL              | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| NCL-49                                                | 4/12/2004  | 0.0117        | 0.24   | 0.0021  | BDL   | BDL     | 0.00671          | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 11/4/2004  | BDL           | 0.528  | BDL     | 1.61  | BDL     | 0.48             | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| MW-53                                                 | 12/9/1997  | 29            | 0.226  | BDL     | 21.9  | 0.0175  | 4.55             | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 9/30/2002  | 6.55          | 0.376  | 0.0329  | 3.37  | BDL     | 3.37             | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| MW-53                                                 | 12/26/2002 | BDL           | 0.305  | BDL     | 1.07  | BDL     | 1.98             | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 8/11/2003  | 1.1           | 0.34   | 0.00782 | 1.11  | BDL     | 2.42             | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| MW-53                                                 | 11/3/2003  | BDL           | 0.404  | 0.00521 | 0.567 | BDL     | 1.99             | 47      | 13           | 16      | BDL      | BDL           | BDL | BDL |
|                                                       | 1/12/2004  | 0.0111        | 0.396  | 0.0038  | 1.4   | BDL     | 0.778            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| MW-54A                                                | 4/12/2004  | 0.0412        | 0.287  | BDL     | BDL   | BDL     | 1.75             | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 7/14/2004  | 0.0204        | 0.337  | BDL     | BDL   | BDL     | 1.76             | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| MW-54A                                                | 12/10/1997 | 4.34          | 0.187  | BDL     | 3.25  | BDL     | 0.302            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 9/30/2002  | 0.376         | 0.287  | 0.521   | 0.741 | BDL     | 0.346            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| MW-54A                                                | 12/26/2002 | BDL           | 0.234  | 0.355   | BDL   | BDL     | 0.328            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 8/12/2003  | 0.281         | 0.309  | 0.00458 | 1.25  | BDL     | 0.427            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| MW-59                                                 | 11/6/2003  | 0.261         | 0.242  | 0.00931 | 1.12  | BDL     | 0.523            | 370     | 56           | 18      | BDL      | BDL           | BDL | BDL |
|                                                       | 1/12/2004  | 0.102         | 0.49   | 0.793   | 4.81  | BDL     | 0.688            | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| MW-59                                                 | 2/1/2004   | 0.232         | 0.33   | 0.00579 | 1.08  | BDL     | 0.407            | 3800    | 380          | 56      | BDL      | BDL           | BDL | BDL |
|                                                       | 4/21/2004  | BDL           | 0.271  | 0.00612 | 0.954 | BDL     | 0.346            | 190     | 15           | BDL     | BDL      | BDL           | BDL | BDL |
| MW-59                                                 | 7/19/2004  | 0.0143        | 0.229  | BDL     | 0.301 | BDL     | 0.341            | 190     | 35           | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 11/4/2004  | BDL           | 0.321  | BDL     | 1.68  | BDL     | 0.37             | 830     | 85           | BDL     | BDL      | BDL           | BDL | BDL |
| MW-60                                                 | 11/6/2003  | 0.0892        | 0.404  | 0.0108  | 2.27  | BDL     | 0.764            | 27      | 15           | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 4/13/2004  | 0.367         | 0.525  | 0.00795 | 2.57  | BDL     | 0.702            | 13      | 5.4          | BDL     | BDL      | BDL           | BDL | BDL |
| MW-60                                                 | 7/19/2004  | 0.028         | 0.477  | BDL     | 2.77  | BDL     | 0.722            | 160     | 120          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 11/4/2004  | 0.051         | 0.418  | BDL     | 3.46  | BDL     | 0.694            | 9       | 7.2          | BDL     | BDL      | BDL           | BDL | BDL |
| TEL-1                                                 | 12/10/1997 | 0.94          | 0.395  | BDL     | 1.1   | BDL     | BDL              | BDL     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 10/1/2002  | BDL           | 0.632  | BDL     | 0.13  | BDL     | 0.0575           | 13.6    | 3.63         | 11.7    | BDL      | BDL           | BDL | BDL |
| TEL-1                                                 | 12/30/2002 | BDL           | 0.605  | BDL     | 0.114 | BDL     | 0.0591           | 18.7    | 4.25         | 17.1    | BDL      | BDL           | BDL | BDL |
|                                                       | 8/13/2003  | BDL           | 0.795  | 0.00327 | 1.16  | BDL     | 0.0796           | 9.1     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| TEL-1                                                 | 11/13/2003 | BDL           | 0.668  | BDL     | BDL   | BDL     | 0.108            | 20      | 8.4          | 19      | BDL      | BDL           | BDL | BDL |
|                                                       | 2/2/2004   | BDL           | 0.667  | 0.00276 | 0.417 | BDL     | 0.0613           | 34      | 7.3          | 17      | BDL      | BDL           | BDL | BDL |
| TEL-1                                                 | 4/2/2004   | BDL           | 0.568  | 0.00409 | 0.868 | BDL     | 0.132            | 39      | 6.8          | 17      | BDL      | BDL           | BDL | BDL |
|                                                       | 11/5/2004  | BDL           | 0.627  | BDL     | 1.42  | BDL     | 0.0893           | 11      | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| TEL-2                                                 | 12/10/1997 | 0.975         | 0.394  | BDL     | 1.41  | 0.0208  | 0.0358           | 2090    | 176          | 367     | BDL      | BDL           | BDL | BDL |
|                                                       | 10/1/2002  | BDL           | 0.657  | BDL     | BDL   | BDL     | 0.0196           | 1120    | 25.9         | 203     | BDL      | BDL           | BDL | BDL |
| TEL-2                                                 | 12/30/2002 | BDL           | 0.611  | BDL     | BDL   | BDL     | 0.036            | 1290    | 36.6         | 214     | BDL      | BDL           | BDL | BDL |
|                                                       | 8/13/2003  | BDL           | 0.881  | 0.00399 | 0.779 | BDL     | 0.0299           | 1100    | 29           | 200     | BDL      | BDL           | BDL | BDL |
| TEL-2                                                 | 11/1/2003  | BDL           | 0.615  | BDL     | BDL   | BDL     | 0.0183           | 1700    | 39           | 240     | BDL      | BDL           | BDL | BDL |
|                                                       | 2/2/2004   | BDL           | 0.739  | 0.00333 | 0.279 | BDL     | 0.0244           | 1500    | 45           | 210     | BDL      | BDL           | BDL | BDL |
| TEL-2                                                 | 4/2/2004   | 0.032         | 0.589  | 0.00538 | 1.03  | BDL     | 0.00784          | 120     | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 8/4/2004   | BDL           | 0.578  | 0.00271 | 1.49  | BDL     | 0.00992          | 80      | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
| TEL-3                                                 | 11/5/2004  | BDL           | 0.493  | BDL     | 1.49  | BDL     | 0.00527          | 78      | BDL          | BDL     | BDL      | BDL           | BDL | BDL |
|                                                       | 12/10/1997 | 0.586         | 0.396  | BDL     | 1.4   | 0.00971 | 0.88             | 141     | 411          | 163     | BDL      | BDL           | BDL | BDL |
| TEL-3                                                 | 10/1/2002  | BDL           | 0.756  | BDL     | 0.127 | BDL     | 0.39             | 28.4    | 84.6         | 147     | BDL      | BDL           | BDL | BDL |
|                                                       | 12/30/2003 | BDL           | 0.696  | BDL     | BDL   | BDL     | 0.205            | 2110    | 95.1         | 250     | BDL      | BDL           | BDL | BDL |
| TEL-3                                                 | 8/13/2003  | 0.0129        | 0.714  | 0.00562 | 1.85  | 0.00317 | 0.264            | 2800    | 190          | 340     | BDL      | BDL           | BDL | BDL |
|                                                       | 11/1/2003  | BDL           | 0.896  | BDL     | BDL   | BDL     | 0.185            | 2800    | 180          | 370     | BDL      | BDL           | BDL | BDL |
| TEL-3                                                 | 2/2/2004   | 0.0344        | 0.693  | 0.0177  | 0.451 | BDL     | 0.227            | 2900    | 200          | 351     | BDL      | BDL           | BDL | BDL |
|                                                       | 4/2/2004   | 0.0446        | 0.67   | 0.00656 | 0.56  | BDL     | 0.291            | 3100    | 190          | 390     | BDL      | BDL           | BDL | BDL |
| TEL-4                                                 | 7/22/2004  | BDL           | 0.568  | 0.00287 | 0.871 | BDL     | 0.39             | 820     | 150          | 290     | BDL      | BDL           | BDL | BDL |
|                                                       | 11/4/2004  | BDL           | 0.578  | BDL     | 0.975 | BDL     | 0.509            | 530     | 96           | 200     | BDL      | BDL           | BDL | BDL |

NOTES:  
BDL Below Detection Limit  
NA Not Analyzed

FIGURE 4-1 NCL-34 ANALYTICAL RESULTS GRAPH

FIGURE 4-1  
NCL-34

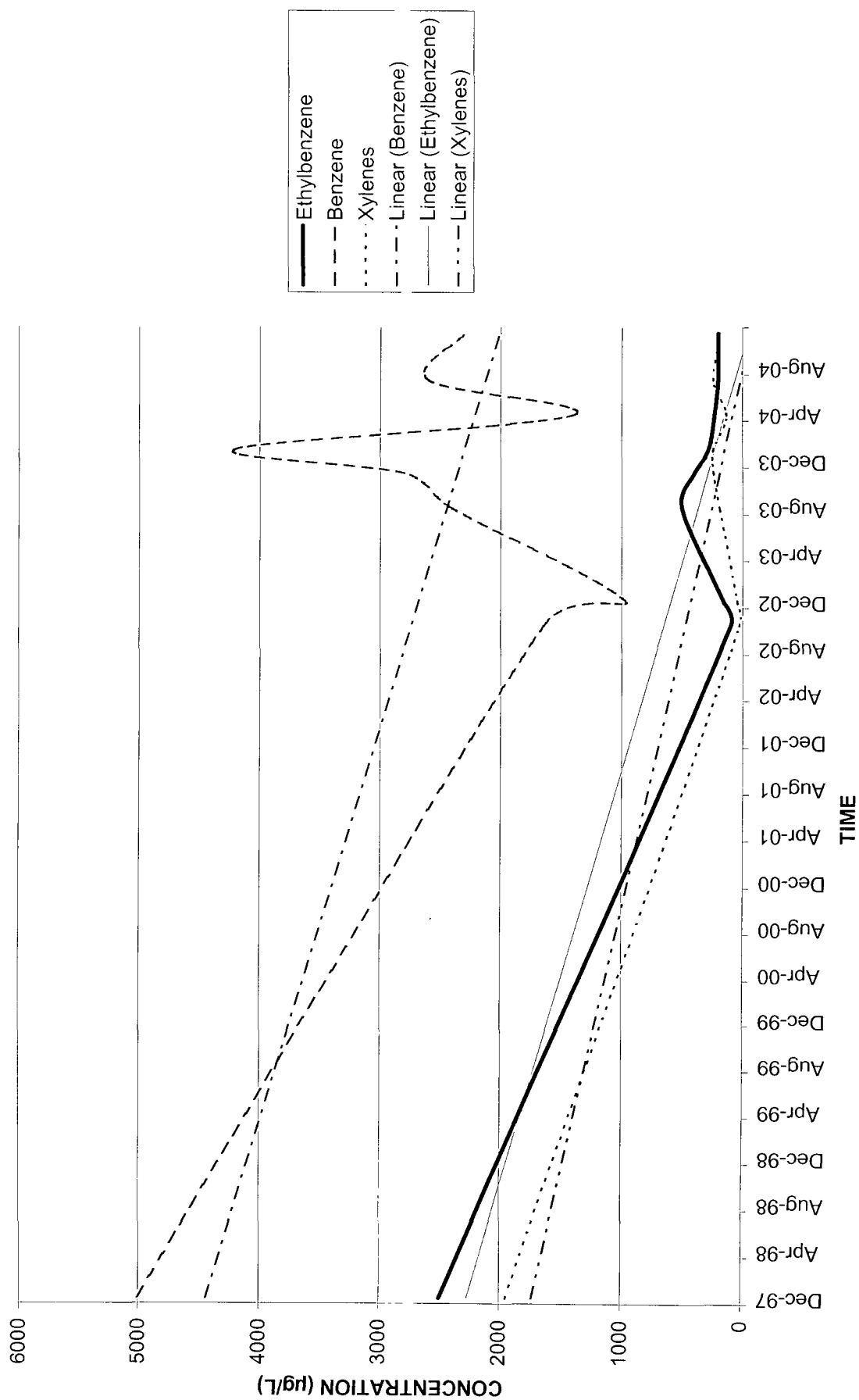




FIGURE 4-2 TEL-2 ANALYTICAL RESULTS GRAPH

FIGURE 4-2  
TEL-2

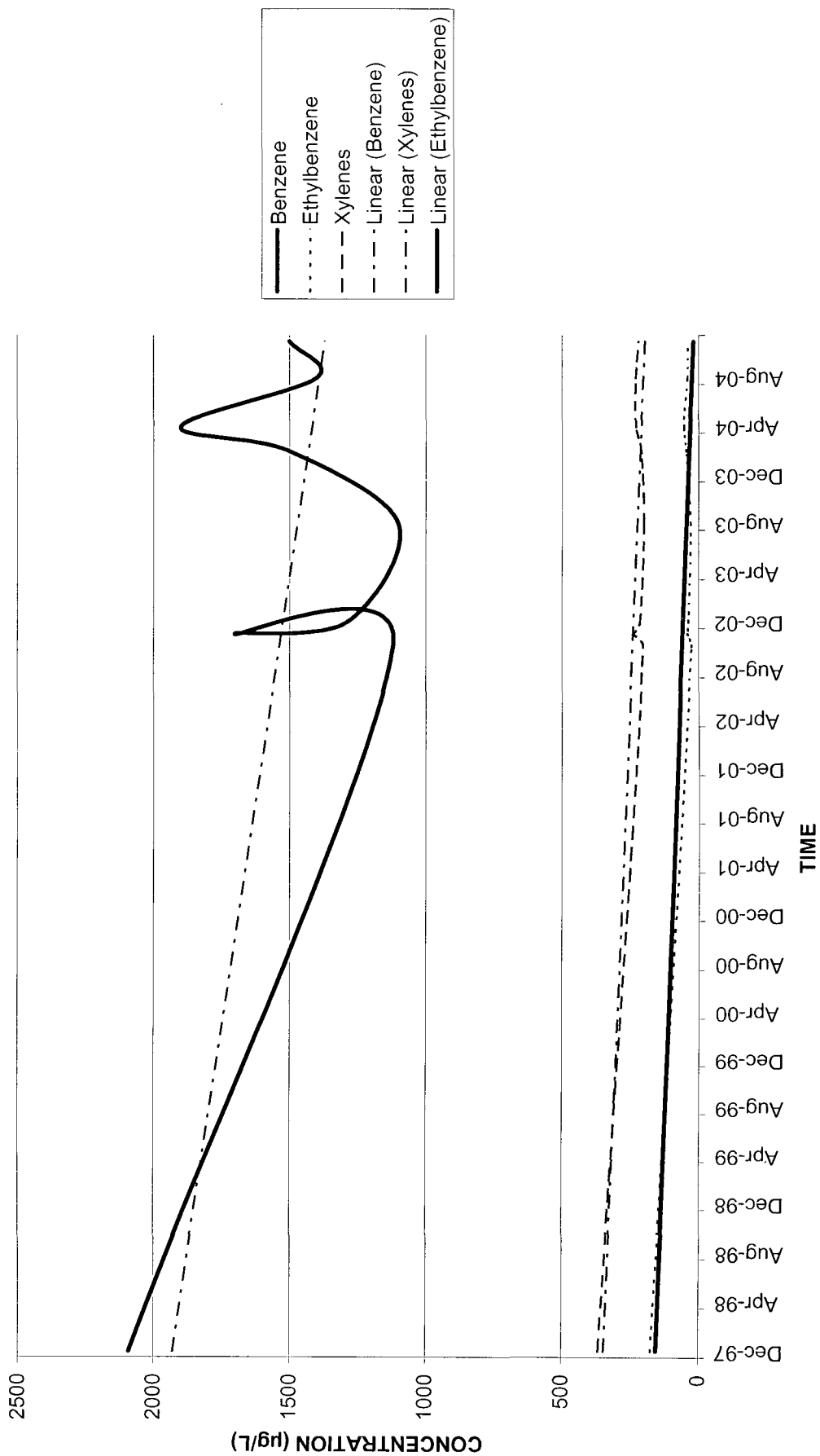


FIGURE 4-3 TEL-3 ANALYTICAL RESULTS GRAPH

**FIGURE 4-3**  
**TEL-3**

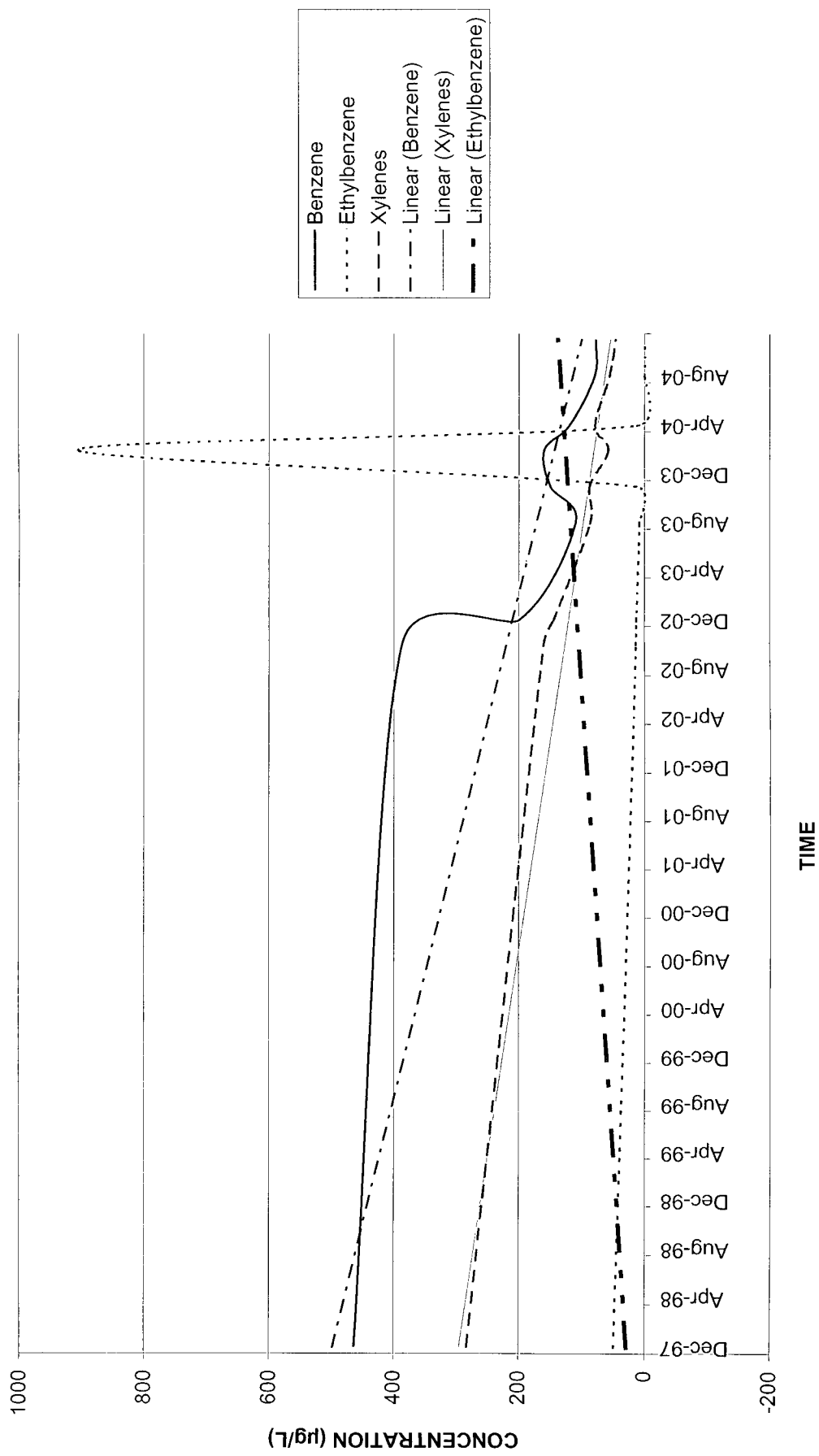
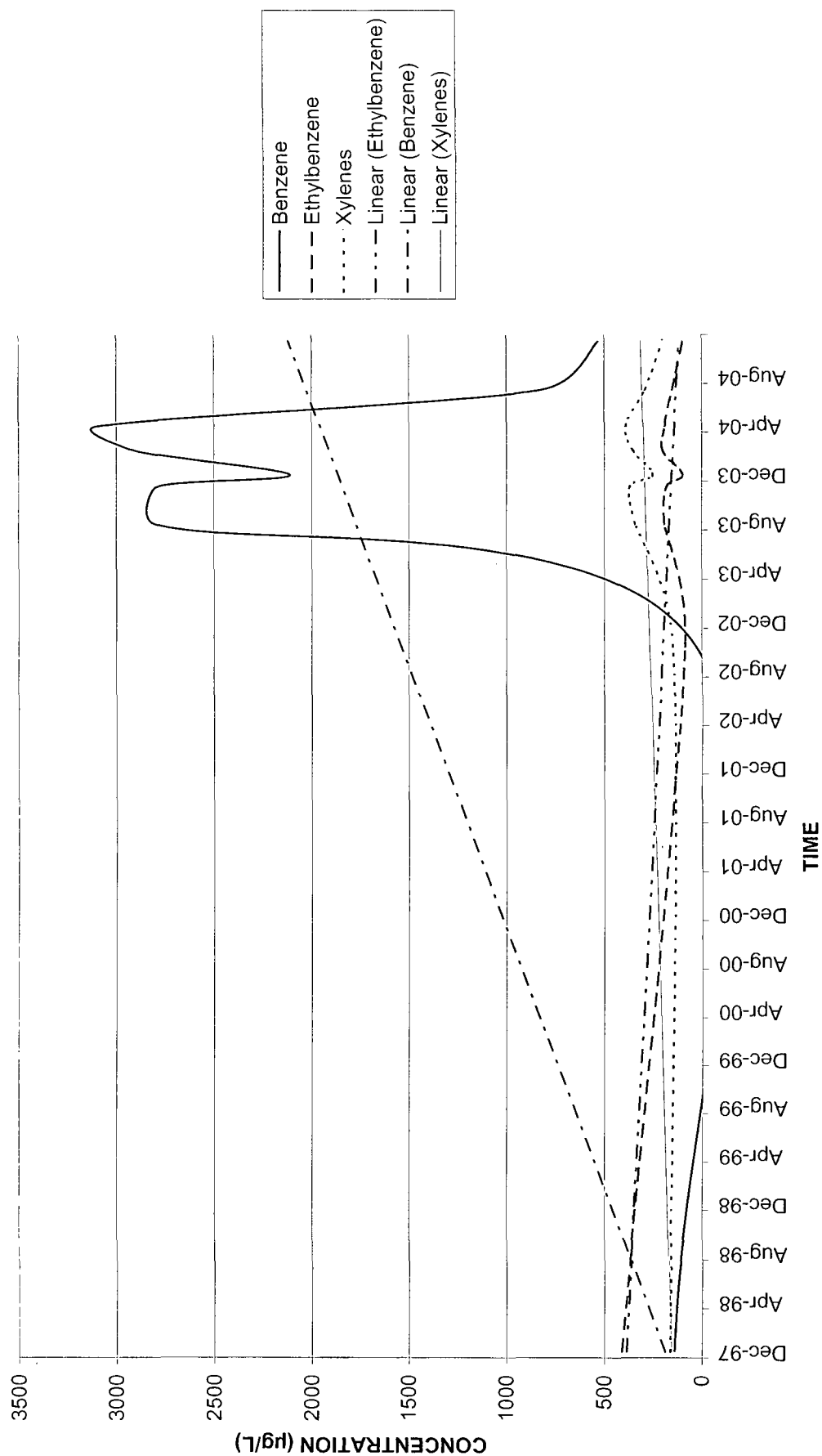


FIGURE 4-4 TEL-4 ANALYTICAL RESULTS GRAPH

FIGURE 4-4  
TEL-4



## 5.0 EVAPORATION PONDS

TABLE 5-1 contains the analytical results for the last four years of sampling events for this set of wells. None of these wells have exhibited concentrations of hydrocarbons above the method detection limit. The levels of metals and anions occurring above the WQCC level are consistent between the wells and are assumed to be naturally occurring. The laboratory analytical data sheets for 2004 are provided in ATTACHMENT D.

FIGURE 5-1 is the groundwater gradient map for the evaporation ponds. The overall direction appears to be toward the southeast. Nothing of significance has changed.

TABLE 5-1 EVAPORATION PONDS MONITORING WELL ANALYTICAL DATA





FIGURE 5-1 EVAPORATION PONDS GROUNDWATER GRADIENT MAP



## **6.0 REVERSE OSMOSIS REJECT WATER**

Navajo Refining discharged a total of 103,428,000 gallons to the farms for irrigation during 2004. Since we started discharging the Reverse Osmosis (RO) reject water, we have discharged a total of 1,336,738,000 gallons. This is broken down as follows: 196,713,498 gallons have been put into Eagle Draw (stopped in December 1999) and 1,139,925,000 gallons have been put on our farms.

No TABLE is provided for the analytical as there were no chemicals of concern above the WQCC standards. Sulfate was found to be above the WQCC standard. This is expected as most all of the groundwater wells in this area are above the WQCC standard. The laboratory analytical reports for the RO Reject sampling are provided in ATTACHMENT E.

## 7.0 IRRIGATION WELL ANALYSIS

Ten irrigation wells are sampled monthly during the growing season. A summary of the analytical results are provided in TABLE 7-1. No hydrocarbon contaminants were detected above the WQCC levels. The metals and anions are believed to be naturally occurring levels as there are no significantly different values between up gradient and down gradient wells or sampling events. In the past, a well has occasionally exhibited hydrocarbon constituents. It has been believed that these relatively low level hits are attributed to the operators oiling the pumps and bearings. The laboratory analytical reports for 2004 are provided in ATTACHMENT F.

TABLE 7-1 IRRIGATION WELL ANALYTICAL

**TABLE 7-1  
IRRIGATION WELL ANALYTICAL**

| WGCC    | Date      | Boron  | Iron    | Manganese | ANIONS (mg/L) |         |
|---------|-----------|--------|---------|-----------|---------------|---------|
|         |           |        |         |           | Chloride      | Sulfate |
|         |           | 0.75   | 1       | 0.2       | 250           | 600     |
| RA 304  | 6/7/2004  | 0.0844 | 0.828   | 0.0216    | 222           | 1110    |
| RA 307  | 7/8/2003  | BDL    | 0.876   | 0.00206   | 146           | 1,130   |
|         | 8/6/2003  | BDL    | 1.05    | 0.0587    | 152           | 2,360   |
|         | 9/15/2003 | BDL    | 4.2     | 0.0831    | 153           | 1,090   |
|         | 5/12/2004 | 0.0795 | BDL     | BDL       | 661           | 1,180   |
|         | 7/12/2004 | 0.0963 | 3.19    | BDL       | 274           | 1,080   |
|         | 8/23/2004 | 0.102  | 1.07    | BDL       | 240           | 1,070   |
|         |           |        |         |           |               |         |
|         |           |        |         |           |               |         |
| RA 313  | 7/17/2003 | BDL    | 2.08    | 0.0432    | 17            | 534     |
|         | 8/7/2003  | BDL    | 0.81    | 0.0256    | 207           | 507     |
|         | 6/7/2004  | 0.0426 | 0.345   | BDL       | 16.5          | 534     |
|         | 7/22/2004 | 0.0523 | 0.607   | BDL       | 15.6          | 481     |
|         | 8/3/2004  | 0.0448 | 0.498   | BDL       | 15.7          | 447     |
|         |           |        |         |           |               |         |
| RA 314  | 7/8/2003  | BDL    | 0.901   | BDL       | 225           | 690     |
|         | 8/18/2003 | BDL    | 1.12    | 0.0012    | 79.2          | 578     |
|         | 6/7/2004  | 0.0458 | 0.413   | BDL       | 238           | 687     |
|         | 7/12/2004 | 0.0427 | 2       | BDL       | 220           | 628     |
|         | 8/23/2004 | 0.0537 | 0.703   | BDL       | 232           | 644     |
|         | 9/7/2004  | 0.0502 | 1.08    | BDL       | 202           | 584     |
| RA 1227 | 7/2/2003  | BDL    | 2.02    | BDL       | 130           | 1,580   |
|         | 8/6/2003  | BDL    | 1.17    | 0.00265   | 121           | 1,500   |
|         | 6/23/2004 | BDL    | 0.00891 | BDL       | 128           | 1,350   |
|         | 7/12/2004 | 0.254  | 3.66    | BDL       | 124           | 1,350   |
|         | 8/3/2004  | 0.217  | 0.944   | BDL       | 120           | 1,350   |
|         |           |        |         |           |               |         |
| RA 3723 |           | BDL    | BDL     | BDL       | BDL           | BDL     |
| RA 3156 | 7/21/2003 | BDL    | 2.15    | 0.0179    | 232           | 1,720   |
|         | 8/29/2003 | BDL    | 4.14    | 0.0238    | 236           | 1,600   |
|         | 9/29/2003 | BDL    | 6.09    | 0.18      | 236           | 1,650   |
|         | 5/24/2004 | 0.111  | BDL     | 0.0294    | 166           | 1,080   |
|         | 6/28/2004 | BDL    | 1.59    | 0.0097    | 226           | 1,510   |
|         | 7/14/2004 | 0.216  | BDL     | 0.00646   | 207           | 1,440   |
|         | 8/16/2004 | 0.213  | 1.69    | BDL       | 213           | 1,470   |
|         | 9/16/2004 | 0.226  | 1.42    | BDL       | 250           | 1,850   |
| RA 3333 | 6/28/2004 | 0.101  | 1.11    | BDL       | 168           | 1,040   |
|         | 7/22/2004 | 0.11   | 2.48    | BDL       | 152           | 954     |
|         | 8/23/2004 | 0.113  | 1.31    | BDL       | 174           | 1,060   |
|         |           |        |         |           |               |         |
| RA 3353 | 4/24/2003 | BDL    | BDL     | BDL       | BDL           | BDL     |
|         | 7/21/2003 | BDL    | 1.5     | 0.00705   | 170           | 1,180   |
|         | 8/18/2003 | BDL    | 2.37    | 0.0121    | 169           | 1,080   |
|         | 9/29/2003 | BDL    | 1.89    | 0.00838   | 173           | 1,210   |
| RA 3356 | 5/24/2004 | 0.201  | 1.6     | 0.017     | 216           | 1,420   |
| RA 4196 | 7/8/2003  | BDL    | 5.7     | 0.175     | 305           | 1,400   |
|         | 8/18/2003 | BDL    | 11.3    | 0.282     | 217           | 1,390   |
|         | 9/15/2003 | BDL    | 13.7    | 0.223     | 198           | 1,450   |
|         | 5/12/2004 | 0.199  | 1.59    | BDL       | 130           | 1,480   |
|         | 7/27/2004 | 0.152  | 4.91    | 0.0688    | 198           | 1,260   |
|         | 8/25/2004 | 0.177  | 6.36    | 0.0816    | 162           | 1,320   |
|         | 9/7/2004  | 0.0675 | 22.8    | 0.336     | 272           | 1,240   |
|         | 9/22/2004 | 0.148  | 4.93    | 0.0888    | 144           | 1,300   |
| RA 4798 | 3/6/2003  | BDL    | BDL     | BDL       | BDL           | BDL     |
|         | 4/9/2003  | BDL    | BDL     | BDL       | BDL           | BDL     |
|         | 6/29/2003 | BDL    | BDL     | BDL       | BDL           | BDL     |
|         | 7/17/2003 | BDL    | 1.1     | 0.00365   | 145           | 1,720   |
|         | 8/18/2003 | BDL    | 3.21    | 0.0066    | 138           | 1,560   |
|         | 9/15/2003 | BDL    | 7.46    | 0.0378    | 148           | 1,580   |
|         | 5/12/2004 | 0.0844 | 3.54    | 0.0441    | 653           | 1,380   |
|         | 6/28/2004 | BDL    | 5.5     | 0.0173    | 208           | 1,470   |
|         | 7/27/2004 | 0.183  | 14.8    | 0.0267    | 132           | 1,390   |
|         | 8/25/2004 | 0.208  | 3.63    | 0.00929   | 133           | 1,380   |
|         | 9/22/2004 | 0.171  | 2.06    | 0.0133    | 129           | 1,380   |
|         |           |        |         |           |               |         |
|         |           |        |         |           |               |         |
|         |           |        |         |           |               |         |
|         |           |        |         |           |               |         |
|         |           |        |         |           |               |         |
| Larue   | 7/2/2003  | BDL    | 2.29    | 0.0218    | 112           | 1,480   |
|         | 8/29/2003 | BDL    | 2.47    | 0.00899   | 122           | 1,430   |
|         | 9/29/2003 | BDL    | 2.32    | 0.0108    | 120           | 1,460   |
|         | 6/23/2004 | BDL    | 0.829   | 0.00918   | 119           | 1,350   |
|         | 7/14/2004 | 0.252  | BDL     | 0.00703   | 111           | 1,330   |
|         | 8/16/2004 | 0.252  | 1.56    | 0.00722   | 108           | 1,350   |
|         | 9/16/2004 | 0.248  | 1.73    | 0.00919   | 112           | 1,540   |
|         |           |        |         |           |               |         |

NOTES:  
BDL -Below Detection Limit

**ATTACHMENT A**

**2004 QUARTERLY RECOVERY WELL PRODUCTION REPORTS**



WEEK#  
1st Qrtly

RECOVERY WELLS OIL DATA  
REPORTING PERIOD :

Jan 5 March 29

| WELL#                      | OLD RDING | NEW RDING | OIL OUTPUT | GPM | GPD  |
|----------------------------|-----------|-----------|------------|-----|------|
| 1                          | 39365     | 39474     | 109        | 0   | 16   |
| 2                          | 17449     | 17945     | 496        | 0   | 71   |
| 3                          | NA        | NA        | NA         | NA  | NA   |
| 4                          | 35060     | 35060     | 0          | 0   | 0    |
| 5                          | 29479     | 31409     | 1930       | 0   | 276  |
| 6                          | 70959     | 85563     | 14604      | 1   | 2086 |
| 7                          | 67        | 67        | 0          | 0   | 0    |
| 8                          | 56237     | 58062     | ≥ 1825     | 0   | 261  |
| 9                          | NA        | NA        | NA         | NA  | NA   |
| 10                         | NA        | NA        | NA         | NA  | NA   |
|                            |           |           |            | GPM | GPD  |
| TOTAL OIL IN PLANT IN GAL. |           |           | 18964      | 2   | 2709 |
|                            |           |           |            | GPM | GPD  |
| BOLTON RD. WELLS OIL DATA  |           |           |            |     |      |
| 11                         | 1216      | 1216      | 0          | 0   | 0    |
| 12                         | 15        | 15        | 0          | 0   | 0    |
| 13                         | 9647      | 15429     | 5782       | 1   | 826  |
| 14                         | 107106    | 116966    | 9860       | 1   | 1409 |
| TOTAL OIL IN GAL.          |           |           | 15642      | 2   | 2235 |

TOOL PUSHERS OIL PRODUCED

|    |                      |       |       |          |  |
|----|----------------------|-------|-------|----------|--|
| 15 | 12279                | 40975 | 28696 |          |  |
|    | PUMPING TIME \       |       | 92    |          |  |
|    | PUMPING TIME TOTAL   |       | 2419  |          |  |
|    | TOTAL OIL IN GALLONS |       | 44338 |          |  |
|    | TOTAL OIL IN BARRELS |       | 1056  |          |  |
|    | TOTAL FLOW RATE      |       | 4 GPM | 6334 GPD |  |

CLOCK SETTING 30 MINUTES 24 TIMES DAILY

1 Produce aproxamitely 95% water

WEEK#  
1stQrtly

RECOVERY WELLS H2O DATA  
REPORTING PERIOD:

Jan 5 March 29

| WELL#              | OLD RDING | NEW RDING | TOTAL  | GPM    | GPD        |
|--------------------|-----------|-----------|--------|--------|------------|
| NEW                | 1         | 276       | 449    | 207600 | 20.6 29657 |
|                    | 2         | 769       | 805    | 43200  | 4.3 6171   |
|                    | 3         | 0         | 0      | 0      | 0.0 0      |
|                    | 4         | 652       | 665    | 15600  | 1.5 2229   |
|                    | 5         | 1086      | 1086   | 0      | 0.0 0      |
|                    | 6         | 0         | 0      | 0      | 0.0 0      |
|                    | 7         | 20921     | 20921  | 0      | 0.0 0      |
|                    | 8         | 1158      | 1273   | 138000 | 13.7 19714 |
|                    | 9         | 552       | 552    | 0      | 0.0 0      |
|                    | 10        | 258       | 258    | 0      | 0.0 0      |
|                    |           |           | TOTAL  | GPM    | GPD        |
| TOTAL H2O IN PLANT |           |           | 404400 | 40     | 57771      |

| BOLTON RD. H2O DATA |       |       | TOTAL  | GPM  | GPD    |
|---------------------|-------|-------|--------|------|--------|
| 11                  | 774   | 774   | 0      | 0.0  | 0      |
| 12                  | 13038 | 13038 | 0      | 0.0  | 0      |
| 13                  | 28564 | 28804 | 144000 | 14.3 | 20571  |
| 14                  | 27982 | 28356 | 747963 | 74.2 | 106852 |
| BOLTON RD. TOTAL    |       |       | 891963 | 88   | 127423 |

|            |           |     |        |
|------------|-----------|-----|--------|
| TOTAL GAL. | TOTAL BBL | GPM | GPD    |
| 1296363    | 30866     | 129 | 185195 |

NOTES: Volume of water produced is estimated based on time pumped and not actual flow.

WEEK#  
2nd Qrtly  
2004

RECOVERY WELLS OIL DATA  
REPORTING PERIOD :

April 5 June 21

| WELL#                      | OLD RDING | NEW RDING | OIL OUTPUT | GPM | GPD  |
|----------------------------|-----------|-----------|------------|-----|------|
| 1                          | 39600     | 39600     | 0          | 0   | 0    |
| 2                          | 18085     | 18085     | 0          | 0   | 0    |
| 3                          | NA        | NA        | NA         | NA  | NA   |
| 4                          | 35060     | 35060     | 0          | 0   | 0    |
| 5                          | 31589     | 31860     | 271        | 0   | 39   |
| 6                          | 87233     | 105280    | 18047      | 2   | 2578 |
| 7                          | 67        | 67        | 0          | 0   | 0    |
| 8                          | 58124     | 58623     | 499        | 0   | 71   |
| 9                          | NA        | NA        | NA         | NA  | NA   |
| 10                         | NA        | NA        | NA         | NA  | NA   |
|                            |           |           |            | GPM | GPD  |
| TOTAL OIL IN PLANT IN GAL. |           |           | 18817      | 2   | 2688 |
|                            |           |           |            | GPM | GPD  |
| BOLTON RD. WELLS OIL DATA  |           |           |            |     |      |
| 11                         | 1216      | 1216      | 0          | 0   | 0    |
| 12                         | 15        | 15        | 0          | 0   | 0    |
| 13                         | 16096     | 22280     | 6184       | 1   | 883  |
| 14                         | 116966    | 123213    | 6247       | 1   | 892  |
| TOTAL OIL IN GAL.          |           |           | 12431      | 1   | 1776 |

TOOL PUSHERS OIL PRODUCED

|                      |       |       |       |      |     |
|----------------------|-------|-------|-------|------|-----|
| 15                   | 40975 | 55829 | 14854 |      |     |
| PUMPING TIME \       |       |       | 92    |      |     |
| PUMPING TIME TOTAL   |       |       | 2419  |      |     |
| TOTAL OIL IN GALLONS |       |       | 27285 |      |     |
| TOTAL OIL IN BARRELS |       |       | 650   |      |     |
| TOTAL FLOW RATE      |       |       | 3 GPM | 3898 | GPD |

CLOCK SETTING 30 MINUTES 24 TIMES DAILY

1 Produce aproxamitely 95% water

WEEK#  
2nd Qrtly  
2004

RECOVERY WELLS H2O DATA  
REPORTING PERIOD:

April 5 June 21

| WELL#              | OLD RDING | NEW RDING | TOTAL  | GPM  | GPD   |
|--------------------|-----------|-----------|--------|------|-------|
| 1                  | 449       | 460       | 13200  | 1.3  | 1886  |
| NEW 2              | 805       | 835       | 36000  | 3.6  | 5143  |
| 3                  | 0         | 0         | 0      | 0.0  | 0     |
| 4                  | 665       | 684       | 22800  | 2.3  | 3257  |
| 5                  | 1086      | 1086      | 0      | 0.0  | 0     |
| 6                  | 0         | 0         | 0      | 0.0  | 0     |
| 7                  | 20921     | 20921     | 0      | 0.0  | 0     |
| 8                  | 1273      | 1434      | 193200 | 19.2 | 27600 |
| 9                  | 552       | 552       | 0      | 0.0  | 0     |
| 10                 | 258       | 258       | 0      | 0.0  | 0     |
|                    |           |           | TOTAL  | GPM  | GPD   |
| TOTAL H2O IN PLANT |           |           | 265200 | 26   | 37886 |

| BOLTON RD. H2O DATA |       |       | TOTAL  | GPM  | GPD    |
|---------------------|-------|-------|--------|------|--------|
| 11                  | 774   | 774   | 0      | 0.0  | 0      |
| 12                  | 13038 | 13038 | 0      | 0.0  | 0      |
| 13                  | 28804 | 28924 | 72000  | 7.1  | 10286  |
| 14                  | 28356 | 28770 | 827959 | 82.1 | 118280 |
| BOLTON RD. TOTAL    |       |       | 899959 | 89   | 128566 |

|             |              |     |        |  |  |
|-------------|--------------|-----|--------|--|--|
| 15 Chase RW | 18167gallons |     |        |  |  |
| TOTAL GAL.  | TOTAL BBL    | GPM | GPD    |  |  |
| 1165159     | 27742        | 116 | 166451 |  |  |

NOTES: Volume of water produced is estimated based on time pumped and not actual flow.

WEEK#  
3rd Qrtly

RECOVERY WELLS OIL DATA  
REPORTING PERIOD :

July 5 Sept 27

| WELL# | OLD RDING | NEW RDING | OIL OUTPUT | GPM | GPD  |
|-------|-----------|-----------|------------|-----|------|
| 1     | 39600     | 39600     | 0          | 0   | 0    |
| 2     | 18085     | 18085     | 0          | 0   | 0    |
| 3     | 0         | 0         | 0          | 0   | 0    |
| 4     | 35060     | 35060     | 0          | 0   | 0    |
| 5     | 31860     | 32220     | 360        | 0   | 51   |
| 6     | 107332    | 134806    | 27474      | 3   | 3925 |
| 7     | 67        | 67        | 0          | 0   | 0    |
| 8     | 58828     | 59896     | 1068       | 0   | 153  |
| 9     | 0         | 0         | 0          | 0   | 0    |
| 10    | 0         | 0         | 0          | 0   | 0    |

|                            | GPM   | GPD    |
|----------------------------|-------|--------|
| TOTAL OIL IN PLANT IN GAL. | 28902 | 3 4129 |

|                           | GPM    | GPD    |       |   |      |
|---------------------------|--------|--------|-------|---|------|
| BOLTON RD. WELLS OIL DATA |        |        |       |   |      |
| 11                        | 1216   | 1216   | 0     | 0 | 0    |
| 12                        | 15     | 15     | 0     | 0 | 0    |
| 13                        | 24219  | 34303  | 10084 | 1 | 1441 |
| 14                        | 124748 | 132735 | 7987  | 1 | 1141 |
| TOTAL OIL IN GAL.         |        |        | 18071 | 2 | 2582 |

TOOL PUSHERS OIL PRODUCED

|    |       |       |      |
|----|-------|-------|------|
| 15 | 56763 | 58546 | 1783 |
|----|-------|-------|------|

PUMPING TIME TOTAL

2419

TOTAL OIL IN GALLONS

48756

TOTAL OIL IN BARRELS

1161

TOTAL FLOW RATE

247

GPD

CLOCK SETTING 30 MINUTES 24 TIMES DAILY

1 Produce aproxamitely 95% water

WEEK#  
3rd Qrtly

RECOVERY WELLS H2O DATA  
REPORTING PERIOD:

July 5 Sept 27

| WELL#               | OLD RDING | NEW RDING | TOTAL   | GPM   | GPD    |
|---------------------|-----------|-----------|---------|-------|--------|
| 1                   | 462       | 476       | 16800   | 1.7   | 2400   |
| 2                   | 840       | 882       | 50400   | 5.0   | 7200   |
| 3                   | 0         | 0         | 0       | 0.0   | 0      |
| 4                   | 687       | 948       | 313200  | 31.1  | 44743  |
| 5                   | 1086      | 1086      | 0       | 0.0   | 0      |
| 6                   | 0         | 0         | 0       | 0.0   | 0      |
| 7                   | 20921     | 20921     | 0       | 0.0   | 0      |
| 8                   | 1466      | 1663      | 236400  | 23.5  | 33771  |
| 9                   | 552       | 552       | 0       | 0.0   | 0      |
| 10                  | 258       | 258       | 0       | 0.0   | 0      |
| TOTAL               |           |           | TOTAL   | GPM   | GPD    |
| TOTAL H2O IN PLANT  |           |           | 616800  | 61    | 88114  |
| BOLTON RD. H2O DATA |           |           | TOTAL   | GPM   | GPD    |
| 11                  | 774       | 774       | 0       | 0.0   | 0      |
| 12                  | 13038     | 13038     | 0       | 0.0   | 0      |
| 13                  | 28948     | 29109     | 96600   | 9.6   | 13800  |
| 14                  | 28858     | 29440     | 1163942 | 115.5 | 166277 |
| BOLTON RD. TOTAL    |           |           | 1260542 | 125   | 180077 |
| 15 Chase RW         |           |           |         |       |        |
| TOTAL GAL.          |           | TOTAL BBL | GPM     | GPD   |        |
| 67250               |           | 1601      | 7       | 9607  |        |

NOTES: Volume of water produced is estimated based on time pumped and not actual flow.

WEEK#  
4th Qrtly

RECOVERY WELLS OIL DATA  
REPORTING PERIOD :

Oct 4 Dec 27

| WELL#             | OLD RDING | NEW RDING | OIL OUTPUT | GPM | GPD  |
|-------------------|-----------|-----------|------------|-----|------|
| 1                 | 39600     | 39600     | 0          | 0   | 0    |
| 2                 | 18085     | 18085     | 0          | 0   | 0    |
| 3                 | 0         | 0         | 0          | 0   | 0    |
| 4                 | 35060     | 35060     | 0          | 0   | 0    |
| 5                 | 32220     | 32220     | 0          | 0   | 0    |
| 6                 | 134806    | 163540    | 28734      | 3   | 4105 |
| 7                 | 67        | 67        | 0          | 0   | 0    |
| 8                 | 59896     | 62119     | ≥ 2223     | 0   | 318  |
| 9                 | 0         | 0         | 0          | 0   | 0    |
| 10                | 0         | 0         | 0          | 0   | 0    |
| 11                | 1216      | 1216      | 0          | 0   | 0    |
| 12                | 15        | 15        | 0          | 0   | 0    |
| 13                | 34303     | 37380     | 3077       | 0   | 440  |
| 14                | 132735    | 136871    | 4136       | 0   | 591  |
| 15                | 58994     | 59026     | 32         |     |      |
| 16                | 0         | 0         | 0          | 0   | 0    |
| 17                | 0         | 0         | 0          | 0   | 0    |
| 18                | 0         | 0         | 0          | 0   | 0    |
| TOTAL OIL IN GAL. |           |           | 38202      | 4   | 5453 |

TOTAL OIL IN GALLONS 38202  
TOTAL OIL IN BARRELS 910

CLOCK SETTING 30 MINUTES 24 TIMES DAILY  
1 Produce aproxamitely 95% water

WEEK#  
4th Qrtly

RECOVERY WELLS H2O DATA  
REPORTING PERIOD:

Oct 4 Dec 27

| WELL#     | OLD RDING | NEW RDING | TOTAL  | GPM  | GPD    |
|-----------|-----------|-----------|--------|------|--------|
| 1         | 476       | 488       | 14400  | 1.4  | 2057   |
| 2         | 882       | 916       | 40800  | 4.0  | 5829   |
| 3         | 0         | 0         | 0      | 0.0  | 0      |
| 4         | 948       | 969       | 25200  | 2.5  | 3600   |
| 5         | 1086      | 1086      | 0      | 0.0  | 0      |
| 6         | 0         | 0         | 0      | 0.0  | 0      |
| 7         | 20921     | 20921     | 0      | 0.0  | 0      |
| 8         | 1663      | 1839      | 211200 | 21.0 | 30171  |
| 9         | 552       | 552       | 0      | 0.0  | 0      |
| 10        | 258       | 258       | 0      | 0.0  | 0      |
| 11        | 774       | 774       | 0      | 0.0  | 0      |
| 12        | 13038     | 13038     | 0      | 0.0  | 0      |
| 13        | 29109     | 29242     | 79800  | 7.9  | 11400  |
| 14        | 29440     | 29898     | 915954 | 90.9 | 130851 |
| 15        | 0         | 0         | 0      | 0    | 0      |
| 16        | 0         | 0         | 0      | 0    | 0      |
| 17        | 0         | 0         | 0      | 0    | 0      |
| 18        | 0         | 0         | 0      | 0    | 0      |
| R.W Chase |           |           | 32027  | 128  | 32155  |

NOTES: Volume of water produced is estimated based on time pumped and not actual flow.



**ATTACHMENT B**

**2004 ANNUAL AND SEMI-ANNUAL  
LABORATORY ANALYTICAL REPORTS**



**e-Lab Analytical, Inc.**

10450 Standliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

November 08, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: Annual

Work Order : **0410241**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 3 samples on 10/21/2004 8:45:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 41.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

**e-Lab Analytical, Inc.**

**Date:** November 08, 2004

**CLIENT:** Navajo Refining Company

**Project:** Annual

**Work Order:** 0410241

## Work Order Sample Summary

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0410241-01           | RW-12                   | Water         |                   | 10/20/2004 11:00       | 10/21/2004 08:45     | <input type="checkbox"/> |
| 0410241-02           | RW-11                   | Water         |                   | 10/20/2004 13:15       | 10/21/2004 08:45     | <input type="checkbox"/> |
| 0410241-03           | RW-18                   | Water         |                   | 10/20/2004 14:00       | 10/21/2004 08:45     | <input type="checkbox"/> |

**e-Lab Analytical, Inc.****Date:** November 08, 2004

**CLIENT:** Navajo Refining Company  
**Project:** Annual  
**Work Order:** 0410241

**Case Narrative**

Batch 10847 Semivolatiles LCS/LCSD recoveries were outside of control limits for 3-Nitroaniline (52% and 52.2%). This is considered a SME (Sporadic Marginal Exceedence) which is accepted by the SOP at e-Lab Analytical.

Batch R24078 Volatiles MS/MSD was an unrelated sample.

Batch R24024 Anions MS/MSD was an unrelated sample.

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410241  
**Project:** Annual  
**Lab ID:** 0410241-01

**Client Sample ID:** RW-12  
**Collection Date:** 10/20/2004 11:00:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                                                |
|---------------------------------------|---------|---------------|------|-------|-----------------|--------------------------------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                                              |
|                                       |         | <b>SW7470</b> |      |       |                 |                                                              |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | Prep Date: 10/28/2004 Analyst: JCJ<br>10/29/2004 12:59:17 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                                              |
|                                       |         | <b>SW6020</b> |      |       |                 |                                                              |
| Aluminum                              | ND      | 0.0200        |      | mg/L  | 2               | Prep Date: 10/26/2004 Analyst: ALR<br>11/1/2004 7:04:00 PM   |
| Arsenic                               | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Barium                                | 0.0806  | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Beryllium                             | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Boron                                 | 0.435   | 0.200         |      | mg/L  | 10              | 10/30/2004 8:44:00 PM                                        |
| Cadmium                               | ND      | 0.00200       |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Calcium                               | 356     | 25.0          |      | mg/L  | 50              | 10/30/2004 6:14:00 PM                                        |
| Chromium                              | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Cobalt                                | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Copper                                | 0.00564 | 0.00400       |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Iron                                  | 1.70    | 0.400         |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Lead                                  | ND      | 0.0100        |      | mg/L  | 2               | 11/2/2004 3:48:00 PM                                         |
| Magnesium                             | 265     | 10.0          |      | mg/L  | 50              | 10/30/2004 6:14:00 PM                                        |
| Manganese                             | 0.217   | 0.0500        |      | mg/L  | 10              | 10/30/2004 8:44:00 PM                                        |
| Molybdenum                            | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Nickel                                | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Potassium                             | ND      | 0.400         |      | mg/L  | 2               | 11/2/2004 3:48:00 PM                                         |
| Selenium                              | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Silver                                | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Sodium                                | 170     | 2.00          |      | mg/L  | 10              | 11/2/2004 2:48:00 PM                                         |
| Vanadium                              | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:04:00 PM                                         |
| Zinc                                  | 0.0250  | 0.0100        |      | mg/L  | 2               | 11/2/2004 3:48:00 PM                                         |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                                              |
|                                       |         | <b>SW8270</b> |      |       |                 |                                                              |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1               | Prep Date: 10/25/2004 Analyst: HV<br>11/5/2004 4:32:00 AM    |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 11/5/2004 4:32:00 AM                                         |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 11/5/2004 4:32:00 AM                                         |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1               | 11/5/2004 4:32:00 AM                                         |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 4:32:00 AM                                         |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 4:32:00 AM                                         |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 11/5/2004 4:32:00 AM                                         |
| 3&4-Methylphenol                      | ND      | 10            |      | µg/L  | 1               | 11/5/2004 4:32:00 AM                                         |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 4:32:00 AM                                         |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 4:32:00 AM                                         |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 11/5/2004 4:32:00 AM                                         |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1               | 11/5/2004 4:32:00 AM                                         |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 4:32:00 AM                                         |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410241  
Project: Annual  
Lab ID: 0410241-01

Client Sample ID: RW-12  
Collection Date: 10/20/2004 11:00:00 AM  
Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 4:32:00 AM |
| Surr: 2,4,6-Tribromophenol | 90.7   | 39-153       |      | %REC  | 1               | 11/5/2004 4:32:00 AM |
| Surr: 2-Fluorobiphenyl     | 75.9   | 40-147       |      | %REC  | 1               | 11/5/2004 4:32:00 AM |
| Surr: 2-Fluorophenol       | 36.6   | 21-110       |      | %REC  | 1               | 11/5/2004 4:32:00 AM |
| Surr: 4-Terphenyl-d14      | 93.9   | 39-141       |      | %REC  | 1               | 11/5/2004 4:32:00 AM |
| Surr: Nitrobenzene-d5      | 68.5   | 37-140       |      | %REC  | 1               | 11/5/2004 4:32:00 AM |
| Surr: Phenol-d6            | 24.0   | 11-100       |      | %REC  | 1               | 11/5/2004 4:32:00 AM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |       |     |  |      |    |                       |
|---------------------------|-------|-----|--|------|----|-----------------------|
| 1,1,1-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| 1,1,2,2-Tetrachloroethane | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| 1,1,2-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| 1,1-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| 1,1-Dichloroethene        | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| 1,2-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| 2-Butanone                | ND    | 10  |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| 2-Chloroethyl vinyl ether | ND    | 10  |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| 2-Hexanone                | ND    | 10  |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| 4-Methyl-2-pentanone      | ND    | 10  |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| Acetone                   | ND    | 10  |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| Benzene                   | 3,400 | 120 |  | µg/L | 25 | 10/24/2004 4:37:00 PM |
| Bromodichloromethane      | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| Bromoform                 | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| Bromomethane              | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| Carbon disulfide          | ND    | 10  |  | µg/L | 1  | 10/22/2004 8:33:00 PM |
| Carbon tetrachloride      | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 8:33:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410241  
**Project:** Annual  
**Lab ID:** 0410241-01

**Client Sample ID:** RW-12  
**Collection Date:** 10/20/2004 11:00:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed          |
|-------------------------------------|--------|---------------|------|-------|---------------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Ethylbenzene                        | 68     | 5.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| m,p-Xylene                          | 330    | 10            |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Toluene                             | 37     | 5.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Xylenes, Total                      | 340    | 15            |      | µg/L  | 1                   | 10/22/2004 8:33:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 87.7   | 71-126        |      | %REC  | 1                   | 10/22/2004 8:33:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 80.5   | 71-126        |      | %REC  | 25                  | 10/24/2004 4:37:00 PM  |
| Surr: 4-Bromofluorobenzene          | 90.8   | 74-125        |      | %REC  | 1                   | 10/22/2004 8:33:00 PM  |
| Surr: 4-Bromofluorobenzene          | 88.7   | 74-125        |      | %REC  | 25                  | 10/24/2004 4:37:00 PM  |
| Surr: Dibromofluoromethane          | 114    | 73-126        |      | %REC  | 1                   | 10/22/2004 8:33:00 PM  |
| Surr: Dibromofluoromethane          | 84.9   | 73-126        |      | %REC  | 25                  | 10/24/2004 4:37:00 PM  |
| Surr: Toluene-d8                    | 97.2   | 75-125        |      | %REC  | 1                   | 10/22/2004 8:33:00 PM  |
| Surr: Toluene-d8                    | 90.4   | 75-125        |      | %REC  | 25                  | 10/24/2004 4:37:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>MG</b>  |                        |
| Chloride                            | 191    | 5.00          |      | mg/L  | 10                  | 10/22/2004 12:14:00 PM |
| Fluoride                            | 0.840  | 0.100         |      | mg/L  | 1                   | 10/22/2004 11:17:00 AM |
| Sulfate                             | 1,060  | 100           |      | mg/L  | 100                 | 10/22/2004 12:43:00 PM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1                   | 10/22/2004 11:17:00 AM |
| Surr: Dichloroacetic acid (surr)    | 99.6   | 80-120        |      | %REC  | 1                   | 10/22/2004 11:17:00 AM |
| Surr: Dichloroacetic acid (surr)    | 104    | 80-120        |      | %REC  | 10                  | 10/22/2004 12:14:00 PM |
| Surr: Dichloroacetic acid (surr)    | 102    | 80-120        |      | %REC  | 100                 | 10/22/2004 12:43:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>HDO</b> |                        |
| Alkalinity, Bicarbonate (As CaCO3)  | 690    | 5.00          |      | mg/L  | 1                   | 10/31/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 10/31/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 10/31/2004             |
| Alkalinity, Total (As CaCO3)        | 690    | 5.00          |      | mg/L  | 1                   | 10/31/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: <b>LMD</b> |                        |

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\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.****Date:** November 08, 2004**CLIENT:** Navajo Refining Company**Client Sample ID:** RW-12**Work Order:** 0410241**Collection Date:** 10/20/2004 11:00:00 AM**Project:** Annual**Lab ID:** 0410241-01**Matrix:** WATER

| Analyses | Result | Report<br>Limit | Qual | Units | Dilution<br>Factor | Date Analyzed |
|----------|--------|-----------------|------|-------|--------------------|---------------|
| Cyanide  | ND     | 0.0200          |      | mg/L  | 1                  | 10/28/2004    |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410241  
Project: Annual  
Lab ID: 0410241-02

Client Sample ID: RW-11  
Collection Date: 10/20/2004 1:15:00 PM  
Matrix: WATER

| Analyses                              | Result | Report Limit  | Qual | Units | Dilution Factor       | Date Analyzed         |
|---------------------------------------|--------|---------------|------|-------|-----------------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |        |               |      |       |                       |                       |
|                                       |        | <b>SW7470</b> |      |       | Prep Date: 10/28/2004 | Analyst: JCJ          |
| Mercury                               | ND     | 0.000200      |      | mg/L  | 1                     | 10/29/2004 1:08:11 PM |
| <b>ICP METALS, TOTAL</b>              |        |               |      |       |                       |                       |
|                                       |        | <b>SW6020</b> |      |       | Prep Date: 10/26/2004 | Analyst: ALR          |
| Aluminum                              | ND     | 0.0200        |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Arsenic                               | ND     | 0.0100        |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Barium                                | 1.67   | 0.0500        |      | mg/L  | 10                    | 10/30/2004 8:49:00 PM |
| Beryllium                             | ND     | 0.00400       |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Boron                                 | 0.389  | 0.0400        |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Cadmium                               | ND     | 0.00200       |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Calcium                               | 242    | 25.0          |      | mg/L  | 50                    | 10/30/2004 6:18:00 PM |
| Chromium                              | ND     | 0.00400       |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Cobalt                                | ND     | 0.00400       |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Copper                                | ND     | 0.00400       |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Iron                                  | 8.04   | 0.400         |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Lead                                  | ND     | 0.0100        |      | mg/L  | 2                     | 11/2/2004 3:53:00 PM  |
| Magnesium                             | 120    | 10.0          |      | mg/L  | 50                    | 10/30/2004 6:18:00 PM |
| Manganese                             | 0.520  | 0.0500        |      | mg/L  | 10                    | 10/30/2004 8:49:00 PM |
| Molybdenum                            | ND     | 0.0100        |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Nickel                                | ND     | 0.0100        |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Potassium                             | 1.79   | 0.400         |      | mg/L  | 2                     | 11/2/2004 3:53:00 PM  |
| Selenium                              | ND     | 0.0100        |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Silver                                | ND     | 0.0100        |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Sodium                                | 80.5   | 2.00          |      | mg/L  | 10                    | 11/2/2004 2:52:00 PM  |
| Vanadium                              | ND     | 0.0100        |      | mg/L  | 2                     | 11/1/2004 7:09:00 PM  |
| Zinc                                  | 0.182  | 0.0100        |      | mg/L  | 2                     | 11/2/2004 3:53:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |               |      |       |                       |                       |
|                                       |        | <b>SW8270</b> |      |       | Prep Date: 10/25/2004 | Analyst: HV           |
| 1,2,4-Trichlorobenzene                | ND     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |
| 2,4,5-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |
| 2,4,6-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |
| 2-Methylnaphthalene                   | ND     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |
| 2-Methylphenol                        | ND     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |
| 2-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |
| 2-Nitrophenol                         | ND     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |
| 3&4-Methylphenol                      | 16     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |
| 3-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |
| 4-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |
| 4-Nitrophenol                         | ND     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |
| Acenaphthene                          | ND     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |
| Acenaphthylene                        | ND     | 10            |      | µg/L  | 1                     | 11/5/2004 11:34:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**
**Date:** November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410241  
**Project:** Annual  
**Lab ID:** 0410241-02

**Client Sample ID:** RW-11  
**Collection Date:** 10/20/2004 1:15:00 PM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Naphthalene                | 35     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:34:00 PM |
| Surr: 2,4,6-Tribromophenol | 86.5   | 39-153       |      | %REC  | 1               | 11/5/2004 11:34:00 PM |
| Surr: 2-Fluorobiphenyl     | 68.1   | 40-147       |      | %REC  | 1               | 11/5/2004 11:34:00 PM |
| Surr: 2-Fluorophenol       | 48.8   | 21-110       |      | %REC  | 1               | 11/5/2004 11:34:00 PM |
| Surr: 4-Terphenyl-d14      | 82.8   | 39-141       |      | %REC  | 1               | 11/5/2004 11:34:00 PM |
| Surr: Nitrobenzene-d5      | 73.1   | 37-140       |      | %REC  | 1               | 11/5/2004 11:34:00 PM |
| Surr: Phenol-d6            | 24.4   | 11-100       |      | %REC  | 1               | 11/5/2004 11:34:00 PM |

**VOLATILES BY GC/MS**
**SW8260**
**Analyst: PC**

|                           |     |     |  |      |   |                       |
|---------------------------|-----|-----|--|------|---|-----------------------|
| 1,1,1-Trichloroethane     | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| 1,1,2,2-Tetrachloroethane | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| 1,1,2-Trichloroethane     | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| 1,1-Dichloroethane        | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| 1,1-Dichloroethene        | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| 1,2-Dichloroethane        | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| 2-Butanone                | 21  | 10  |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| 2-Chloroethyl vinyl ether | ND  | 10  |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| 2-Hexanone                | ND  | 10  |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| 4-Methyl-2-pentanone      | ND  | 10  |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| Acetone                   | 13  | 10  |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| Benzene                   | 490 | 25  |  | µg/L | 5 | 10/24/2004 6:18:00 PM |
| Bromodichloromethane      | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| Bromoform                 | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| Bromomethane              | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| Carbon disulfide          | ND  | 10  |  | µg/L | 1 | 10/22/2004 9:01:00 PM |
| Carbon tetrachloride      | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:01:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410241  
**Project:** Annual  
**Lab ID:** 0410241-02

**Client Sample ID:** RW-11  
**Collection Date:** 10/20/2004 1:15:00 PM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Ethylbenzene                        | 550    | 25            |      | µg/L                | 5               | 10/24/2004 6:18:00 PM |
| m,p-Xylene                          | 150    | 10            |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Toluene                             | 13     | 5.0           |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Xylenes, Total                      | 180    | 15            |      | µg/L                | 1               | 10/22/2004 9:01:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 77.9   | 71-126        |      | %REC                | 1               | 10/22/2004 9:01:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 82.3   | 71-126        |      | %REC                | 5               | 10/24/2004 6:18:00 PM |
| Surr: 4-Bromofluorobenzene          | 100    | 74-125        |      | %REC                | 1               | 10/22/2004 9:01:00 PM |
| Surr: 4-Bromofluorobenzene          | 88.8   | 74-125        |      | %REC                | 5               | 10/24/2004 6:18:00 PM |
| Surr: Dibromofluoromethane          | 86.5   | 73-126        |      | %REC                | 5               | 10/24/2004 6:18:00 PM |
| Surr: Dibromofluoromethane          | 89.1   | 73-126        |      | %REC                | 1               | 10/22/2004 9:01:00 PM |
| Surr: Toluene-d8                    | 100    | 75-125        |      | %REC                | 1               | 10/22/2004 9:01:00 PM |
| Surr: Toluene-d8                    | 90.4   | 75-125        |      | %REC                | 5               | 10/24/2004 6:18:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                       |
| Chloride                            | 109    | 2.50          |      | mg/L                | 5               | 10/22/2004 1:40:00 PM |
| Fluoride                            | 1.00   | 0.100         |      | mg/L                | 1               | 10/22/2004 1:11:00 PM |
| Sulfate                             | 48.6   | 5.00          |      | mg/L                | 5               | 10/22/2004 1:40:00 PM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 10/22/2004 1:11:00 PM |
| Surr: Dichloroacetic acid (surr)    | 99.2   | 80-120        |      | %REC                | 1               | 10/22/2004 1:11:00 PM |
| Surr: Dichloroacetic acid (surr)    | 104    | 80-120        |      | %REC                | 5               | 10/22/2004 1:40:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>HDO</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 870    | 5.00          |      | mg/L                | 1               | 10/31/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/31/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/31/2004            |
| Alkalinity, Total (As CaCO3)        | 870    | 5.00          |      | mg/L                | 1               | 10/31/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 10/28/2004            |

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 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410241  
**Project:** Annual  
**Lab ID:** 0410241-03

**Client Sample ID:** RW-18  
**Collection Date:** 10/20/2004 2:00:00 PM  
**Matrix:** WATER

| Analyses                              | Result | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                                               |
|---------------------------------------|--------|---------------|------|-------|-----------------|-------------------------------------------------------------|
| <b>MERCURY, TOTAL</b>                 |        |               |      |       |                 |                                                             |
|                                       |        | <b>SW7470</b> |      |       |                 |                                                             |
| Mercury                               | ND     | 0.000200      |      | mg/L  | 1               | Prep Date: 10/28/2004 Analyst: JCJ<br>10/29/2004 1:09:44 PM |
| <b>ICP METALS, TOTAL</b>              |        |               |      |       |                 |                                                             |
|                                       |        | <b>SW6020</b> |      |       |                 |                                                             |
| Aluminum                              | ND     | 0.0200        |      | mg/L  | 2               | Prep Date: 10/26/2004 Analyst: ALR<br>11/1/2004 7:14:00 PM  |
| Arsenic                               | ND     | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Barium                                | 0.0185 | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Beryllium                             | ND     | 0.00400       |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Boron                                 | 1.13   | 0.200         |      | mg/L  | 10              | 10/30/2004 9:46:00 PM                                       |
| Cadmium                               | ND     | 0.00200       |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Calcium                               | 500    | 25.0          |      | mg/L  | 50              | 10/30/2004 6:23:00 PM                                       |
| Chromium                              | ND     | 0.00400       |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Cobalt                                | ND     | 0.00400       |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Copper                                | 0.0131 | 0.00400       |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Iron                                  | 2.41   | 0.400         |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Lead                                  | ND     | 0.0100        |      | mg/L  | 2               | 11/2/2004 3:58:00 PM                                        |
| Magnesium                             | 577    | 10.0          |      | mg/L  | 50              | 10/30/2004 6:23:00 PM                                       |
| Manganese                             | 0.982  | 0.0500        |      | mg/L  | 10              | 10/30/2004 9:46:00 PM                                       |
| Molybdenum                            | ND     | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Nickel                                | 0.0116 | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Potassium                             | 1.37   | 0.400         |      | mg/L  | 2               | 11/2/2004 3:58:00 PM                                        |
| Selenium                              | ND     | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Silver                                | ND     | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Sodium                                | 336    | 2.00          |      | mg/L  | 10              | 10/30/2004 9:46:00 PM                                       |
| Vanadium                              | ND     | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM                                        |
| Zinc                                  | 0.0280 | 0.0100        |      | mg/L  | 2               | 11/2/2004 3:58:00 PM                                        |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |               |      |       |                 |                                                             |
|                                       |        | <b>SW8270</b> |      |       |                 |                                                             |
| 1,2,4-Trichlorobenzene                | ND     | 10            |      | µg/L  | 1               | Prep Date: 10/26/2004 Analyst: HV<br>11/5/2004 11:58:00 PM  |
| 2,4,5-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM                                       |
| 2,4,6-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM                                       |
| 2-Methylnaphthalene                   | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM                                       |
| 2-Methylphenol                        | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM                                       |
| 2-Nitroaniline                        | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM                                       |
| 2-Nitrophenol                         | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM                                       |
| 3&4-Methylphenol                      | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM                                       |
| 3-Nitroaniline                        | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM                                       |
| 4-Nitroaniline                        | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM                                       |
| 4-Nitrophenol                         | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM                                       |
| Acenaphthene                          | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM                                       |
| Acenaphthylene                        | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM                                       |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410241  
Project: Annual  
Lab ID: 0410241-03

Client Sample ID: RW-18  
Collection Date: 10/20/2004 2:00:00 PM  
Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Surr: 2,4,6-Tribromophenol | 64.5   | 39-153       |      | %REC  | 1               | 11/5/2004 11:58:00 PM |
| Surr: 2-Fluorobiphenyl     | 56.7   | 40-147       |      | %REC  | 1               | 11/5/2004 11:58:00 PM |
| Surr: 2-Fluorophenol       | 32.2   | 21-110       |      | %REC  | 1               | 11/5/2004 11:58:00 PM |
| Surr: 4-Terphenyl-d14      | 64.6   | 39-141       |      | %REC  | 1               | 11/5/2004 11:58:00 PM |
| Surr: Nitrobenzene-d5      | 57.5   | 37-140       |      | %REC  | 1               | 11/5/2004 11:58:00 PM |
| Surr: Phenol-d6            | 18.8   | 11-100       |      | %REC  | 1               | 11/5/2004 11:58:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                       |
|---------------------------|----|-----|--|------|---|-----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Benzene                   | 19 | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410241  
**Project:** Annual  
**Lab ID:** 0410241-03

**Client Sample ID:** RW-18  
**Collection Date:** 10/20/2004 2:00:00 PM  
**Matrix:** WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|-----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Ethylbenzene                | 8.1    | 5.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| m,p-Xylene                  | 11     | 10           |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 10/25/2004 2:39:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 106    | 71-126       |      | %REC  | 1               | 10/25/2004 2:39:00 PM |
| Surr: 4-Bromofluorobenzene  | 95.7   | 74-125       |      | %REC  | 1               | 10/25/2004 2:39:00 PM |
| Surr: Dibromofluoromethane  | 107    | 73-126       |      | %REC  | 1               | 10/25/2004 2:39:00 PM |
| Surr: Toluene-d8            | 99.6   | 75-125       |      | %REC  | 1               | 10/25/2004 2:39:00 PM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |       |        |      |     |                       |
|----------------------------------|-------|--------|------|-----|-----------------------|
| Chloride                         | 478   | 5.00   | mg/L | 10  | 10/22/2004 4:02:00 PM |
| Fluoride                         | 1.55  | 0.100  | mg/L | 1   | 10/22/2004 3:05:00 PM |
| Sulfate                          | 3,200 | 100    | mg/L | 100 | 10/22/2004 4:31:00 PM |
| Nitrate/Nitrite (as N)           | ND    | 0.100  | mg/L | 1   | 10/22/2004 3:05:00 PM |
| Surr: Dichloroacetic acid (surr) | 111   | 80-120 | %REC | 1   | 10/22/2004 3:05:00 PM |
| Surr: Dichloroacetic acid (surr) | 101   | 80-120 | %REC | 10  | 10/22/2004 4:02:00 PM |
| Surr: Dichloroacetic acid (surr) | 102   | 80-120 | %REC | 100 | 10/22/2004 4:31:00 PM |

**ALKALINITY****E310.1**Analyst: **HDO**

|                                    |     |      |      |   |            |
|------------------------------------|-----|------|------|---|------------|
| Alkalinity, Bicarbonate (As CaCO3) | 360 | 5.00 | mg/L | 1 | 10/31/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 | mg/L | 1 | 10/31/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 | mg/L | 1 | 10/31/2004 |
| Alkalinity, Total (As CaCO3)       | 360 | 5.00 | mg/L | 1 | 10/31/2004 |

**CYANIDE, TOTAL****E335.3**Analyst: **LMD**

|         |    |        |      |   |            |
|---------|----|--------|------|---|------------|
| Cyanide | ND | 0.0200 | mg/L | 1 | 10/28/2004 |
|---------|----|--------|------|---|------------|

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

AR Page 10 of 10

## e-Lab Analytical, Inc.

Date: Nov 08 2004

CLIENT: Navajo Refining Company

Work Order: 0410241

Project: Annual

## QC BATCH REPORT

Batch ID: 10862 InstrumentID: ICP4500

MBLK Sample ID: MBLKW2-102604 Test Code: SW6020 Units: mg/L Analysis Date: 10/27/04 14:04

Client ID: Run ID: ICP4500\_041027A SeqNo: 561905 Prep Date: 10/26/2004 DF: 1

| Analyte    | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | ND     | 0.010  |         |               |      |               |               |      |           |      |
| Arsenic    | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Barium     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Cadmium    | ND     | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium    | ND     | 0.50   |         |               |      |               |               |      |           |      |
| Chromium   | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Copper     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Iron       | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Lead       | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium  | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Manganese  | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Molybdenum | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium  | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Selenium   | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Silver     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium     | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium   | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc       | ND     | 0.0050 |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW2-102604 Test Code: SW6020 Units: mg/L Analysis Date: 10/29/04 19:36

Client ID: Run ID: ICP4500\_041029A SeqNo: 563925 Prep Date: 10/26/2004 DF: 1

| Analyte   | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | ND     | 0.0020 |         |               |      |               |               |      |           |      |
| Boron     | ND     | 0.020  |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is &gt; 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10862 InstrumentID: ICP4500

LCS Sample ID: MLCSW2-102604 Test Code: SW6020 Units: mg/L Analysis Date: 10/27/04 14:09

Client ID: Run ID: ICP4500\_041027A SeqNo: 561906 Prep Date: 10/26/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.04112 | 0.010  | 0.05    | 0             | 82.2 | 79-126        | 0             |      |           |      |
| Arsenic    | 0.04758 | 0.0050 | 0.05    | 0             | 95.2 | 80-121        | 0             |      |           |      |
| Barium     | 0.04482 | 0.0050 | 0.05    | 0             | 89.6 | 79.8-119      | 0             |      |           |      |
| Cadmium    | 0.04839 | 0.0020 | 0.05    | 0             | 96.8 | 79.1-119      | 0             |      |           |      |
| Calcium    | 4.743   | 0.50   | 5       | 0             | 94.9 | 80-121        | 0             |      |           |      |
| Chromium   | 0.0437  | 0.0050 | 0.05    | 0             | 87.4 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04392 | 0.0050 | 0.05    | 0             | 87.8 | 82-121        | 0             |      |           |      |
| Copper     | 0.04325 | 0.0050 | 0.05    | 0             | 86.5 | 81-120        | 0             |      |           |      |
| Iron       | 4.634   | 0.20   | 5       | 0             | 92.7 | 80-120        | 0             |      |           |      |
| Lead       | 0.04323 | 0.0050 | 0.05    | 0             | 86.5 | 80-118        | 0             |      |           |      |
| Magnesium  | 4.78    | 0.20   | 5       | 0             | 95.6 | 80-120        | 0             |      |           |      |
| Manganese  | 0.04349 | 0.0050 | 0.05    | 0             | 87   | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04352 | 0.0050 | 0.05    | 0             | 87   | 81-115        | 0             |      |           |      |
| Nickel     | 0.04498 | 0.0050 | 0.05    | 0             | 90   | 82-120        | 0             |      |           |      |
| Potassium  | 4.685   | 0.20   | 5       | 0             | 93.7 | 80-120        | 0             |      |           |      |
| Selenium   | 0.04815 | 0.0050 | 0.05    | 0             | 96.3 | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04552 | 0.0050 | 0.05    | 0             | 91   | 80-117        | 0             |      |           |      |
| Sodium     | 4.55    | 0.20   | 5       | 0             | 91   | 80.6-119      | 0             |      |           |      |
| Vanadium   | 0.045   | 0.0050 | 0.05    | 0             | 90   | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.04493 | 0.0050 | 0.05    | 0             | 89.9 | 79-118        | 0             |      |           |      |

LCS Sample ID: MLCSW2-102604 Test Code: SW6020 Units: mg/L Analysis Date: 10/29/04 19:40

Client ID: Run ID: ICP4500\_041029A SeqNo: 563926 Prep Date: 10/26/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | 0.05309 | 0.0020 | 0.05    | 0             | 106  | 78.9-120      | 0             |      |           |      |
| Boron     | 0.5362  | 0.020  | 0.5     | 0             | 107  | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10862 InstrumentID: ICP4500

MS Sample ID: 0410225-08CMS Test Code: SW6020 Units: mg/L Analysis Date: 10/27/04 14:31

Client ID: Run ID: ICP4500\_041027A SeqNo: 561911 Prep Date: 10/26/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.0456  | 0.010  | 0.05    | 0.0002146     | 90.8 | 79-126        | 0             |      |           |      |
| Arsenic    | 0.04741 | 0.0050 | 0.05    | -0.001188     | 97.2 | 80-121        | 0             |      |           |      |
| Barium     | 0.04617 | 0.0050 | 0.05    | 0.0009088     | 90.5 | 79.8-119      | 0             |      |           |      |
| Cadmium    | 0.0482  | 0.0020 | 0.05    | 0.00005498    | 96.3 | 79.1-119      | 0             |      |           |      |
| Calcium    | 4.79    | 0.50   | 5       | 0.09682       | 93.9 | 80-121        | 0             |      |           |      |
| Chromium   | 0.04517 | 0.0050 | 0.05    | 0.0004131     | 89.5 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04461 | 0.0050 | 0.05    | 0.0004069     | 88.4 | 82-121        | 0             |      |           |      |
| Copper     | 0.04473 | 0.0050 | 0.05    | 0.0001013     | 89.3 | 80-120        | 0             |      |           |      |
| Iron       | 4.703   | 0.20   | 5       | 0.01851       | 93.7 | 80-120        | 0             |      |           |      |
| Lead       | 0.04313 | 0.0050 | 0.05    | 0.00009188    | 86.1 | 80-118        | 0             |      |           |      |
| Magnesium  | 4.694   | 0.20   | 5       | 0.04154       | 93   | 80-120        | 0             |      |           |      |
| Manganese  | 0.047   | 0.0050 | 0.05    | 0.00278       | 88.4 | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04295 | 0.0050 | 0.05    | 0.001224      | 83.5 | 81-115        | 0             |      |           |      |
| Nickel     | 0.04574 | 0.0050 | 0.05    | -0.00005889   | 91.6 | 82-120        | 0             |      |           |      |
| Potassium  | 4.702   | 0.20   | 5       | 0.03225       | 93.4 | 80-120        | 0             |      |           |      |
| Selenium   | 0.04829 | 0.0050 | 0.05    | 0.00003129    | 96.5 | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04553 | 0.0050 | 0.05    | 0.0003438     | 90.4 | 80-117        | 0             |      |           |      |
| Sodium     | 4.57    | 0.20   | 5       | 0.09221       | 89.6 | 80.6-119      | 0             |      |           |      |
| Vanadium   | 0.04464 | 0.0050 | 0.05    | 0.00001488    | 89.3 | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.04492 | 0.0050 | 0.05    | 0.001819      | 86.2 | 79-118        | 0             |      |           |      |

MS Sample ID: 0410225-08CMS Test Code: SW6020 Units: mg/L Analysis Date: 10/29/04 19:54

Client ID: Run ID: ICP4500\_041029A SeqNo: 563929 Prep Date: 10/26/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | 0.05312 | 0.0020 | 0.05    | 0.00004241    | 106  | 78.9-120      | 0             |      |           |      |
| Boron     | 0.5305  | 0.020  | 0       | 0.009991      | 0    | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10862 InstrumentID: ICP4500

| MSD        | Sample ID: 0410225-08CMSD |        |         | Test Code: SW6020 |      | Units: mg/L           |               | Analysis Date: 10/27/04 14:36 |           |      |
|------------|---------------------------|--------|---------|-------------------|------|-----------------------|---------------|-------------------------------|-----------|------|
| Client ID: | Run ID: ICP4500_041027A   |        |         | SeqNo: 561912     |      | Prep Date: 10/26/2004 |               | DF: 1                         |           |      |
| Analyte    | Result                    | PQL    | SPK Val | SPK Ref Value     | %REC | Control Limit         | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Aluminum   | 0.04562                   | 0.010  | 0.05    | 0.0002146         | 90.8 | 79-126                | 0.0456        | 0.0439                        | 15        |      |
| Arsenic    | 0.04639                   | 0.0050 | 0.05    | -0.001188         | 95.2 | 80-121                | 0.04741       | 2.17                          | 15        |      |
| Barium     | 0.04587                   | 0.0050 | 0.05    | 0.0009088         | 89.9 | 79.8-119              | 0.04617       | 0.652                         | 15        |      |
| Cadmium    | 0.04773                   | 0.0020 | 0.05    | 0.00005498        | 95.4 | 79.1-119              | 0.0482        | 0.98                          | 15        |      |
| Calcium    | 4.776                     | 0.50   | 5       | 0.09682           | 93.6 | 80-121                | 4.79          | 0.293                         | 15        |      |
| Chromium   | 0.04451                   | 0.0050 | 0.05    | 0.0004131         | 88.2 | 79.3-121              | 0.04517       | 1.47                          | 15        |      |
| Cobalt     | 0.04453                   | 0.0050 | 0.05    | 0.0004069         | 88.2 | 82-121                | 0.04461       | 0.179                         | 15        |      |
| Copper     | 0.04403                   | 0.0050 | 0.05    | 0.0001013         | 87.9 | 81-120                | 0.04473       | 1.58                          | 15        |      |
| Iron       | 4.649                     | 0.20   | 5       | 0.01851           | 92.6 | 80-120                | 4.703         | 1.15                          | 15        |      |
| Lead       | 0.04298                   | 0.0050 | 0.05    | 0.00009188        | 85.8 | 80-118                | 0.04313       | 0.348                         | 15        |      |
| Magnesium  | 4.66                      | 0.20   | 5       | 0.04154           | 92.4 | 80-120                | 4.694         | 0.727                         | 15        |      |
| Manganese  | 0.046                     | 0.0050 | 0.05    | 0.00278           | 86.4 | 82-119                | 0.047         | 2.15                          | 15        |      |
| Molybdenum | 0.04282                   | 0.0050 | 0.05    | 0.001224          | 83.2 | 81-115                | 0.04295       | 0.303                         | 15        |      |
| Nickel     | 0.04493                   | 0.0050 | 0.05    | -0.00005889       | 90   | 82-120                | 0.04574       | 1.79                          | 15        |      |
| Potassium  | 4.713                     | 0.20   | 5       | 0.03225           | 93.6 | 80-120                | 4.702         | 0.234                         | 15        |      |
| Selenium   | 0.04641                   | 0.0050 | 0.05    | 0.00003129        | 92.8 | 79.2-118              | 0.04829       | 3.97                          | 15        |      |
| Silver     | 0.04434                   | 0.0050 | 0.05    | 0.0003438         | 88   | 80-117                | 0.04553       | 2.65                          | 15        |      |
| Sodium     | 4.529                     | 0.20   | 5       | 0.09221           | 88.7 | 80.6-119              | 4.57          | 0.901                         | 15        |      |
| Vanadium   | 0.04434                   | 0.0050 | 0.05    | 0.00001488        | 88.7 | 82.1-119              | 0.04464       | 0.674                         | 15        |      |
| Zinc       | 0.04556                   | 0.0050 | 0.05    | 0.001819          | 87.5 | 79-118                | 0.04492       | 1.41                          | 15        |      |

|            |                           |        |         |               |                   |                       |               |                               |           |      |
|------------|---------------------------|--------|---------|---------------|-------------------|-----------------------|---------------|-------------------------------|-----------|------|
| MSD        | Sample ID: 0410225-08CMSD |        |         |               | Test Code: SW6020 |                       | Units: mg/L   | Analysis Date: 10/29/04 19:59 |           |      |
| Client ID: | Run ID: ICP4500_041029A   |        |         | SeqNo: 563930 |                   | Prep Date: 10/26/2004 |               | DF: 1                         |           |      |
| Analyte    | Result                    | PQL    | SPK Val | SPK Ref Value | %REC              | Control Limit         | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Beryllium  | 0.04994                   | 0.0020 | 0.05    | 0.00004241    | 99.8              | 78.9-120              | 0.05312       | 6.17                          | 15        |      |
| Boron      | 0.5156                    | 0.020  | 0       | 0.009991      | 0                 | 80-120                | 0.5305        | 2.85                          | 15        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0410241  
Project: Annual

## QC BATCH REPORT

Batch ID: 10862 InstrumentID: ICP4500

|            |                           |        |         |                   |      |                       |               |                               |           |      |
|------------|---------------------------|--------|---------|-------------------|------|-----------------------|---------------|-------------------------------|-----------|------|
| DUP        | Sample ID: 0410225-08CDUP |        |         | Test Code: SW6020 |      | Units: mg/L           |               | Analysis Date: 10/27/04 14:27 |           |      |
| Client ID: | Run ID: ICP4500_041027A   |        |         | SeqNo: 561910     |      | Prep Date: 10/26/2004 |               | DF: 1                         |           |      |
| Analyte    | Result                    | PQL    | SPK Val | SPK Ref Value     | %REC | Control Limit         | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Aluminum   | ND                        | 0.010  | 0       | 0                 | 0    | 0-0                   | 0.0002146     | 0                             | 25        |      |
| Arsenic    | ND                        | 0.0050 | 0       | 0                 | 0    | 0-0                   | -0.001188     | 0                             | 25        |      |
| Barium     | 0.0009541                 | 0.0050 | 0       | 0                 | 0    | 0-0                   | 0.0009088     | 0                             | 25        | J    |
| Cadmium    | ND                        | 0.0020 | 0       | 0                 | 0    | 0-0                   | 0.00005498    | 0                             | 25        |      |
| Calcium    | ND                        | 0.50   | 0       | 0                 | 0    | 0-0                   | 0.09682       | 0                             | 25        |      |
| Chromium   | 0.0005351                 | 0.0050 | 0       | 0                 | 0    | 0-0                   | 0.0004131     | 0                             | 25        | J    |
| Cobalt     | 0.0003818                 | 0.0050 | 0       | 0                 | 0    | 0-0                   | 0.0004069     | 0                             | 25        | J    |
| Copper     | ND                        | 0.0050 | 0       | 0                 | 0    | 0-0                   | 0.0001013     | 0                             | 25        |      |
| Iron       | ND                        | 0.20   | 0       | 0                 | 0    | 0-0                   | 0.01851       | 0                             | 25        |      |
| Lead       | 0.001886                  | 0.0050 | 0       | 0                 | 0    | 0-0                   | 0.00009188    | 0                             | 25        | J    |
| Magnesium  | 0.03988                   | 0.20   | 0       | 0                 | 0    | 0-0                   | 0.04154       | 0                             | 25        | J    |
| Manganese  | 0.0028                    | 0.0050 | 0       | 0                 | 0    | 0-0                   | 0.00278       | 0                             | 25        | J    |
| Molybdenum | ND                        | 0.0050 | 0       | 0                 | 0    | 0-0                   | 0.001224      | 0                             | 25        |      |
| Nickel     | ND                        | 0.0050 | 0       | 0                 | 0    | 0-0                   | -0.00005889   | 0                             | 25        |      |
| Potassium  | 0.02547                   | 0.20   | 0       | 0                 | 0    | 0-0                   | 0.03225       | 0                             | 25        | J    |
| Selenium   | ND                        | 0.0050 | 0       | 0                 | 0    | 0-0                   | 0.00003129    | 0                             | 25        |      |
| Silver     | 0.0006316                 | 0.0050 | 0       | 0                 | 0    | 0-0                   | 0.0003438     | 0                             | 25        | J    |
| Sodium     | 0.09019                   | 0.20   | 0       | 0                 | 0    | 0-0                   | 0.09221       | 0                             | 25        | J    |
| Vanadium   | ND                        | 0.0050 | 0       | 0                 | 0    | 0-0                   | 0.00001488    | 0                             | 25        |      |
| Zinc       | ND                        | 0.0050 | 0       | 0                 | 0    | 0-0                   | 0.001819      | 0                             | 25        |      |

|            |                           |        |         |               |                   |                       |               |                               |           |      |
|------------|---------------------------|--------|---------|---------------|-------------------|-----------------------|---------------|-------------------------------|-----------|------|
| DUP        | Sample ID: 0410225-08CDUP |        |         |               | Test Code: SW6020 |                       | Units: mg/L   | Analysis Date: 10/29/04 19:49 |           |      |
| Client ID: | Run ID: ICP4500_041029A   |        |         | SeqNo: 563928 |                   | Prep Date: 10/26/2004 |               | DF: 1                         |           |      |
| Analyte    | Result                    | PQL    | SPK Val | SPK Ref Value | %REC              | Control Limit         | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Beryllium  | ND                        | 0.0020 | 0       | 0             | 0                 | 0-0                   | 0.00004241    | 0                             | 25        |      |
| Boron      | ND                        | 0.020  | 0       | 0             | 0                 | 0-0                   | 0.009991      | 0                             | 25        |      |

The following samples were analyzed in this batch:

0410241-01C 0410241-02C 0410241-03C

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10918 InstrumentID: Mercury

MBLK Sample ID: GBLKW2-102804 Test Code: SW7470 Units: mg/L Analysis Date: 10/29/04 12:51

Client ID: Run ID: MERCURY\_041029B SeqNo: 563581 Prep Date: 10/28/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW2-102804 Test Code: SW7470 Units: mg/L Analysis Date: 10/29/04 12:53

Client ID: Run ID: MERCURY\_041029B SeqNo: 563582 Prep Date: 10/28/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.0052 | 0.00020 | 0.005   | 0             | 104  | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW2-102804 Test Code: SW7470 Units: mg/L Analysis Date: 10/29/04 12:54

Client ID: Run ID: MERCURY\_041029B SeqNo: 563583 Prep Date: 10/28/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00534 | 0.00020 | 0.005   | 0             | 107  | 83-115        | 0.0052        | 2.66 | 20        |      |

MS Sample ID: 0410241-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 10/29/04 13:02

Client ID: RW-12 Run ID: MERCURY\_041029B SeqNo: 563586 Prep Date: 10/28/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00502 | 0.00020 | 0.005   | 0.000012      | 100  | 83-115        | 0             |      |           |      |

MSD Sample ID: 0410241-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 10/29/04 13:03

Client ID: RW-12 Run ID: MERCURY\_041029B SeqNo: 563587 Prep Date: 10/28/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.0051 | 0.00020 | 0.005   | 0.000012      | 102  | 83-115        | 0.00502       | 1.58 | 20        |      |

DUP Sample ID: 0410241-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 10/29/04 13:03

Client ID: RW-12 Run ID: MERCURY\_041029B SeqNo: 563585 Prep Date: 10/28/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | 0.000012      | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410241-01C | 0410241-02C | 0410241-03C |
|-------------|-------------|-------------|

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10847 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-041025 Test Code: SW8270 Units: µg/L Analysis Date: 10/27/04 13:40

Client ID: Run ID: SV-3\_041027A SeqNo: 562498 Prep Date: 10/25/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3&4-Methylphenol           | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 89.87  | 10  | 100     | 0             | 89.9 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 78.41  | 10  | 100     | 0             | 78.4 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 37.87  | 10  | 100     | 0             | 37.9 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 83.43  | 10  | 100     | 0             | 83.4 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 78.27  | 10  | 100     | 0             | 78.3 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 23.21  | 10  | 100     | 0             | 23.2 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10847 InstrumentID: SV-3

LCS Sample ID: SLCSW1-041025 Test Code: SW8270 Units: µg/L Analysis Date: 10/27/04 14:07

Client ID: Run ID: SV-3\_041027A SeqNo: 562499 Prep Date: 10/25/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 34.36  | 10  | 50      | 0             | 68.7 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 76.11  | 10  | 100     | 0             | 76.1 | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 73.09  | 10  | 100     | 0             | 73.1 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 33.29  | 10  | 50      | 0             | 66.6 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 58.36  | 10  | 100     | 0             | 58.4 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 35.51  | 10  | 50      | 0             | 71   | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 74.41  | 10  | 100     | 0             | 74.4 | 60-119        | 0             |      |           |      |
| 3&4-Methylphenol           | 80.21  | 10  | 150     | 0             | 53.5 | 44-115        | 0             |      |           |      |
| 3-Nitroaniline             | 26.01  | 10  | 50      | 0             | 52   | 61-118        | 0             |      |           | S    |
| 4-Nitroaniline             | 31.83  | 10  | 50      | 0             | 63.7 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 34.57  | 10  | 100     | 0             | 34.6 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 36.6   | 10  | 50      | 0             | 73.2 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 35.99  | 10  | 50      | 0             | 72   | 67-116        | 0             |      |           |      |
| Aniline                    | 21.94  | 10  | 50      | 0             | 43.9 | 40-130        | 0             |      |           |      |
| Anthracene                 | 37.69  | 10  | 50      | 0             | 75.4 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 37.4   | 10  | 50      | 0             | 74.8 | 55-131        | 0             |      |           |      |
| Benzidine                  | 10.56  | 10  | 50      | 0             | 21.1 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 32.6   | 10  | 50      | 0             | 65.2 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 37.9   | 10  | 50      | 0             | 75.8 | 42-123        | 0             |      |           |      |
| Isophorone                 | 36.85  | 10  | 50      | 0             | 73.7 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 36.04  | 10  | 50      | 0             | 72.1 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 14.46  | 10  | 50      | 0             | 28.9 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 39.15  | 10  | 50      | 0             | 78.3 | 72-144        | 0             |      |           |      |
| Naphthalene                | 35.25  | 10  | 50      | 0             | 70.5 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 36.45  | 10  | 50      | 0             | 72.9 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 70.54  | 10  | 100     | 0             | 70.5 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 37.92  | 10  | 50      | 0             | 75.8 | 69-119        | 0             |      |           |      |
| Phenol                     | 25.85  | 10  | 100     | 0             | 25.8 | 16-115        | 0             |      |           |      |
| Pyrene                     | 35.39  | 10  | 50      | 0             | 70.8 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 83.67  | 10  | 100     | 0             | 83.7 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 76.26  | 10  | 100     | 0             | 76.3 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 37.46  | 10  | 100     | 0             | 37.5 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 79.11  | 10  | 100     | 0             | 79.1 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 76.93  | 10  | 100     | 0             | 76.9 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 26.76  | 10  | 100     | 0             | 26.8 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10847 InstrumentID: SV-3

LCSD Sample ID: SLCSDW1-041025 Test Code: SW8270 Units: µg/L Analysis Date: 10/27/04 14:32

Client ID: Run ID: SV-3\_041027A SeqNo: 562500 Prep Date: 10/25/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,2,4-Trichlorobenzene     | 35.11  | 10  | 50      | 0             | 70.2 | 50-115        | 34.36         | 2.17  | 30        |      |
| 2,4,5-Trichlorophenol      | 72.12  | 10  | 100     | 0             | 72.1 | 68-128        | 76.11         | 5.38  | 30        |      |
| 2,4,6-Trichlorophenol      | 75.89  | 10  | 100     | 0             | 75.9 | 66-125        | 73.09         | 3.75  | 30        |      |
| 2-Methylnaphthalene        | 33.19  | 10  | 50      | 0             | 66.4 | 47-122        | 33.29         | 0.307 | 30        |      |
| 2-Methylphenol             | 70.28  | 10  | 100     | 0             | 70.3 | 51-115        | 58.36         | 18.5  | 30        |      |
| 2-Nitroaniline             | 34.79  | 10  | 50      | 0             | 69.6 | 64-128        | 35.51         | 2.04  | 30        |      |
| 2-Nitrophenol              | 74.13  | 10  | 100     | 0             | 74.1 | 60-119        | 74.41         | 0.376 | 30        |      |
| 3&4-Methylphenol           | 98.31  | 10  | 150     | 0             | 65.5 | 44-115        | 80.21         | 20.3  | 30        |      |
| 3-Nitroaniline             | 26.1   | 10  | 50      | 0             | 52.2 | 61-118        | 26.01         | 0.35  | 30        | S    |
| 4-Nitroaniline             | 32.93  | 10  | 50      | 0             | 65.9 | 61-123        | 31.83         | 3.41  | 30        |      |
| 4-Nitrophenol              | 33.89  | 10  | 100     | 0             | 33.9 | 17-100        | 34.57         | 1.99  | 30        |      |
| Acenaphthene               | 37.43  | 10  | 50      | 0             | 74.9 | 68-115        | 36.6          | 2.22  | 30        |      |
| Acenaphthylene             | 36.48  | 10  | 50      | 0             | 73   | 67-116        | 35.99         | 1.36  | 30        |      |
| Aniline                    | 20.77  | 10  | 50      | 0             | 41.5 | 40-130        | 21.94         | 5.47  | 30        |      |
| Anthracene                 | 38.49  | 10  | 50      | 0             | 77   | 70-129        | 37.69         | 2.11  | 30        |      |
| Benz(a)anthracene          | 37.58  | 10  | 50      | 0             | 75.2 | 55-131        | 37.4          | 0.48  | 30        |      |
| Benzidine                  | 7.619  | 10  | 50      | 0             | 15.2 | 10-115        | 10.56         | 0     | 30        | J    |
| Hexachloroethane           | 41.02  | 10  | 50      | 0             | 82   | 46-115        | 32.6          | 22.9  | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 38.62  | 10  | 50      | 0             | 77.2 | 42-123        | 37.9          | 1.87  | 30        |      |
| Isophorone                 | 37.44  | 10  | 50      | 0             | 74.9 | 63-117        | 36.85         | 1.58  | 30        |      |
| N-Nitrosodi-n-propylamine  | 44.51  | 10  | 50      | 0             | 89   | 67-115        | 36.04         | 21    | 30        |      |
| N-Nitrosodimethylamine     | 17.45  | 10  | 50      | 0             | 34.9 | 28-115        | 14.46         | 18.8  | 30        |      |
| N-Nitrosodiphenylamine     | 41.22  | 10  | 50      | 0             | 82.4 | 72-144        | 39.15         | 5.15  | 30        |      |
| Naphthalene                | 35.57  | 10  | 50      | 0             | 71.1 | 52-115        | 35.25         | 0.914 | 30        |      |
| Nitrobenzene               | 35.78  | 10  | 50      | 0             | 71.6 | 65-115        | 36.45         | 1.86  | 30        |      |
| Pentachlorophenol          | 73.26  | 10  | 100     | 0             | 73.3 | 65-123        | 70.54         | 3.78  | 30        |      |
| Phenanthrene               | 38.47  | 10  | 50      | 0             | 76.9 | 69-119        | 37.92         | 1.44  | 30        |      |
| Phenol                     | 24.99  | 10  | 100     | 0             | 25   | 16-115        | 25.85         | 3.35  | 30        |      |
| Pyrene                     | 36.15  | 10  | 50      | 0             | 72.3 | 51-130        | 35.39         | 2.11  | 30        |      |
| Surr: 2,4,6-Tribromophenol | 84.77  | 10  | 100     | 0             | 84.8 | 39-153        | 83.67         | 1.3   | 30        |      |
| Surr: 2-Fluorobiphenyl     | 73.11  | 10  | 100     | 0             | 73.1 | 40-147        | 76.26         | 4.22  | 30        |      |
| Surr: 2-Fluorophenol       | 40.6   | 10  | 100     | 0             | 40.6 | 21-110        | 37.46         | 8.06  | 30        |      |
| Surr: 4-Terphenyl-d14      | 76.98  | 10  | 100     | 0             | 77   | 39-141        | 79.11         | 2.74  | 30        |      |
| Surr: Nitrobenzene-d5      | 73.47  | 10  | 100     | 0             | 73.5 | 37-140        | 76.93         | 4.59  | 30        |      |
| Surr: Phenol-d6            | 25.05  | 10  | 100     | 0             | 25.1 | 11-100        | 26.76         | 6.6   | 30        |      |

The following samples were analyzed in this batch:

0410241-01E 0410241-02E

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10875 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-041026 Test Code: SW8270 Units: µg/L Analysis Date: 10/27/04 19:17

Client ID: Run ID: SV-3\_041027D SeqNo: 563529 Prep Date: 10/26/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3&4-Methylphenol           | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 80.23  | 10  | 100     | 0             | 80.2 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 70.95  | 10  | 100     | 0             | 70.9 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 37.98  | 10  | 100     | 0             | 38   | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 77.42  | 10  | 100     | 0             | 77.4 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 70.16  | 10  | 100     | 0             | 70.2 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 22.92  | 10  | 100     | 0             | 22.9 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method-Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10875 InstrumentID: SV-3

LCS Sample ID: SLCSW1-041026 Test Code: SW8270 Units: µg/L Analysis Date: 10/27/04 19:42

Client ID: Run ID: SV-3\_041027D SeqNo: 563530 Prep Date: 10/26/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 32.61  | 10  | 50      | 0             | 65.2 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 76.04  | 10  | 100     | 0             | 76   | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 73.93  | 10  | 100     | 0             | 73.9 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 32.28  | 10  | 50      | 0             | 64.6 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 59.82  | 10  | 100     | 0             | 59.8 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 35.95  | 10  | 50      | 0             | 71.9 | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 69.76  | 10  | 100     | 0             | 69.8 | 60-119        | 0             |      |           |      |
| 3&4-Methylphenol           | 83.2   | 10  | 150     | 0             | 55.5 | 44-115        | 0             |      |           |      |
| 3-Nitroaniline             | 31.01  | 10  | 50      | 0             | 62   | 61-118        | 0             |      |           |      |
| 4-Nitroaniline             | 34.38  | 10  | 50      | 0             | 68.8 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 34.03  | 10  | 100     | 0             | 34   | 17-100        | 0             |      |           |      |
| Acenaphthene               | 37.1   | 10  | 50      | 0             | 74.2 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 35.57  | 10  | 50      | 0             | 71.1 | 67-116        | 0             |      |           |      |
| Aniline                    | 28.54  | 10  | 50      | 0             | 57.1 | 40-130        | 0             |      |           |      |
| Anthracene                 | 38.89  | 10  | 50      | 0             | 77.8 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 36.82  | 10  | 50      | 0             | 73.6 | 55-131        | 0             |      |           |      |
| Benzidine                  | 17.37  | 10  | 50      | 0             | 34.7 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 31.89  | 10  | 50      | 0             | 63.8 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 35.69  | 10  | 50      | 0             | 71.4 | 42-123        | 0             |      |           |      |
| Isophorone                 | 35.03  | 10  | 50      | 0             | 70.1 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 35.24  | 10  | 50      | 0             | 70.5 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 18.06  | 10  | 50      | 0             | 36.1 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 41.12  | 10  | 50      | 0             | 82.2 | 72-144        | 0             |      |           |      |
| Naphthalene                | 34.53  | 10  | 50      | 0             | 69.1 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 34.76  | 10  | 50      | 0             | 69.5 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 65.81  | 10  | 100     | 0             | 65.8 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 38.77  | 10  | 50      | 0             | 77.5 | 69-119        | 0             |      |           |      |
| Phenol                     | 27.92  | 10  | 100     | 0             | 27.9 | 16-115        | 0             |      |           |      |
| Pyrene                     | 35.63  | 10  | 50      | 0             | 71.3 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 83.35  | 10  | 100     | 0             | 83.4 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 72.57  | 10  | 100     | 0             | 72.6 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 41.87  | 10  | 100     | 0             | 41.9 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 77.07  | 10  | 100     | 0             | 77.1 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 70.33  | 10  | 100     | 0             | 70.3 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 28.11  | 10  | 100     | 0             | 28.1 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10875 InstrumentID: SV-3

LCSD Sample ID: SLCSDW1-041026 Test Code: SW8270 Units: µg/L Analysis Date: 10/27/04 20:07

Client ID: Run ID: SV-3\_041027D SeqNo: 563531 Prep Date: 10/26/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,2,4-Trichlorobenzene     | 33.49  | 10  | 50      | 0             | 67   | 50-115        | 32.61         | 2.67   | 30        |      |
| 2,4,5-Trichlorophenol      | 71.62  | 10  | 100     | 0             | 71.6 | 68-128        | 76.04         | 5.97   | 30        |      |
| 2,4,6-Trichlorophenol      | 74.13  | 10  | 100     | 0             | 74.1 | 66-125        | 73.93         | 0.267  | 30        |      |
| 2-Methylnaphthalene        | 32.38  | 10  | 50      | 0             | 64.8 | 47-122        | 32.28         | 0.304  | 30        |      |
| 2-Methylphenol             | 59.55  | 10  | 100     | 0             | 59.6 | 51-115        | 59.82         | 0.442  | 30        |      |
| 2-Nitroaniline             | 35.2   | 10  | 50      | 0             | 70.4 | 64-128        | 35.95         | 2.12   | 30        |      |
| 2-Nitrophenol              | 70.56  | 10  | 100     | 0             | 70.6 | 60-119        | 69.76         | 1.14   | 30        |      |
| 3&4-Methylphenol           | 82.49  | 10  | 150     | 0             | 55   | 44-115        | 83.2          | 0.854  | 30        |      |
| 3-Nitroaniline             | 31.61  | 10  | 50      | 0             | 63.2 | 61-118        | 31.01         | 1.92   | 30        |      |
| 4-Nitroaniline             | 35.65  | 10  | 50      | 0             | 71.3 | 61-123        | 34.38         | 3.61   | 30        |      |
| 4-Nitrophenol              | 35.68  | 10  | 100     | 0             | 35.7 | 17-100        | 34.03         | 4.71   | 30        |      |
| Acenaphthene               | 36.61  | 10  | 50      | 0             | 73.2 | 68-115        | 37.1          | 1.34   | 30        |      |
| Acenaphthylene             | 35.96  | 10  | 50      | 0             | 71.9 | 67-116        | 35.57         | 1.09   | 30        |      |
| Aniline                    | 31.11  | 10  | 50      | 0             | 62.2 | 40-130        | 28.54         | 8.62   | 30        |      |
| Anthracene                 | 38.45  | 10  | 50      | 0             | 76.9 | 70-129        | 38.89         | 1.13   | 30        |      |
| Benz(a)anthracene          | 36.79  | 10  | 50      | 0             | 73.6 | 55-131        | 36.82         | 0.0829 | 30        |      |
| Benzidine                  | 16.64  | 10  | 50      | 0             | 33.3 | 10-115        | 17.37         | 4.27   | 30        |      |
| Hexachloroethane           | 32.7   | 10  | 50      | 0             | 65.4 | 46-115        | 31.89         | 2.53   | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 36.8   | 10  | 50      | 0             | 73.6 | 42-123        | 35.69         | 3.07   | 30        |      |
| Isophorone                 | 34.65  | 10  | 50      | 0             | 69.3 | 63-117        | 35.03         | 1.1    | 30        |      |
| N-Nitrosodi-n-propylamine  | 34.75  | 10  | 50      | 0             | 69.5 | 67-115        | 35.24         | 1.41   | 30        |      |
| N-Nitrosodimethylamine     | 16.91  | 10  | 50      | 0             | 33.8 | 28-115        | 18.06         | 6.55   | 30        |      |
| N-Nitrosodiphenylamine     | 40.81  | 10  | 50      | 0             | 81.6 | 72-144        | 41.12         | 0.736  | 30        |      |
| Naphthalene                | 34.24  | 10  | 50      | 0             | 68.5 | 52-115        | 34.53         | 0.85   | 30        |      |
| Nitrobenzene               | 34.02  | 10  | 50      | 0             | 68   | 65-115        | 34.76         | 2.16   | 30        |      |
| Pentachlorophenol          | 68.09  | 10  | 100     | 0             | 68.1 | 65-123        | 65.81         | 3.41   | 30        |      |
| Phenanthrene               | 38.72  | 10  | 50      | 0             | 77.4 | 69-119        | 38.77         | 0.119  | 30        |      |
| Phenol                     | 28.39  | 10  | 100     | 0             | 28.4 | 16-115        | 27.92         | 1.69   | 30        |      |
| Pyrene                     | 36.13  | 10  | 50      | 0             | 72.3 | 51-130        | 35.63         | 1.39   | 30        |      |
| Surr: 2,4,6-Tribromophenol | 82.4   | 10  | 100     | 0             | 82.4 | 39-153        | 83.35         | 1.15   | 30        |      |
| Surr: 2-Fluorobiphenyl     | 70.72  | 10  | 100     | 0             | 70.7 | 40-147        | 72.57         | 2.59   | 30        |      |
| Surr: 2-Fluorophenol       | 40.91  | 10  | 100     | 0             | 40.9 | 21-110        | 41.87         | 2.31   | 30        |      |
| Surr: 4-Terphenyl-d14      | 76.95  | 10  | 100     | 0             | 76.9 | 39-141        | 77.07         | 0.159  | 30        |      |
| Surr: Nitrobenzene-d5      | 67.95  | 10  | 100     | 0             | 67.9 | 37-140        | 70.33         | 3.45   | 30        |      |
| Surr: Phenol-d6            | 27.34  | 10  | 100     | 0             | 27.3 | 11-100        | 28.11         | 2.77   | 30        |      |

The following samples were analyzed in this batch:

0410241-03E

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24028 InstrumentID: VOA1

MBLK Sample ID: VBLKW-1022 Test Code: SW8260 Units: µg/L Analysis Date: 10/22/04 14:06

Client ID: Run ID: VOA1\_041022A SeqNo: 559635 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.82  | 5.0 | 50      | 0             | 91.6 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 50.03  | 5.0 | 50      | 0             | 100  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.65  | 5.0 | 50      | 0             | 93.3 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 48.36  | 5.0 | 50      | 0             | 96.7 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24028 InstrumentID: VOA1

LCS Sample ID: VLCSW-1022 Test Code: SW8260 Units: µg/L Analysis Date: 10/22/04 12:43

Client ID: Run ID: VOA1\_041022A SeqNo: 559634 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 48.58  | 5.0 | 50      | 0             | 97.2 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 50.18  | 5.0 | 50      | 0             | 100  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 52.57  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 44.85  | 5.0 | 50      | 0             | 89.7 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 47.03  | 5.0 | 50      | 0             | 94.1 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 46.6   | 5.0 | 50      | 0             | 93.2 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 92.52  | 10  | 100     | 0             | 92.5 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 100.9  | 10  | 100     | 0             | 101  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 102.2  | 10  | 100     | 0             | 102  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 102.7  | 10  | 100     | 0             | 103  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 87.93  | 10  | 100     | 0             | 87.9 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 48.38  | 5.0 | 50      | 0             | 96.8 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 50.05  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Bromoform                   | 47.72  | 5.0 | 50      | 0             | 95.4 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 40.19  | 5.0 | 50      | 0             | 80.4 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 95.13  | 10  | 100     | 0             | 95.1 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 50.08  | 5.0 | 50      | 0             | 100  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 49.95  | 5.0 | 50      | 0             | 99.9 | 80-120        | 0             |      |           |      |
| Chloroethane                | 48.36  | 5.0 | 50      | 0             | 96.7 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 47.04  | 5.0 | 50      | 0             | 94.1 | 80-120        | 0             |      |           |      |
| Chloromethane               | 44.32  | 5.0 | 50      | 0             | 88.6 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 52.63  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 48.36  | 5.0 | 50      | 0             | 96.7 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 49.23  | 5.0 | 50      | 0             | 98.5 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 100.5  | 10  | 100     | 0             | 101  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 46.51  | 10  | 50      | 0             | 93   | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.5   | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 50.47  | 5.0 | 50      | 0             | 101  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 50.57  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 53.12  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 48.48  | 5.0 | 50      | 0             | 97   | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 107.5  | 10  | 100     | 0             | 108  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 46.92  | 2.0 | 50      | 0             | 93.8 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 150.7  | 15  | 150     | 0             | 100  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 41.45  | 5.0 | 50      | 0             | 82.9 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.87  | 5.0 | 50      | 0             | 97.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 43.6   | 5.0 | 50      | 0             | 87.2 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.7   | 5.0 | 50      | 0             | 99.4 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24028 InstrumentID: VOA1

MS Sample ID: 0410257-01CMS Test Code: SW8260 Units: µg/L Analysis Date: 10/22/04 15:29

Client ID: Run ID: VOA1\_041022A SeqNo: 559637 Prep Date: DF: 20

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 1024   | 100 | 1000    | 0             | 102  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 973.1  | 100 | 1000    | 0             | 97.3 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 997    | 100 | 1000    | 0             | 99.7 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 913.7  | 100 | 1000    | 0             | 91.4 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 912.8  | 100 | 1000    | 0             | 91.3 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 972.9  | 100 | 1000    | 0             | 97.3 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 1780   | 200 | 2000    | 113.8         | 83.3 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 1924   | 200 | 2000    | 0             | 96.2 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 1933   | 200 | 2000    | 0             | 96.6 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 2005   | 200 | 2000    | 0             | 100  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 1596   | 200 | 2000    | 0             | 79.8 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 967.2  | 100 | 1000    | 49.63         | 91.8 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 1024   | 100 | 1000    | 0             | 102  | 80-120        | 0             |      |           |      |
| Bromoform                   | 980.7  | 100 | 1000    | 0             | 98.1 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 787.3  | 100 | 1000    | 0             | 78.7 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 1939   | 200 | 2000    | 0             | 96.9 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 1004   | 100 | 1000    | 0             | 100  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 956.2  | 100 | 1000    | 0             | 95.6 | 80-120        | 0             |      |           |      |
| Chloroethane                | 904.6  | 100 | 1000    | 0             | 90.5 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 967.6  | 100 | 1000    | 0             | 96.8 | 80-120        | 0             |      |           |      |
| Chloromethane               | 778.3  | 100 | 1000    | 0             | 77.8 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 972.7  | 100 | 1000    | 0             | 97.3 | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 971.6  | 100 | 1000    | 0             | 97.2 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 3108   | 100 | 1000    | 2225          | 88.3 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 2460   | 200 | 2000    | 588.1         | 93.6 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 939.8  | 200 | 1000    | 44.38         | 89.5 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 1023   | 100 | 1000    | 0             | 102  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 972.4  | 100 | 1000    | 0             | 97.2 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 978.8  | 100 | 1000    | 11.65         | 96.7 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 990.1  | 100 | 1000    | 0             | 99   | 80-120        | 0             |      |           |      |
| Trichloroethene             | 895.4  | 100 | 1000    | 0             | 89.5 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 2282   | 200 | 2000    | 0             | 114  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 863.6  | 40  | 1000    | 0             | 86.4 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 3487   | 300 | 3000    | 602           | 96.2 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 892.1  | 100 | 1000    | 0             | 89.2 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 967.1  | 100 | 1000    | 0             | 96.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 945.4  | 100 | 1000    | 0             | 94.5 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 982.9  | 100 | 1000    | 0             | 98.3 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24028 InstrumentID: VOA1

MSD Sample ID: 0410257-01CMSD Test Code: SW8260 Units: µg/L Analysis Date: 10/22/04 15:57

Client ID: Run ID: VOA1\_041022A SeqNo: 559638 Prep Date: DF: 20

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 994.8  | 100 | 1000    | 0             | 99.5 | 75.2-120      | 1024          | 2.89   | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 1018   | 100 | 1000    | 0             | 102  | 72.4-121      | 973.1         | 4.5    | 20        |      |
| 1,1,2-Trichloroethane       | 1001   | 100 | 1000    | 0             | 100  | 80-120        | 997           | 0.384  | 20        |      |
| 1,1-Dichloroethane          | 913.1  | 100 | 1000    | 0             | 91.3 | 76.9-120      | 913.7         | 0.0698 | 20        |      |
| 1,1-Dichloroethene          | 904.8  | 100 | 1000    | 0             | 90.5 | 72.6-123      | 912.8         | 0.881  | 20        |      |
| 1,2-Dichloroethane          | 990.7  | 100 | 1000    | 0             | 99.1 | 80-120        | 972.9         | 1.81   | 20        |      |
| 2-Butanone                  | 1858   | 200 | 2000    | 113.8         | 87.2 | 69-131        | 1780          | 4.28   | 20        |      |
| 2-Chloroethyl vinyl ether   | 2035   | 200 | 2000    | 0             | 102  | 60-135        | 1924          | 5.62   | 20        |      |
| 2-Hexanone                  | 1980   | 200 | 2000    | 0             | 99   | 55.6-126      | 1933          | 2.42   | 20        |      |
| 4-Methyl-2-pentanone        | 2127   | 200 | 2000    | 0             | 106  | 67.4-121      | 2005          | 5.92   | 20        |      |
| Acetone                     | 1757   | 200 | 2000    | 0             | 87.9 | 64.4-140      | 1596          | 9.62   | 20        |      |
| Benzene                     | 995.4  | 100 | 1000    | 49.63         | 94.6 | 80-120        | 967.2         | 2.87   | 20        |      |
| Bromodichloromethane        | 1052   | 100 | 1000    | 0             | 105  | 80-120        | 1024          | 2.67   | 20        |      |
| Bromoform                   | 959.6  | 100 | 1000    | 0             | 96   | 77.9-121      | 980.7         | 2.17   | 20        |      |
| Bromomethane                | 813.2  | 100 | 1000    | 0             | 81.3 | 63.3-137      | 787.3         | 3.24   | 20        |      |
| Carbon disulfide            | 1954   | 200 | 2000    | 0             | 97.7 | 74.1-123      | 1939          | 0.769  | 20        |      |
| Carbon tetrachloride        | 1030   | 100 | 1000    | 0             | 103  | 74.7-120      | 1004          | 2.58   | 20        |      |
| Chlorobenzene               | 984.8  | 100 | 1000    | 0             | 98.5 | 80-120        | 956.2         | 2.94   | 20        |      |
| Chloroethane                | 989.1  | 100 | 1000    | 0             | 98.9 | 74.7-126      | 904.6         | 8.93   | 20        |      |
| Chloroform                  | 974.5  | 100 | 1000    | 0             | 97.4 | 80-120        | 967.6         | 0.708  | 20        |      |
| Chloromethane               | 850.8  | 100 | 1000    | 0             | 85.1 | 64.5-132      | 778.3         | 8.89   | 20        |      |
| cis-1,3-Dichloropropene     | 1027   | 100 | 1000    | 0             | 103  | 80-120        | 972.7         | 5.38   | 20        |      |
| Dibromochloromethane        | 975.3  | 100 | 1000    | 0             | 97.5 | 80-120        | 971.6         | 0.381  | 20        |      |
| Ethylbenzene                | 3086   | 100 | 1000    | 2225          | 86.1 | 80-120        | 3108          | 0.706  | 20        |      |
| m,p-Xylene                  | 2516   | 200 | 2000    | 588.1         | 96.4 | 80-120        | 2460          | 2.28   | 20        |      |
| Methylene chloride          | 984.7  | 200 | 1000    | 44.38         | 94   | 76.2-120      | 939.8         | 4.67   | 20        |      |
| Styrene                     | 987.2  | 100 | 1000    | 0             | 98.7 | 80-120        | 1023          | 3.6    | 20        |      |
| Tetrachloroethene           | 975.8  | 100 | 1000    | 0             | 97.6 | 68.5-130      | 972.4         | 0.344  | 20        |      |
| Toluene                     | 965.9  | 100 | 1000    | 11.65         | 95.4 | 80-120        | 978.8         | 1.32   | 20        |      |
| trans-1,3-Dichloropropene   | 1036   | 100 | 1000    | 0             | 104  | 80-120        | 990.1         | 4.57   | 20        |      |
| Trichloroethene             | 954.4  | 100 | 1000    | 0             | 95.4 | 78.9-120      | 895.4         | 6.38   | 20        |      |
| Vinyl acetate               | 2303   | 200 | 2000    | 0             | 115  | 62.4-133      | 2282          | 0.895  | 20        |      |
| Vinyl chloride              | 933.4  | 40  | 1000    | 0             | 93.3 | 72.7-128      | 863.6         | 7.76   | 20        |      |
| Xylenes, Total              | 3519   | 300 | 3000    | 602           | 97.2 | 80-120        | 3487          | 0.912  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 881.4  | 100 | 1000    | 0             | 88.1 | 71-126        | 892.1         | 1.21   | 20        |      |
| Surr: 4-Bromofluorobenzene  | 987.9  | 100 | 1000    | 0             | 98.8 | 74-125        | 967.1         | 2.13   | 20        |      |
| Surr: Dibromofluoromethane  | 902.1  | 100 | 1000    | 0             | 90.2 | 73-126        | 945.4         | 4.68   | 20        |      |
| Surr: Toluene-d8            | 980.1  | 100 | 1000    | 0             | 98   | 75-125        | 982.9         | 0.281  | 20        |      |

The following samples were analyzed in this batch:

0410241-01A 0410241-02A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24032 InstrumentID: VOA2

MBLK Sample ID: VBLKW-1024 Test Code: SW8260 Units: µg/L Analysis Date: 10/24/04 11:58

Client ID: Run ID: VOA2\_041024A SeqNo: 559723 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44.54  | 5.0 | 50      | 0             | 89.1 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 43.11  | 5.0 | 50      | 0             | 86.2 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 45.92  | 5.0 | 50      | 0             | 91.8 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 44.5   | 5.0 | 50      | 0             | 89   | 75-125        | 0             |      |           |      |

LCS Sample ID: VLCSW-1024 Test Code: SW8260 Units: µg/L Analysis Date: 10/24/04 11:07

Client ID: Run ID: VOA2\_041024A SeqNo: 559722 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 47.83  | 5.0 | 50      | 0             | 95.7 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 48.43  | 5.0 | 50      | 0             | 96.9 | 80-120        | 0             |      |           |      |
| Toluene                     | 46.89  | 5.0 | 50      | 0             | 93.8 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 40.22  | 5.0 | 50      | 0             | 80.4 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 44.71  | 5.0 | 50      | 0             | 89.4 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 41.98  | 5.0 | 50      | 0             | 84   | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 44.82  | 5.0 | 50      | 0             | 89.6 | 75-125        | 0             |      |           |      |

MS Sample ID: 0410241-01AMS Test Code: SW8260 Units: µg/L Analysis Date: 10/24/04 17:02

Client ID: RW-12 Run ID: VOA2\_041024A SeqNo: 559734 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 4651   | 120 | 1250    | 3383          | 101  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 1284   | 120 | 1250    | 61.09         | 97.9 | 80-120        | 0             |      |           |      |
| Toluene                     | 1256   | 120 | 1250    | 50            | 96.5 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 1020   | 120 | 1250    | 0             | 81.6 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 1109   | 120 | 1250    | 0             | 88.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 1076   | 120 | 1250    | 0             | 86   | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 1127   | 120 | 1250    | 0             | 90.2 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0410241  
Project: Annual

## QC BATCH REPORT

Batch ID: R24032 InstrumentID: VOA2

MSD Sample ID: 0410241-01AMSD Test Code: SW8260 Units: µg/L Analysis Date: 10/24/04 17:28

Client ID: RW-12 Run ID: VOA2\_041024A SeqNo: 559735 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Benzene                     | 4589   | 120 | 1250    | 3383          | 96.5 | 80-120        | 4651          | 1.34   | 20        |      |
| Ethylbenzene                | 1264   | 120 | 1250    | 61.09         | 96.2 | 80-120        | 1284          | 1.61   | 20        |      |
| Toluene                     | 1235   | 120 | 1250    | 50            | 94.8 | 80-120        | 1256          | 1.66   | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 1024   | 120 | 1250    | 0             | 81.9 | 71-126        | 1020          | 0.366  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 1107   | 120 | 1250    | 0             | 88.6 | 74-125        | 1109          | 0.137  | 20        |      |
| Surr: Dibromofluoromethane  | 1068   | 120 | 1250    | 0             | 85.5 | 73-126        | 1076          | 0.686  | 20        |      |
| Surr: Toluene-d8            | 1126   | 120 | 1250    | 0             | 90.1 | 75-125        | 1127          | 0.0855 | 20        |      |

The following samples were analyzed in this batch:

0410241-01A 0410241-02A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
Work Order: 0410241  
Project: Annual

## QC BATCH REPORT

Batch ID: R24078 InstrumentID: VOA1

MBLK Sample ID: VBLKW-1025 Test Code: SW8260 Units: µg/L Analysis Date: 10/25/04 13:41

Client ID: Run ID: VOA1\_041025A SeqNo: 560907 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.26  | 5.0 | 50      | 0             | 92.5 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 47.78  | 5.0 | 50      | 0             | 95.6 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.35  | 5.0 | 50      | 0             | 92.7 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 46.22  | 5.0 | 50      | 0             | 92.4 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in assoc. Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

U - Analyzed for but not detected

O - Referenced analyte value is > 4 times amount spiked

P - Dual Column results percent difference > 40%

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24078 InstrumentID: VOA1

LCS Sample ID: VLCSW-1025 Test Code: SW8260 Units: µg/L Analysis Date: 10/25/04 12:33

Client ID: Run ID: VOA1\_041025A SeqNo: 560906 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 53.47  | 5.0 | 50      | 0             | 107  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 45.08  | 5.0 | 50      | 0             | 90.2 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 49.25  | 5.0 | 50      | 0             | 98.5 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 44.46  | 5.0 | 50      | 0             | 88.9 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 50.89  | 5.0 | 50      | 0             | 102  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 51.1   | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 81.7   | 10  | 100     | 0             | 81.7 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 99.1   | 10  | 100     | 0             | 99.1 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 95.23  | 10  | 100     | 0             | 95.2 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 93.67  | 10  | 100     | 0             | 93.7 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 94.52  | 10  | 100     | 0             | 94.5 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 50.84  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 56.64  | 5.0 | 50      | 0             | 113  | 80-120        | 0             |      |           |      |
| Bromoform                   | 49.85  | 5.0 | 50      | 0             | 99.7 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 44.5   | 5.0 | 50      | 0             | 89   | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 103    | 10  | 100     | 0             | 103  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 57.74  | 5.0 | 50      | 0             | 115  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 50.28  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Chloroethane                | 50.63  | 5.0 | 50      | 0             | 101  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 51.89  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Chloromethane               | 43.71  | 5.0 | 50      | 0             | 87.4 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 54.81  | 5.0 | 50      | 0             | 110  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 50.59  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 50.25  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 102.9  | 10  | 100     | 0             | 103  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 50.15  | 10  | 50      | 0             | 100  | 76.2-120      | 0             |      |           |      |
| Styrene                     | 51.08  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 51.29  | 5.0 | 50      | 0             | 103  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 49.34  | 5.0 | 50      | 0             | 98.7 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 56.31  | 5.0 | 50      | 0             | 113  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 50.48  | 5.0 | 50      | 0             | 101  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 106.7  | 10  | 100     | 0             | 107  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 46.08  | 2.0 | 50      | 0             | 92.2 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 153.6  | 15  | 150     | 0             | 102  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 47.61  | 5.0 | 50      | 0             | 95.2 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 50.34  | 5.0 | 50      | 0             | 101  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.53  | 5.0 | 50      | 0             | 97.1 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 47.58  | 5.0 | 50      | 0             | 95.2 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24078 InstrumentID: VOA1

MS Sample ID: 0410254-06AMS Test Code: SW8260 Units: µg/L Analysis Date: 10/25/04 15:07

Client ID: Run ID: VOA1\_041025A SeqNo: 560910 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 52.97  | 5.0 | 50      | 0             | 106  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 44.8   | 5.0 | 50      | 0             | 89.6 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 46.52  | 5.0 | 50      | 0             | 93   | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 46.81  | 5.0 | 50      | 0             | 93.6 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 45.58  | 5.0 | 50      | 0             | 91.2 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 50.62  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 74.83  | 10  | 100     | 0             | 74.8 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 3.373  | 10  | 100     | 0             | 3.37 | 60-135        | 0             |      |           | JS   |
| 2-Hexanone                  | 80.25  | 10  | 100     | 0             | 80.2 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 88.07  | 10  | 100     | 0             | 88.1 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 72.26  | 10  | 100     | 0             | 72.3 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 48.27  | 5.0 | 50      | 0             | 96.5 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 55.68  | 5.0 | 50      | 0             | 111  | 80-120        | 0             |      |           |      |
| Bromoform                   | 48.52  | 5.0 | 50      | 0             | 97   | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 35.08  | 5.0 | 50      | 0             | 70.2 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 101.4  | 10  | 100     | 0             | 101  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 55.52  | 5.0 | 50      | 0             | 111  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 48.81  | 5.0 | 50      | 0             | 97.6 | 80-120        | 0             |      |           |      |
| Chloroethane                | 48.08  | 5.0 | 50      | 0             | 96.2 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 50.45  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Chloromethane               | 38.96  | 5.0 | 50      | 0             | 77.9 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 52.48  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 49.78  | 5.0 | 50      | 0             | 99.6 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 46.73  | 5.0 | 50      | 0             | 93.5 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 95.92  | 10  | 100     | 0             | 95.9 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 48.82  | 10  | 50      | 0             | 97.6 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 46.76  | 5.0 | 50      | 0             | 93.5 | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 47.97  | 5.0 | 50      | 0             | 95.9 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 47.7   | 5.0 | 50      | 0             | 95.4 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 53.68  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 49.59  | 5.0 | 50      | 0             | 99.2 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 108.7  | 10  | 100     | 0             | 109  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 44.39  | 2.0 | 50      | 0             | 88.8 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 142.7  | 15  | 150     | 0             | 95.1 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 47.55  | 5.0 | 50      | 0             | 95.1 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 47.4   | 5.0 | 50      | 0             | 94.8 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 47.24  | 5.0 | 50      | 0             | 94.5 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 46.95  | 5.0 | 50      | 0             | 93.9 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

# QC BATCH REPORT

Batch ID: R24078 InstrumentID: VOA1

MSD Sample ID: 0410254-06AMSD Test Code: SW8260 Units: µg/L Analysis Date: 10/25/04 15:34

Client ID: Run ID: VOA1\_041025A SeqNo: 560911 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 51.6   | 5.0 | 50      | 0             | 103  | 75.2-120      | 52.97         | 2.61   | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 44.96  | 5.0 | 50      | 0             | 89.9 | 72.4-121      | 44.8          | 0.344  | 20        |      |
| 1,1,2-Trichloroethane       | 47.59  | 5.0 | 50      | 0             | 95.2 | 80-120        | 46.52         | 2.28   | 20        |      |
| 1,1-Dichloroethane          | 44.34  | 5.0 | 50      | 0             | 88.7 | 76.9-120      | 46.81         | 5.4    | 20        |      |
| 1,1-Dichloroethene          | 47.48  | 5.0 | 50      | 0             | 95   | 72.6-123      | 45.58         | 4.07   | 20        |      |
| 1,2-Dichloroethane          | 48.65  | 5.0 | 50      | 0             | 97.3 | 80-120        | 50.62         | 3.97   | 20        |      |
| 2-Butanone                  | 73.69  | 10  | 100     | 0             | 73.7 | 69-131        | 74.83         | 1.54   | 20        |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 60-135        | 3.373         | 0      | 20        | S    |
| 2-Hexanone                  | 91.5   | 10  | 100     | 0             | 91.5 | 55.6-126      | 80.25         | 13.1   | 20        |      |
| 4-Methyl-2-pentanone        | 91.82  | 10  | 100     | 0             | 91.8 | 67.4-121      | 88.07         | 4.17   | 20        |      |
| Acetone                     | 70.79  | 10  | 100     | 0             | 70.8 | 64.4-140      | 72.26         | 2.06   | 20        |      |
| Benzene                     | 48.6   | 5.0 | 50      | 0             | 97.2 | 80-120        | 48.27         | 0.673  | 20        |      |
| Bromodichloromethane        | 54.09  | 5.0 | 50      | 0             | 108  | 80-120        | 55.68         | 2.9    | 20        |      |
| Bromoform                   | 49.34  | 5.0 | 50      | 0             | 98.7 | 77.9-121      | 48.52         | 1.69   | 20        |      |
| Bromomethane                | 37.22  | 5.0 | 50      | 0             | 74.4 | 63.3-137      | 35.08         | 5.9    | 20        |      |
| Carbon disulfide            | 99.92  | 10  | 100     | 0             | 99.9 | 74.1-123      | 101.4         | 1.44   | 20        |      |
| Carbon tetrachloride        | 52.37  | 5.0 | 50      | 0             | 105  | 74.7-120      | 55.52         | 5.85   | 20        |      |
| Chlorobenzene               | 49.3   | 5.0 | 50      | 0             | 98.6 | 80-120        | 48.81         | 1      | 20        |      |
| Chloroethane                | 50.18  | 5.0 | 50      | 0             | 100  | 74.7-126      | 48.08         | 4.28   | 20        |      |
| Chloroform                  | 49.11  | 5.0 | 50      | 0             | 98.2 | 80-120        | 50.45         | 2.7    | 20        |      |
| Chloromethane               | 38.79  | 5.0 | 50      | 0             | 77.6 | 64.5-132      | 38.96         | 0.445  | 20        |      |
| cis-1,3-Dichloropropene     | 52.07  | 5.0 | 50      | 0             | 104  | 80-120        | 52.48         | 0.777  | 20        |      |
| Dibromochloromethane        | 51.2   | 5.0 | 50      | 0             | 102  | 80-120        | 49.78         | 2.79   | 20        |      |
| Ethylbenzene                | 50.22  | 5.0 | 50      | 0             | 100  | 80-120        | 46.73         | 7.21   | 20        |      |
| m,p-Xylene                  | 100.9  | 10  | 100     | 0             | 101  | 80-120        | 95.92         | 5.05   | 20        |      |
| Methylene chloride          | 49.21  | 10  | 50      | 0             | 98.4 | 76.2-120      | 48.82         | 0.792  | 20        |      |
| Styrene                     | 50.43  | 5.0 | 50      | 0             | 101  | 80-120        | 46.76         | 7.54   | 20        |      |
| Tetrachloroethene           | 50.34  | 5.0 | 50      | 0             | 101  | 68.5-130      | 47.97         | 4.82   | 20        |      |
| Toluene                     | 49.65  | 5.0 | 50      | 0             | 99.3 | 80-120        | 47.7          | 4.01   | 20        |      |
| trans-1,3-Dichloropropene   | 53.79  | 5.0 | 50      | 0             | 108  | 80-120        | 53.68         | 0.213  | 20        |      |
| Trichloroethene             | 47.21  | 5.0 | 50      | 0             | 94.4 | 78.9-120      | 49.59         | 4.9    | 20        |      |
| Vinyl acetate               | 108.7  | 10  | 100     | 0             | 109  | 62.4-133      | 108.7         | 0.0253 | 20        |      |
| Vinyl chloride              | 44.7   | 2.0 | 50      | 0             | 89.4 | 72.7-128      | 44.39         | 0.684  | 20        |      |
| Xylenes, Total              | 151.1  | 15  | 150     | 0             | 101  | 80-120        | 142.7         | 5.7    | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 46.17  | 5.0 | 50      | 0             | 92.3 | 71-126        | 47.55         | 2.96   | 20        |      |
| Surr: 4-Bromofluorobenzene  | 46.94  | 5.0 | 50      | 0             | 93.9 | 74-125        | 47.4          | 0.979  | 20        |      |
| Surr: Dibromofluoromethane  | 47.66  | 5.0 | 50      | 0             | 95.3 | 73-126        | 47.24         | 0.89   | 20        |      |
| Surr: Toluene-d8            | 47.52  | 5.0 | 50      | 0             | 95   | 75-125        | 46.95         | 1.21   | 20        |      |

The following samples were analyzed in this batch:

0410241-03A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410241  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24024 InstrumentID: IC201

MBLK Sample ID: WBLKW1-102104 Test Code: E300 Units: mg/L Analysis Date: 10/21/04 21:02

Client ID: Run ID: IC201\_041021A SeqNo: 559447 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.2    | 0.10 | 5       | 0             | 104  | 80-120        | 0             |      |           |      |

LCS Sample ID: WLCSW1-102104 Test Code: E300 Units: mg/L Analysis Date: 10/21/04 21:30

Client ID: Run ID: IC201\_041021A SeqNo: 559448 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 8.99   | 0.50 | 10      | 0             | 89.9 | 80-120        | 0             |      |           |      |
| Fluoride                         | 2.04   | 0.10 | 2       | 0             | 102  | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.79   | 1.0  | 10      | 0             | 97.9 | 80-120        | 0             |      |           |      |
| Nitrate/Nitrite (as N)           | 3.9    | 0.10 | 0       | 0             | 0    | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.1    | 0.10 | 5       | 0             | 102  | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-10210 Test Code: E300 Units: mg/L Analysis Date: 10/21/04 21:59

Client ID: Run ID: IC201\_041021A SeqNo: 559449 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 9.02   | 0.50 | 10      | 0             | 90.2 | 80-120        | 8.99          | 0.333 | 20        |      |
| Fluoride                         | 2.09   | 0.10 | 2       | 0             | 104  | 80-120        | 2.04          | 2.42  | 20        |      |
| Sulfate                          | 9.81   | 1.0  | 10      | 0             | 98.1 | 80-120        | 9.79          | 0.204 | 20        |      |
| Nitrate/Nitrite (as N)           | 3.9    | 0.10 | 0       | 0             | 0    | 80-120        | 3.9           | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.16   | 0.10 | 5       | 0             | 103  | 80-120        | 5.1           | 1.17  | 20        |      |

MS Sample ID: 0410256-07BMS Test Code: E300 Units: mg/L Analysis Date: 10/21/04 23:24

Client ID: Run ID: IC201\_041021A SeqNo: 559452 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC  | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|-------|---------------|---------------|------|-----------|------|
| Chloride                         | 2249   | 0.50 | 10      | 2283          | -336  | 75-125        | 0             |      |           | SEO  |
| Fluoride                         | 1.83   | 0.10 | 2       | 0.18          | 82.5  | 75-125        | 0             |      |           |      |
| Sulfate                          | 6114   | 1.0  | 10      | 6248          | -1350 | 75-125        | 0             |      |           | SEO  |
| Nitrate/Nitrite (as N)           | 4.13   | 0.10 | 4       | 0             | 103   | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.01   | 0.10 | 5       | 0             | 100   | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0410241  
Project: Annual

## QC BATCH REPORT

Batch ID: R24024 InstrumentID: IC201

|                                  |                           |      |         |                 |       |               |               |                               |           |      |
|----------------------------------|---------------------------|------|---------|-----------------|-------|---------------|---------------|-------------------------------|-----------|------|
| MSD                              | Sample ID: 0410256-07BMSD |      |         | Test Code: E300 |       | Units: mg/L   |               | Analysis Date: 10/21/04 23:53 |           |      |
| Client ID:                       | Run ID: IC201_041021A     |      |         | SeqNo: 559453   |       | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                    | PQL  | SPK Val | SPK Ref Value   | %REC  | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 2248                      | 0.50 | 10      | 2283            | -345  | 75-125        | 2249          | 0.0396                        | 20        | SEO  |
| Fluoride                         | 1.83                      | 0.10 | 2       | 0.18            | 82.5  | 75-125        | 1.83          | 0                             | 20        |      |
| Sulfate                          | 6147                      | 1.0  | 10      | 6248            | -1020 | 75-125        | 6114          | 0.534                         | 20        | SEO  |
| Nitrate/Nitrite (as N)           | 3.96                      | 0.10 | 4       | 0               | 99    | 75-125        | 4.13          | 4.2                           | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.22                      | 0.10 | 5       | 0               | 104   | 80-120        | 5.01          | 4.11                          | 20        |      |

|                                  |                           |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0410256-07BDUP |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/21/04 22:56 |           |      |
| Client ID:                       | Run ID: IC201_041021A     |      |         | SeqNo: 559451   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                    | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 2286                      | 0.50 | 0       | 0               | 0    | 0-0           | 2283          | 0.135                         | 20        | E    |
| Fluoride                         | 0.17                      | 0.10 | 0       | 0               | 0    | 0-0           | 0.18          | 5.71                          | 20        |      |
| Sulfate                          | 6222                      | 1.0  | 0       | 0               | 0    | 0-0           | 6248          | 0.432                         | 20        | E    |
| Nitrate/Nitrite (as N)           | ND                        | 0.10 | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 4.87                      | 0.10 | 5       | 0               | 97.4 | 80-120        | 4.81          | 1.24                          | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0410241-03BDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/22/04 16:59 |           |      |
| Client ID: RW-18                 | Run ID: IC201_041021A     |     |         | SeqNo: 559465   |      | Prep Date:    |               | DF: 100                       |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 352                       | 50  | 0       | 0               | 0    | 0-0           | 352           | 0                             | 20        |      |
| Fluoride                         | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Sulfate                          | 3198                      | 100 | 0       | 0               | 0    | 0-0           | 3199          | 0.0313                        | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 529                       | 10  | 500     | 0               | 106  | 80-120        | 511           | 3.46                          | 20        |      |

|                                  |                           |      |         |                 |      |               |               |                              |           |      |
|----------------------------------|---------------------------|------|---------|-----------------|------|---------------|---------------|------------------------------|-----------|------|
| DUP                              | Sample ID: 0410256-06BDUP |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/22/04 9:23 |           |      |
| Client ID:                       | Run ID: IC201_041021A     |      |         | SeqNo: 559477   |      | Prep Date:    |               | DF: 1                        |           |      |
| Analyte                          | Result                    | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                         | RPD Limit | Qual |
| Chloride                         | 638.6                     | 0.50 | 0       | 0               | 0    | 0-0           | 639.6         | 0.153                        | 20        | E    |
| Fluoride                         | 0.28                      | 0.10 | 0       | 0               | 0    | 0-0           | 0.28          | 0                            | 20        |      |
| Sulfate                          | 5845                      | 1.0  | 0       | 0               | 0    | 0-0           | 5865          | 0.348                        | 20        | E    |
| Nitrate/Nitrite (as N)           | ND                        | 0.10 | 0       | 0               | 0    | 0-0           | 0             | 0                            | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.09                      | 0.10 | 5       | 0               | 102  | 80-120        | 4.87          | 4.42                         | 20        |      |

The following samples were analyzed in this batch:

0410241-01B 0410241-02B 0410241-03B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0410241  
Project: Annual

## QC BATCH REPORT

Batch ID: R24162 InstrumentID: UV-2101PC

MBLK Sample ID: WBLKW1-102604 Test Code: E335.3 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: Run ID: UV-2101PC\_041028B SeqNo: 563051 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-102604 Test Code: E335.3 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: Run ID: UV-2101PC\_041028B SeqNo: 563052 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.193  | 0.020 | 0.2     | 0             | 96.5 | 80-120        | 0             |      |           |      |

MS Sample ID: 0410252-26BMS Test Code: E335.3 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: Run ID: UV-2101PC\_041028B SeqNo: 563067 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1969 | 0.020 | 0.2     | 0.0039        | 96.5 | 75-125        | 0             |      |           |      |

MSD Sample ID: 0410252-26BMSD Test Code: E335.3 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: Run ID: UV-2101PC\_041028B SeqNo: 563068 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1989 | 0.020 | 0.2     | 0.0039        | 97.5 | 75-125        | 0.1969        | 1.01 | 25        |      |

DUP Sample ID: 0410252-26BDUP Test Code: E335.3 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: Run ID: UV-2101PC\_041028B SeqNo: 563070 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.0037 | 0.020 | 0       | 0             | 0    | 0-0           | 0.0039        | 0    | 20        | J    |

The following samples were analyzed in this batch:

0410241-01D 0410241-02D 0410241-03D

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0410241  
Project: Annual

## QC BATCH REPORT

Batch ID: **R24239** InstrumentID: **WetChem**

**MBLK** Sample ID: **WBLKW1-103104** Test Code: **E310.1** Units: **mg/L** Analysis Date: **10/31/04 0:00**

Client ID: Run ID: **WETCHEM\_041031A** SeqNo: **565034** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

**LCS** Sample ID: **WLCW1-103104** Test Code: **E310.1** Units: **mg/L** Analysis Date: **10/31/04 0:00**

Client ID: Run ID: **WETCHEM\_041031A** SeqNo: **565035** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 1000   | 5.0 | 0       | 1             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Total (As CaCO3)       | 1000   | 5.0 | 1000    | 0             | 100  | 80-120        | 0             |      |           |      |

**DUP** Sample ID: **0410229-18BDUP** Test Code: **E310.1** Units: **mg/L** Analysis Date: **10/31/04 0:00**

Client ID: Run ID: **WETCHEM\_041031A** SeqNo: **565074** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 680.2  | 5.0 | 0       | 0             | 0    | 0-0           | 680.2         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 680.2  | 5.0 | 0       | 0             | 0    | 0-0           | 680.2         | 0    | 20        |      |

The following samples were analyzed in this batch:

0410241-01B 0410241-02B 0410241-03B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

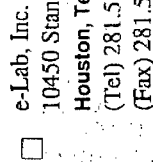
P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range





**e-Lab, Inc.**  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

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**Note:** Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.

e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 10/21/2004 8:45:00 AM

Work Order Number 0410241

Received by: RNG

Checklist completed by

Signature

Date

Reviewed by

Initials

Date

Matrix:

Carrier name

FedEx

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

Temperature(s)/Thermometer(s):

2.2C

002

Water - VOA vials have zero headspace?

Yes ☒

No ☐

No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

N/A ☐

Adjusted? \_\_\_\_\_

Checked by \_\_\_\_\_

Login Notes:

No Trip Blank was in cooler.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_

Date contacted: \_\_\_\_\_

Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_

Regarding: \_\_\_\_\_

Comments:

Corrective Action \_\_\_\_\_

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410241  
**Project:** Annual  
**Lab ID:** 0410241-03

**Client Sample ID:** RW-18  
**Collection Date:** 10/20/2004 2:00:00 PM

**Matrix:** WATER

| Analyses                              | Result | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                      |
|---------------------------------------|--------|---------------|------|-------|-----------------|------------------------------------|
| <b>MERCURY, TOTAL</b>                 |        |               |      |       |                 |                                    |
|                                       |        | <b>SW7470</b> |      |       |                 | Prep Date: 10/28/2004 Analyst: JCJ |
| Mercury                               | ND     | 0.000200      |      | mg/L  | 1               | 10/29/2004 1:09:44 PM              |
| <b>ICP METALS, TOTAL</b>              |        |               |      |       |                 |                                    |
|                                       |        | <b>SW6020</b> |      |       |                 | Prep Date: 10/26/2004 Analyst: ALR |
| Aluminum                              | ND     | 0.0200        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Arsenic                               | ND     | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Barium                                | 0.0185 | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Beryllium                             | ND     | 0.00400       |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Boron                                 | 1.13   | 0.200         |      | mg/L  | 10              | 10/30/2004 9:46:00 PM              |
| Cadmium                               | ND     | 0.00200       |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Calcium                               | 500    | 25.0          |      | mg/L  | 50              | 10/30/2004 6:23:00 PM              |
| Chromium                              | ND     | 0.00400       |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Cobalt                                | ND     | 0.00400       |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Copper                                | 0.0131 | 0.00400       |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Iron                                  | 2.41   | 0.400         |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Lead                                  | ND     | 0.0100        |      | mg/L  | 2               | 11/2/2004 3:58:00 PM               |
| Magnesium                             | 577    | 10.0          |      | mg/L  | 50              | 10/30/2004 6:23:00 PM              |
| Manganese                             | 0.982  | 0.0500        |      | mg/L  | 10              | 10/30/2004 9:46:00 PM              |
| Molybdenum                            | ND     | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Nickel                                | 0.0116 | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Potassium                             | 1.37   | 0.400         |      | mg/L  | 2               | 11/2/2004 3:58:00 PM               |
| Selenium                              | ND     | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Silver                                | ND     | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Sodium                                | 336    | 2.00          |      | mg/L  | 10              | 10/30/2004 9:46:00 PM              |
| Vanadium                              | ND     | 0.0100        |      | mg/L  | 2               | 11/1/2004 7:14:00 PM               |
| Zinc                                  | 0.0280 | 0.0100        |      | mg/L  | 2               | 11/2/2004 3:58:00 PM               |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |               |      |       |                 |                                    |
|                                       |        | <b>SW8270</b> |      |       |                 | Prep Date: 10/26/2004 Analyst: HV  |
| 1,2,4-Trichlorobenzene                | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |
| 2,4,5-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |
| 2,4,6-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |
| 2-Methylnaphthalene                   | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |
| 2-Methylphenol                        | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |
| 2-Nitroaniline                        | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |
| 2-Nitrophenol                         | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |
| 3&4-Methylphenol                      | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |
| 3-Nitroaniline                        | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |
| 4-Nitroaniline                        | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |
| 4-Nitrophenol                         | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |
| Acenaphthene                          | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |
| Acenaphthylene                        | ND     | 10            |      | µg/L  | 1               | 11/5/2004 11:58:00 PM              |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company

Client Sample ID: RW-18

Work Order: 0410241

Collection Date: 10/20/2004 2:00:00 PM

Project: Annual

Lab ID: 0410241-03

Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 11:58:00 PM |
| Surr: 2,4,6-Tribromophenol | 64.5   | 39-153       |      | %REC  | 1               | 11/5/2004 11:58:00 PM |
| Surr: 2-Fluorobiphenyl     | 56.7   | 40-147       |      | %REC  | 1               | 11/5/2004 11:58:00 PM |
| Surr: 2-Fluorophenol       | 32.2   | 21-110       |      | %REC  | 1               | 11/5/2004 11:58:00 PM |
| Surr: 4-Terphenyl-d14      | 64.6   | 39-141       |      | %REC  | 1               | 11/5/2004 11:58:00 PM |
| Surr: Nitrobenzene-d5      | 57.5   | 37-140       |      | %REC  | 1               | 11/5/2004 11:58:00 PM |
| Surr: Phenol-d6            | 18.8   | 11-100       |      | %REC  | 1               | 11/5/2004 11:58:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                       |
|---------------------------|----|-----|--|------|---|-----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Benzene                   | 19 | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 10/25/2004 2:39:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 10/25/2004 2:39:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company

Client Sample ID: RW-18

Work Order: 0410241

Collection Date: 10/20/2004 2:00:00 PM

Project: Annual

Lab ID: 0410241-03

Matrix: WATER

| Analyses                            | Result | Report Limit | Qual | Units         | Dilution Factor     | Date Analyzed         |
|-------------------------------------|--------|--------------|------|---------------|---------------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Chloroethane                        | ND     | 5.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Chloroform                          | ND     | 5.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Chloromethane                       | ND     | 5.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Dibromochloromethane                | ND     | 5.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Ethylbenzene                        | 8.1    | 5.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| m,p-Xylene                          | 11     | 10           |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Methylene chloride                  | ND     | 10           |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Styrene                             | ND     | 5.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Tetrachloroethene                   | ND     | 5.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Toluene                             | ND     | 5.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Trichloroethene                     | ND     | 5.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Vinyl acetate                       | ND     | 10           |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Vinyl chloride                      | ND     | 2.0          |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Xylenes, Total                      | ND     | 15           |      | µg/L          | 1                   | 10/25/2004 2:39:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 106    | 71-126       |      | %REC          | 1                   | 10/25/2004 2:39:00 PM |
| Surr: 4-Bromofluorobenzene          | 95.7   | 74-125       |      | %REC          | 1                   | 10/25/2004 2:39:00 PM |
| Surr: Dibromofluoromethane          | 107    | 73-126       |      | %REC          | 1                   | 10/25/2004 2:39:00 PM |
| Surr: Toluene-d8                    | 99.6   | 75-125       |      | %REC          | 1                   | 10/25/2004 2:39:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        |              |      | <b>E300</b>   | Analyst: <b>MG</b>  |                       |
| Chloride                            | 478    | 5.00         |      | mg/L          | 10                  | 10/22/2004 4:02:00 PM |
| Fluoride                            | 1.55   | 0.100        |      | mg/L          | 1                   | 10/22/2004 3:05:00 PM |
| Sulfate                             | 3,200  | 100          |      | mg/L          | 100                 | 10/22/2004 4:31:00 PM |
| Nitrate/Nitrite (as N)              | ND     | 0.100        |      | mg/L          | 1                   | 10/22/2004 3:05:00 PM |
| Surr: Dichloroacetic acid (surr)    | 111    | 80-120       |      | %REC          | 1                   | 10/22/2004 3:05:00 PM |
| Surr: Dichloroacetic acid (surr)    | 101    | 80-120       |      | %REC          | 10                  | 10/22/2004 4:02:00 PM |
| Surr: Dichloroacetic acid (surr)    | 102    | 80-120       |      | %REC          | 100                 | 10/22/2004 4:31:00 PM |
| <b>ALKALINITY</b>                   |        |              |      | <b>E310.1</b> | Analyst: <b>HDO</b> |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 360    | 5.00         |      | mg/L          | 1                   | 10/31/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00         |      | mg/L          | 1                   | 10/31/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00         |      | mg/L          | 1                   | 10/31/2004            |
| Alkalinity, Total (As CaCO3)        | 360    | 5.00         |      | mg/L          | 1                   | 10/31/2004            |
| <b>CYANIDE, TOTAL</b>               |        |              |      | <b>E335.3</b> | Analyst: <b>LMD</b> |                       |
| Cyanide                             | ND     | 0.0200       |      | mg/L          | 1                   | 10/28/2004            |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

AR Page 10 of 10

## e-Lab Analytical, Inc.

Date: Nov 08 2004

CLIENT: Navajo Refining Company

## QC BATCH REPORT

Work Order: 0410241

Project: Annual

Batch ID: 10862

InstrumentID:

ICP4500

MBLK Sample ID: MBLKW2-102604 Test Code: SW6020 Units: mg/L Analysis Date: 10/27/04 14:04

Client ID: Run ID: ICP4500\_041027A SeqNo: 561905 Prep Date: 10/26/2004 DF: 1

| Analyte    | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | ND     | 0.010  |         |               |      |               |               |      |           |      |
| Arsenic    | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Barium     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Cadmium    | ND     | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium    | ND     | 0.50   |         |               |      |               |               |      |           |      |
| Chromium   | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Copper     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Iron       | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Lead       | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium  | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Manganese  | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Molybdenum | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium  | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Selenium   | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Silver     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium     | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium   | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc       | ND     | 0.0050 |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW2-102604 Test Code: SW6020 Units: mg/L Analysis Date: 10/29/04 19:36

Client ID: Run ID: ICP4500\_041029A SeqNo: 563925 Prep Date: 10/26/2004 DF: 1

| Analyte   | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | ND     | 0.0020 |         |               |      |               |               |      |           |      |
| Boron     | ND     | 0.020  |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in assoc. Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

U - Analyzed for but not detected

O - Referenced analyte value is &gt; 4 times amount spiked

P - Dual Column results percent difference &gt; 40%

E - Value above quantitation range



**e-Lab Analytical, Inc.**

10450 Standcliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

November 08, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: Annual

Work Order : **0410220**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 9 samples on 10/20/2004 8:50:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 64.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

*Jeffrey L Croston*

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

**e-Lab Analytical, Inc.**

**Date:** November 08, 2004

**CLIENT:** Navajo Refining Company

**Project:** Annual

**Work Order:** 0410220

## Work Order Sample Summary

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0410220-01           | KWB-3R                  | Water         |                   | 10/19/2004 10:15       | 10/20/2004 08:50     | <input type="checkbox"/> |
| 0410220-02           | KWB-9                   | Water         |                   | 10/19/2004 10:40       | 10/20/2004 08:50     | <input type="checkbox"/> |
| 0410220-03           | MW-28                   | Water         |                   | 10/19/2004 11:00       | 10/20/2004 08:50     | <input type="checkbox"/> |
| 0410220-04           | MW-48                   | Water         |                   | 10/19/2004 11:45       | 10/20/2004 08:50     | <input type="checkbox"/> |
| 0410220-05           | RW-3                    | Water         |                   | 10/19/2004 13:00       | 10/20/2004 08:50     | <input type="checkbox"/> |
| 0410220-06           | RW-9                    | Water         |                   | 10/19/2004 13:15       | 10/20/2004 08:50     | <input type="checkbox"/> |
| 0410220-07           | RW-10                   | Water         |                   | 10/19/2004 13:45       | 10/20/2004 08:50     | <input type="checkbox"/> |
| 0410220-08           | RW-16                   | Water         |                   | 10/19/2004 14:15       | 10/20/2004 08:50     | <input type="checkbox"/> |
| 0410220-09           | RW-17                   | Water         |                   | 10/19/2004 14:45       | 10/20/2004 08:50     | <input type="checkbox"/> |



**e-Lab Analytical, Inc.****Date:** *November 08, 2004***CLIENT:** Navajo Refining Company**Project:** Annual**Work Order:** 0410220**Case Narrative**

Batch 10847 Semivolatiles LCS/LCSD recoveries were outside of control limits for 3-Nitroaniline (52% and 52.2%). This is considered a SME (Sporadic Marginal Exceedence) which is accepted by the SOP at e-Lab Analytical.

**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual  
Lab ID: 0410220-01

Client Sample ID: KWB-3R  
Collection Date: 10/19/2004 10:15:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|---------------------------------------|---------|--------------|------|-------|-----------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                        |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 10/29/2004 11:57:07 AM |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                        |
| Aluminum                              | 0.0433  | 0.0200       |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Arsenic                               | ND      | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Barium                                | 0.0167  | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Beryllium                             | ND      | 0.00400      |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Boron                                 | 0.445   | 0.200        |      | mg/L  | 10              | 10/30/2004 7:25:00 PM  |
| Cadmium                               | ND      | 0.00200      |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Calcium                               | 741     | 25.0         |      | mg/L  | 50              | 10/30/2004 4:57:00 PM  |
| Chromium                              | ND      | 0.00400      |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Cobalt                                | ND      | 0.00400      |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Copper                                | 0.00812 | 0.00400      |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Iron                                  | 1.94    | 0.400        |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Lead                                  | ND      | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Magnesium                             | 317     | 10.0         |      | mg/L  | 50              | 10/30/2004 4:57:00 PM  |
| Manganese                             | ND      | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Molybdenum                            | ND      | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Nickel                                | 0.0119  | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Potassium                             | 0.580   | 0.400        |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Selenium                              | 0.0311  | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Silver                                | ND      | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Sodium                                | 464     | 10.0         |      | mg/L  | 50              | 10/30/2004 4:57:00 PM  |
| Vanadium                              | 0.0158  | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:43:00 PM   |
| Zinc                                  | 0.0144  | 0.0100       |      | mg/L  | 2               | 11/2/2004 4:21:00 PM   |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                        |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |
| 3&4-Methylphenol                      | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM   |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual  
Lab ID: 0410220-01

Client Sample ID: KWB-3R  
Collection Date: 10/19/2004 10:15:00 AM  
Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 11/4/2004 6:13:00 PM |
| Surr: 2,4,6-Tribromophenol | 107    | 39-153       |      | %REC  | 1               | 11/4/2004 6:13:00 PM |
| Surr: 2-Fluorobiphenyl     | 87.9   | 40-147       |      | %REC  | 1               | 11/4/2004 6:13:00 PM |
| Surr: 2-Fluorophenol       | 46.2   | 21-110       |      | %REC  | 1               | 11/4/2004 6:13:00 PM |
| Surr: 4-Terphenyl-d14      | 100    | 39-141       |      | %REC  | 1               | 11/4/2004 6:13:00 PM |
| Surr: Nitrobenzene-d5      | 86.0   | 37-140       |      | %REC  | 1               | 11/4/2004 6:13:00 PM |
| Surr: Phenol-d6            | 30.2   | 11-100       |      | %REC  | 1               | 11/4/2004 6:13:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                        |
|---------------------------|----|-----|--|------|---|------------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 10/22/2004 12:13:00 AM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:13:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual  
Lab ID: 0410220-01

Client Sample ID: KWB-3R  
Collection Date: 10/19/2004 10:15:00 AM  
Matrix: WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|-----------------------------|--------|--------------|------|-------|-----------------|------------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 10/22/2004 12:13:00 AM |
| Surr: 1,2-Dichloroethane-d4 | 92.0   | 71-126       |      | %REC  | 1               | 10/22/2004 12:13:00 AM |
| Surr: 4-Bromofluorobenzene  | 98.6   | 74-125       |      | %REC  | 1               | 10/22/2004 12:13:00 AM |
| Surr: Dibromofluoromethane  | 93.0   | 73-126       |      | %REC  | 1               | 10/22/2004 12:13:00 AM |
| Surr: Toluene-d8            | 93.8   | 75-125       |      | %REC  | 1               | 10/22/2004 12:13:00 AM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |       |        |  |      |     |                        |
|----------------------------------|-------|--------|--|------|-----|------------------------|
| Chloride                         | 449   | 10.0   |  | mg/L | 20  | 10/23/2004 8:40:00 AM  |
| Fluoride                         | 0.410 | 0.100  |  | mg/L | 1   | 10/20/2004 10:42:00 PM |
| Sulfate                          | 2,680 | 100    |  | mg/L | 100 | 10/23/2004 9:09:00 AM  |
| Nitrate/Nitrite (as N)           | 12.1  | 0.500  |  | mg/L | 5   | 10/20/2004 11:10:00 PM |
| Surr: Dichloroacetic acid (surr) | 106   | 80-120 |  | %REC | 1   | 10/20/2004 10:42:00 PM |
| Surr: Dichloroacetic acid (surr) | 106   | 80-120 |  | %REC | 5   | 10/20/2004 11:10:00 PM |
| Surr: Dichloroacetic acid (surr) | 117   | 80-120 |  | %REC | 20  | 10/23/2004 8:40:00 AM  |
| Surr: Dichloroacetic acid (surr) | 118   | 80-120 |  | %REC | 100 | 10/23/2004 9:09:00 AM  |

**ALKALINITY****E310.1**Analyst: **HDO**

|                                    |     |      |  |      |   |            |
|------------------------------------|-----|------|--|------|---|------------|
| Alkalinity, Bicarbonate (As CaCO3) | 380 | 5.00 |  | mg/L | 1 | 10/28/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 10/28/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 10/28/2004 |
| Alkalinity, Total (As CaCO3)       | 380 | 5.00 |  | mg/L | 1 | 10/28/2004 |

**CYANIDE, TOTAL****E335.3**Analyst: **LMD**

|         |    |        |  |      |   |            |
|---------|----|--------|--|------|---|------------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 10/28/2004 |
|---------|----|--------|--|------|---|------------|

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-02

**Client Sample ID:** KWB-9  
**Collection Date:** 10/19/2004 10:40:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                      |
|---------------------------------------|---------|---------------|------|-------|-----------------|------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                    |
|                                       |         | <b>SW7470</b> |      |       |                 | Prep Date: 10/28/2004 Analyst: JCJ |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | 10/29/2004 12:06:21 PM             |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                    |
|                                       |         | <b>SW6020</b> |      |       |                 | Prep Date: 10/26/2004 Analyst: ALR |
| Aluminum                              | ND      | 0.0200        |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Arsenic                               | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Barium                                | 0.0111  | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Beryllium                             | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Boron                                 | 0.435   | 0.200         |      | mg/L  | 10              | 10/30/2004 7:30:00 PM              |
| Cadmium                               | ND      | 0.00200       |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Calcium                               | 464     | 25.0          |      | mg/L  | 50              | 10/30/2004 5:02:00 PM              |
| Chromium                              | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Cobalt                                | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Copper                                | 0.00465 | 0.00400       |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Iron                                  | 1.19    | 0.400         |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Lead                                  | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Magnesium                             | 166     | 2.00          |      | mg/L  | 10              | 10/30/2004 7:30:00 PM              |
| Manganese                             | 0.0194  | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Molybdenum                            | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Nickel                                | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Potassium                             | 0.652   | 0.400         |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Selenium                              | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Silver                                | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Sodium                                | 134     | 2.00          |      | mg/L  | 10              | 10/30/2004 7:30:00 PM              |
| Vanadium                              | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:48:00 PM               |
| Zinc                                  | ND      | 0.0100        |      | mg/L  | 2               | 11/2/2004 4:25:00 PM               |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                    |
|                                       |         | <b>SW8270</b> |      |       |                 | Prep Date: 10/26/2004 Analyst: HV  |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |
| 3&4-Methylphenol                      | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 10:45:00 PM              |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-02

**Client Sample ID:** KWB-9  
**Collection Date:** 10/19/2004 10:40:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 11/5/2004 10:45:00 PM |
| Surr: 2,4,6-Tribromophenol | 78.2   | 39-153       |      | %REC  | 1               | 11/5/2004 10:45:00 PM |
| Surr: 2-Fluorobiphenyl     | 75.1   | 40-147       |      | %REC  | 1               | 11/5/2004 10:45:00 PM |
| Surr: 2-Fluorophenol       | 39.1   | 21-110       |      | %REC  | 1               | 11/5/2004 10:45:00 PM |
| Surr: 4-Terphenyl-d14      | 81.6   | 39-141       |      | %REC  | 1               | 11/5/2004 10:45:00 PM |
| Surr: Nitrobenzene-d5      | 75.1   | 37-140       |      | %REC  | 1               | 11/5/2004 10:45:00 PM |
| Surr: Phenol-d6            | 22.6   | 11-100       |      | %REC  | 1               | 11/5/2004 10:45:00 PM |

**VOLATILES BY GC/MS****SW8260****Analyst: PC**

|                           |    |     |  |      |   |                        |
|---------------------------|----|-----|--|------|---|------------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 10/22/2004 12:41:00 AM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 10/22/2004 12:41:00 AM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual  
Lab ID: 0410220-02

Client Sample ID: KWB-9  
Collection Date: 10/19/2004 10:40:00 AM  
Matrix: WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|-----------------------------|--------|--------------|------|-------|-----------------|------------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 10/22/2004 12:41:00 AM |
| Surr: 1,2-Dichloroethane-d4 | 94.3   | 71-126       |      | %REC  | 1               | 10/22/2004 12:41:00 AM |
| Surr: 4-Bromofluorobenzene  | 93.5   | 74-125       |      | %REC  | 1               | 10/22/2004 12:41:00 AM |
| Surr: Dibromofluoromethane  | 92.6   | 73-126       |      | %REC  | 1               | 10/22/2004 12:41:00 AM |
| Surr: Toluene-d8            | 95.2   | 75-125       |      | %REC  | 1               | 10/22/2004 12:41:00 AM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |       |        |      |    |                        |
|----------------------------------|-------|--------|------|----|------------------------|
| Chloride                         | 227   | 25.0   | mg/L | 50 | 10/23/2004 10:06:00 AM |
| Fluoride                         | 0.540 | 0.100  | mg/L | 1  | 10/20/2004 11:39:00 PM |
| Sulfate                          | 1,290 | 50.0   | mg/L | 50 | 10/23/2004 10:06:00 AM |
| Nitrate/Nitrite (as N)           | 0.680 | 0.100  | mg/L | 1  | 10/20/2004 11:39:00 PM |
| Surr: Dichloroacetic acid (surr) | 107   | 80-120 | %REC | 1  | 10/20/2004 11:39:00 PM |
| Surr: Dichloroacetic acid (surr) | 115   | 80-120 | %REC | 50 | 10/23/2004 10:06:00 AM |

**ALKALINITY****E310.1**Analyst: **HDO**

|                                    |     |      |      |   |            |
|------------------------------------|-----|------|------|---|------------|
| Alkalinity, Bicarbonate (As CaCO3) | 470 | 5.00 | mg/L | 1 | 10/28/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 | mg/L | 1 | 10/28/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 | mg/L | 1 | 10/28/2004 |
| Alkalinity, Total (As CaCO3)       | 470 | 5.00 | mg/L | 1 | 10/28/2004 |

**CYANIDE, TOTAL****E335.3**Analyst: **LMD**

|         |    |        |      |   |            |
|---------|----|--------|------|---|------------|
| Cyanide | ND | 0.0200 | mg/L | 1 | 10/28/2004 |
|---------|----|--------|------|---|------------|

**Qualifiers:**

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

\* - Value exceeds Maximum Contaminant Level

H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-03

**Client Sample ID:** MW-28  
**Collection Date:** 10/19/2004 11:00:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                      |
|---------------------------------------|---------|---------------|------|-------|-----------------|------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                    |
|                                       |         | <b>SW7470</b> |      |       |                 | Prep Date: 10/28/2004 Analyst: JCJ |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | 10/29/2004 12:07:51 PM             |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                    |
|                                       |         | <b>SW6020</b> |      |       |                 | Prep Date: 10/26/2004 Analyst: ALR |
| Aluminum                              | 0.0237  | 0.0200        |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Arsenic                               | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Barium                                | 0.0298  | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Beryllium                             | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Boron                                 | 1.45    | 0.200         |      | mg/L  | 10              | 10/30/2004 7:35:00 PM              |
| Cadmium                               | ND      | 0.00200       |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Calcium                               | 387     | 25.0          |      | mg/L  | 50              | 10/30/2004 5:06:00 PM              |
| Chromium                              | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Cobalt                                | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Copper                                | 0.00644 | 0.00400       |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Iron                                  | 1.13    | 0.400         |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Lead                                  | 0.0125  | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Magnesium                             | 285     | 10.0          |      | mg/L  | 50              | 10/30/2004 5:06:00 PM              |
| Manganese                             | 0.0688  | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Molybdenum                            | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Nickel                                | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Potassium                             | 0.573   | 0.400         |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Selenium                              | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Silver                                | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Sodium                                | 95.0    | 2.00          |      | mg/L  | 10              | 10/30/2004 7:35:00 PM              |
| Vanadium                              | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 5:53:00 PM               |
| Zinc                                  | 0.0231  | 0.0100        |      | mg/L  | 2               | 11/2/2004 4:30:00 PM               |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                    |
|                                       |         | <b>SW8270</b> |      |       |                 | Prep Date: 10/26/2004 Analyst: HV  |
| 1,2,4-Trichlorobenzene                | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |
| 2,4,5-Trichlorophenol                 | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |
| 2,4,6-Trichlorophenol                 | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |
| 2-Methylnaphthalene                   | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |
| 2-Methylphenol                        | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |
| 2-Nitroaniline                        | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |
| 2-Nitrophenol                         | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |
| 3&4-Methylphenol                      | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |
| 3-Nitroaniline                        | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |
| 4-Nitroaniline                        | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |
| 4-Nitrophenol                         | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |
| Acenaphthene                          | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |
| Acenaphthylene                        | ND      | 11            |      | µg/L  | 1               | 11/4/2004 7:02:00 PM               |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-03

**Client Sample ID:** MW-28  
**Collection Date:** 10/19/2004 11:00:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Anthracene                 | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Benz(a)anthracene          | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Benzidine                  | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Hexachloroethane           | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Isophorone                 | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| N-Nitrosodimethylamine     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| N-Nitrosodiphenylamine     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Naphthalene                | 24     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Nitrobenzene               | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Pentachlorophenol          | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Phenanthrene               | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Phenol                     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Pyrene                     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:02:00 PM |
| Surr: 2,4,6-Tribromophenol | 91.0   | 39-153       |      | %REC  | 1               | 11/4/2004 7:02:00 PM |
| Surr: 2-Fluorobiphenyl     | 72.3   | 40-147       |      | %REC  | 1               | 11/4/2004 7:02:00 PM |
| Surr: 2-Fluorophenol       | 39.0   | 21-110       |      | %REC  | 1               | 11/4/2004 7:02:00 PM |
| Surr: 4-Terphenyl-d14      | 76.8   | 39-141       |      | %REC  | 1               | 11/4/2004 7:02:00 PM |
| Surr: Nitrobenzene-d5      | 73.1   | 37-140       |      | %REC  | 1               | 11/4/2004 7:02:00 PM |
| Surr: Phenol-d6            | 26.8   | 11-100       |      | %REC  | 1               | 11/4/2004 7:02:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |     |     |  |      |   |                       |
|---------------------------|-----|-----|--|------|---|-----------------------|
| 1,1,1-Trichloroethane     | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| 1,1,2,2-Tetrachloroethane | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| 1,1,2-Trichloroethane     | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| 1,1-Dichloroethane        | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| 1,1-Dichloroethene        | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| 1,2-Dichloroethane        | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| 2-Butanone                | ND  | 10  |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| 2-Chloroethyl vinyl ether | ND  | 10  |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| 2-Hexanone                | ND  | 10  |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| 4-Methyl-2-pentanone      | ND  | 10  |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| Acetone                   | ND  | 10  |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| Benzene                   | 690 | 25  |  | µg/L | 5 | 10/22/2004 5:21:00 PM |
| Bromodichloromethane      | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| Bromoform                 | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| Bromomethane              | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| Carbon disulfide          | ND  | 10  |  | µg/L | 1 | 10/22/2004 1:08:00 AM |
| Carbon tetrachloride      | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 1:08:00 AM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-03

**Client Sample ID:** MW-28  
**Collection Date:** 10/19/2004 11:00:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed          |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Ethylbenzene                        | 55     | 5.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| m,p-Xylene                          | 170    | 10            |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Toluene                             | 21     | 5.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Xylenes, Total                      | 180    | 15            |      | µg/L                | 1               | 10/22/2004 1:08:00 AM  |
| Surr: 1,2-Dichloroethane-d4         | 108    | 71-126        |      | %REC                | 1               | 10/22/2004 1:08:00 AM  |
| Surr: 1,2-Dichloroethane-d4         | 84.8   | 71-126        |      | %REC                | 5               | 10/22/2004 5:21:00 PM  |
| Surr: 4-Bromofluorobenzene          | 96.3   | 74-125        |      | %REC                | 1               | 10/22/2004 1:08:00 AM  |
| Surr: 4-Bromofluorobenzene          | 102    | 74-125        |      | %REC                | 5               | 10/22/2004 5:21:00 PM  |
| Surr: Dibromofluoromethane          | 110    | 73-126        |      | %REC                | 1               | 10/22/2004 1:08:00 AM  |
| Surr: Dibromofluoromethane          | 90.3   | 73-126        |      | %REC                | 5               | 10/22/2004 5:21:00 PM  |
| Surr: Toluene-d8                    | 101    | 75-125        |      | %REC                | 1               | 10/22/2004 1:08:00 AM  |
| Surr: Toluene-d8                    | 99.6   | 75-125        |      | %REC                | 5               | 10/22/2004 5:21:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | <b>Analyst: MG</b>  |                 |                        |
| Chloride                            | 163    | 5.00          |      | mg/L                | 10              | 10/21/2004 1:33:00 AM  |
| Fluoride                            | 1.46   | 0.100         |      | mg/L                | 1               | 10/21/2004 12:36:00 AM |
| Sulfate                             | 978    | 100           |      | mg/L                | 100             | 10/21/2004 2:01:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 10/21/2004 12:36:00 AM |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC                | 1               | 10/21/2004 12:36:00 AM |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC                | 10              | 10/21/2004 1:33:00 AM  |
| Surr: Dichloroacetic acid (surr)    | 105    | 80-120        |      | %REC                | 100             | 10/21/2004 2:01:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | <b>Analyst: HDO</b> |                 |                        |
| Alkalinity, Bicarbonate (As CaCO3)  | 800    | 5.00          |      | mg/L                | 1               | 10/28/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/28/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/28/2004             |
| Alkalinity, Total (As CaCO3)        | 800    | 5.00          |      | mg/L                | 1               | 10/28/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | <b>Analyst: LMD</b> |                 |                        |

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 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company

Client Sample ID: MW-28

Work Order: 0410220

Collection Date: 10/19/2004 11:00:00 AM

Project: Annual

Lab ID: 0410220-03

Matrix: WATER

| Analyses | Result | Report<br>Limit | Qual | Units | Dilution<br>Factor | Date Analyzed |
|----------|--------|-----------------|------|-------|--------------------|---------------|
| Cyanide  | ND     | 0.0200          |      | mg/L  | 1                  | 10/28/2004    |

Qualifiers: ND - Not Detected at the Reporting Limit  
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S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual  
Lab ID: 0410220-04

Client Sample ID: MW-48  
Collection Date: 10/19/2004 11:45:00 AM  
Matrix: WATER

| Analyses                              | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|---------------------------------------|--------|--------------|------|-------|-----------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |        |              |      |       |                 |                        |
| Mercury                               | ND     | 0.000200     |      | mg/L  | 1               | 10/29/2004 12:09:21 PM |
| <b>ICP METALS, TOTAL</b>              |        |              |      |       |                 |                        |
| Aluminum                              | 0.0263 | 0.0200       |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Arsenic                               | 0.0404 | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Barium                                | 0.105  | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Beryllium                             | ND     | 0.00400      |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Boron                                 | 0.769  | 0.200        |      | mg/L  | 10              | 10/30/2004 7:40:00 PM  |
| Cadmium                               | ND     | 0.00200      |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Calcium                               | 153    | 5.00         |      | mg/L  | 10              | 10/30/2004 7:40:00 PM  |
| Chromium                              | ND     | 0.00400      |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Cobalt                                | ND     | 0.00400      |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Copper                                | ND     | 0.00400      |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Iron                                  | 0.881  | 0.400        |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Lead                                  | ND     | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Magnesium                             | 132    | 2.00         |      | mg/L  | 10              | 10/30/2004 7:40:00 PM  |
| Manganese                             | 2.01   | 0.250        |      | mg/L  | 50              | 10/30/2004 5:11:00 PM  |
| Molybdenum                            | ND     | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Nickel                                | 0.0109 | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Potassium                             | 0.558  | 0.400        |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Selenium                              | ND     | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Silver                                | ND     | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Sodium                                | 436    | 10.0         |      | mg/L  | 50              | 10/30/2004 5:11:00 PM  |
| Vanadium                              | ND     | 0.0100       |      | mg/L  | 2               | 11/1/2004 5:57:00 PM   |
| Zinc                                  | ND     | 0.0100       |      | mg/L  | 2               | 11/2/2004 6:35:00 PM   |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |              |      |       |                 |                        |
| 1,2,4-Trichlorobenzene                | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |
| 2,4,5-Trichlorophenol                 | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |
| 2,4,6-Trichlorophenol                 | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |
| 2-Methylnaphthalene                   | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |
| 2-Methylphenol                        | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |
| 2-Nitroaniline                        | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |
| 2-Nitrophenol                         | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |
| 3&4-Methylphenol                      | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |
| 3-Nitroaniline                        | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |
| 4-Nitroaniline                        | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |
| 4-Nitrophenol                         | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |
| Acenaphthene                          | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |
| Acenaphthylene                        | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM   |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
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E - Value above quantitation range  
H - Analyzed outside of Hold Time

AR Page 11 of 30

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-04

**Client Sample ID:** MW-48  
**Collection Date:** 10/19/2004 11:45:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Anthracene                 | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Benz(a)anthracene          | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Benzidine                  | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Hexachloroethane           | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Isophorone                 | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| N-Nitrosodimethylamine     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| N-Nitrosodiphenylamine     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Naphthalene                | 19     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Nitrobenzene               | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Pentachlorophenol          | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Phenanthrene               | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Phenol                     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Pyrene                     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:27:00 PM |
| Surr: 2,4,6-Tribromophenol | 90.8   | 39-153       |      | %REC  | 1               | 11/4/2004 7:27:00 PM |
| Surr: 2-Fluorobiphenyl     | 76.8   | 40-147       |      | %REC  | 1               | 11/4/2004 7:27:00 PM |
| Surr: 2-Fluorophenol       | 36.0   | 21-110       |      | %REC  | 1               | 11/4/2004 7:27:00 PM |
| Surr: 4-Terphenyl-d14      | 78.8   | 39-141       |      | %REC  | 1               | 11/4/2004 7:27:00 PM |
| Surr: Nitrobenzene-d5      | 74.0   | 37-140       |      | %REC  | 1               | 11/4/2004 7:27:00 PM |
| Surr: Phenol-d6            | 26.4   | 11-100       |      | %REC  | 1               | 11/4/2004 7:27:00 PM |

**VOLATILES BY GC/MS****SW8260**Analyst: **PC**

|                           |       |     |  |      |    |                       |
|---------------------------|-------|-----|--|------|----|-----------------------|
| 1,1,1-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| 1,1,2,2-Tetrachloroethane | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| 1,1,2-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| 1,1-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| 1,1-Dichloroethene        | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| 1,2-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| 2-Butanone                | ND    | 10  |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| 2-Chloroethyl vinyl ether | ND    | 10  |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| 2-Hexanone                | ND    | 10  |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| 4-Methyl-2-pentanone      | ND    | 10  |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| Acetone                   | ND    | 10  |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| Benzene                   | 1,400 | 50  |  | µg/L | 10 | 10/24/2004 6:44:00 PM |
| Bromodichloromethane      | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| Bromoform                 | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| Bromomethane              | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| Carbon disulfide          | ND    | 10  |  | µg/L | 1  | 10/22/2004 9:28:00 PM |
| Carbon tetrachloride      | ND    | 5.0 |  | µg/L | 1  | 10/22/2004 9:28:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-04

**Client Sample ID:** MW-48  
**Collection Date:** 10/19/2004 11:45:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed         |
|-------------------------------------|--------|---------------|------|-------|---------------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Ethylbenzene                        | 24     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| m,p-Xylene                          | 66     | 10            |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Toluene                             | 36     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Xylenes, Total                      | 69     | 15            |      | µg/L  | 1                   | 10/22/2004 9:28:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 91.1   | 71-126        |      | %REC  | 1                   | 10/22/2004 9:28:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 84.4   | 71-126        |      | %REC  | 10                  | 10/24/2004 6:44:00 PM |
| Surr: 4-Bromofluorobenzene          | 91.1   | 74-125        |      | %REC  | 1                   | 10/22/2004 9:28:00 PM |
| Surr: 4-Bromofluorobenzene          | 87.5   | 74-125        |      | %REC  | 10                  | 10/24/2004 6:44:00 PM |
| Surr: Dibromofluoromethane          | 103    | 73-126        |      | %REC  | 1                   | 10/22/2004 9:28:00 PM |
| Surr: Dibromofluoromethane          | 86.8   | 73-126        |      | %REC  | 10                  | 10/24/2004 6:44:00 PM |
| Surr: Toluene-d8                    | 99.9   | 75-125        |      | %REC  | 1                   | 10/22/2004 9:28:00 PM |
| Surr: Toluene-d8                    | 88.4   | 75-125        |      | %REC  | 10                  | 10/24/2004 6:44:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>MG</b>  |                       |
| Chloride                            | 404    | 50.0          |      | mg/L  | 100                 | 10/21/2004 3:55:00 AM |
| Fluoride                            | 0.870  | 0.100         |      | mg/L  | 1                   | 10/21/2004 2:30:00 AM |
| Sulfate                             | 290    | 10.0          |      | mg/L  | 10                  | 10/21/2004 3:27:00 AM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1                   | 10/21/2004 2:30:00 AM |
| Surr: Dichloroacetic acid (surr)    | 104    | 80-120        |      | %REC  | 1                   | 10/21/2004 2:30:00 AM |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC  | 10                  | 10/21/2004 3:27:00 AM |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC  | 100                 | 10/21/2004 3:55:00 AM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>HDO</b> |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 890    | 5.00          |      | mg/L  | 1                   | 10/28/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 10/28/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 10/28/2004            |
| Alkalinity, Total (As CaCO3)        | 890    | 5.00          |      | mg/L  | 1                   | 10/28/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: <b>LMD</b> |                       |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.****Date:** November 08, 2004**CLIENT:** Navajo Refining Company**Client Sample ID:** MW-48**Work Order:** 0410220**Collection Date:** 10/19/2004 11:45:00 AM**Project:** Annual**Lab ID:** 0410220-04**Matrix:** WATER

| Analyses | Result | Report<br>Limit | Qual | Units | Dilution<br>Factor | Date Analyzed |
|----------|--------|-----------------|------|-------|--------------------|---------------|
| Cyanide  | ND     | 0.0200          |      | mg/L  | 1                  | 10/28/2004    |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-05

**Client Sample ID:** RW-3  
**Collection Date:** 10/19/2004 1:00:00 PM

**Matrix:** WATER

| Analyses                              | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|---------------------------------------|--------|--------------|------|-------|-----------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |        |              |      |       |                 |                        |
| Mercury                               | ND     | 0.000200     |      | mg/L  | 1               | 10/29/2004 12:10:52 PM |
| <b>ICP METALS, TOTAL</b>              |        |              |      |       |                 |                        |
| Aluminum                              | 0.203  | 0.0200       |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Arsenic                               | ND     | 0.0100       |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Barium                                | 0.179  | 0.0100       |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Beryllium                             | ND     | 0.00400      |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Boron                                 | 0.259  | 0.200        |      | mg/L  | 10              | 10/30/2004 7:44:00 PM  |
| Cadmium                               | ND     | 0.00200      |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Calcium                               | 265    | 25.0         |      | mg/L  | 50              | 10/30/2004 5:15:00 PM  |
| Chromium                              | ND     | 0.00400      |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Cobalt                                | ND     | 0.00400      |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Copper                                | ND     | 0.00400      |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Iron                                  | 1.18   | 0.400        |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Lead                                  | ND     | 0.0100       |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Magnesium                             | 77.6   | 2.00         |      | mg/L  | 10              | 10/30/2004 7:44:00 PM  |
| Manganese                             | 0.192  | 0.0100       |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Molybdenum                            | 0.0175 | 0.0100       |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Nickel                                | ND     | 0.0100       |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Potassium                             | 7.40   | 0.400        |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Selenium                              | ND     | 0.0100       |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Silver                                | ND     | 0.0100       |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Sodium                                | 105    | 2.00         |      | mg/L  | 10              | 10/30/2004 7:44:00 PM  |
| Vanadium                              | ND     | 0.0100       |      | mg/L  | 2               | 11/1/2004 6:02:00 PM   |
| Zinc                                  | ND     | 0.0100       |      | mg/L  | 2               | 11/2/2004 6:40:00 PM   |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |              |      |       |                 |                        |
| 1,2,4-Trichlorobenzene                | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |
| 2,4,5-Trichlorophenol                 | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |
| 2,4,6-Trichlorophenol                 | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |
| 2-Methylnaphthalene                   | 33     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |
| 2-Methylphenol                        | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |
| 2-Nitroaniline                        | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |
| 2-Nitrophenol                         | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |
| 3&4-Methylphenol                      | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |
| 3-Nitroaniline                        | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |
| 4-Nitroaniline                        | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |
| 4-Nitrophenol                         | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |
| Acenaphthene                          | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |
| Acenaphthylene                        | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM   |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-05

**Client Sample ID:** RW-3  
**Collection Date:** 10/19/2004 1:00:00 PM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Anthracene                 | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Benz(a)anthracene          | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Benzidine                  | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Hexachloroethane           | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Isophorone                 | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| N-Nitrosodimethylamine     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| N-Nitrosodiphenylamine     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Naphthalene                | 68     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Nitrobenzene               | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Pentachlorophenol          | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Phenanthrene               | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Phenol                     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Pyrene                     | ND     | 11           |      | µg/L  | 1               | 11/4/2004 7:52:00 PM |
| Surr: 2,4,6-Tribromophenol | 81.9   | 39-153       |      | %REC  | 1               | 11/4/2004 7:52:00 PM |
| Surr: 2-Fluorobiphenyl     | 72.7   | 40-147       |      | %REC  | 1               | 11/4/2004 7:52:00 PM |
| Surr: 2-Fluorophenol       | 33.2   | 21-110       |      | %REC  | 1               | 11/4/2004 7:52:00 PM |
| Surr: 4-Terphenyl-d14      | 76.2   | 39-141       |      | %REC  | 1               | 11/4/2004 7:52:00 PM |
| Surr: Nitrobenzene-d5      | 69.1   | 37-140       |      | %REC  | 1               | 11/4/2004 7:52:00 PM |
| Surr: Phenol-d6            | 22.5   | 11-100       |      | %REC  | 1               | 11/4/2004 7:52:00 PM |

**VOLATILES BY GC/MS****SW8260**Analyst: **PC**

|                           |     |     |  |      |   |                       |
|---------------------------|-----|-----|--|------|---|-----------------------|
| 1,1,1-Trichloroethane     | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| 1,1,2,2-Tetrachloroethane | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| 1,1,2-Trichloroethane     | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| 1,1-Dichloroethane        | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| 1,1-Dichloroethene        | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| 1,2-Dichloroethane        | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| 2-Butanone                | ND  | 10  |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| 2-Chloroethyl vinyl ether | ND  | 10  |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| 2-Hexanone                | ND  | 10  |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| 4-Methyl-2-pentanone      | ND  | 10  |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| Acetone                   | ND  | 10  |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| Benzene                   | 560 | 25  |  | µg/L | 5 | 10/24/2004 7:09:00 PM |
| Bromodichloromethane      | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| Bromoform                 | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| Bromomethane              | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| Carbon disulfide          | ND  | 10  |  | µg/L | 1 | 10/22/2004 9:56:00 PM |
| Carbon tetrachloride      | ND  | 5.0 |  | µg/L | 1 | 10/22/2004 9:56:00 PM |

**Qualifiers:**

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

\* - Value exceeds Maximum Contaminant Level

H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-05

**Client Sample ID:** RW-3  
**Collection Date:** 10/19/2004 1:00:00 PM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed         |
|-------------------------------------|--------|---------------|------|-------|---------------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Ethylbenzene                        | 92     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| m,p-Xylene                          | 390    | 10            |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Toluene                             | 31     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Xylenes, Total                      | 510    | 15            |      | µg/L  | 1                   | 10/22/2004 9:56:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 80.0   | 71-126        |      | %REC  | 1                   | 10/22/2004 9:56:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 83.0   | 71-126        |      | %REC  | 5                   | 10/24/2004 7:09:00 PM |
| Surr: 4-Bromofluorobenzene          | 93.1   | 74-125        |      | %REC  | 1                   | 10/22/2004 9:56:00 PM |
| Surr: 4-Bromofluorobenzene          | 89.9   | 74-125        |      | %REC  | 5                   | 10/24/2004 7:09:00 PM |
| Surr: Dibromofluoromethane          | 88.0   | 73-126        |      | %REC  | 1                   | 10/22/2004 9:56:00 PM |
| Surr: Dibromofluoromethane          | 85.0   | 73-126        |      | %REC  | 5                   | 10/24/2004 7:09:00 PM |
| Surr: Toluene-d8                    | 95.3   | 75-125        |      | %REC  | 1                   | 10/22/2004 9:56:00 PM |
| Surr: Toluene-d8                    | 90.7   | 75-125        |      | %REC  | 5                   | 10/24/2004 7:09:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>MG</b>  |                       |
| Chloride                            | 167    | 5.00          |      | mg/L  | 10                  | 10/21/2004 6:46:00 AM |
| Fluoride                            | 2.39   | 0.100         |      | mg/L  | 1                   | 10/21/2004 5:49:00 AM |
| Sulfate                             | 611    | 100           |      | mg/L  | 100                 | 10/21/2004 7:15:00 AM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1                   | 10/21/2004 5:49:00 AM |
| Surr: Dichloroacetic acid (surr)    | 105    | 80-120        |      | %REC  | 1                   | 10/21/2004 5:49:00 AM |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC  | 10                  | 10/21/2004 6:46:00 AM |
| Surr: Dichloroacetic acid (surr)    | 108    | 80-120        |      | %REC  | 100                 | 10/21/2004 7:15:00 AM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>HDO</b> |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 180    | 5.00          |      | mg/L  | 1                   | 10/28/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 10/28/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 10/28/2004            |
| Alkalinity, Total (As CaCO3)        | 180    | 5.00          |      | mg/L  | 1                   | 10/28/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: <b>LMD</b> |                       |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.****Date:** November 08, 2004**CLIENT:** Navajo Refining Company**Client Sample ID:** RW-3**Work Order:** 0410220**Collection Date:** 10/19/2004 1:00:00 PM**Project:** Annual**Lab ID:** 0410220-05**Matrix:** WATER

| Analyses | Result | Report<br>Limit | Qual | Units | Dilution<br>Factor | Date Analyzed |
|----------|--------|-----------------|------|-------|--------------------|---------------|
| Cyanide  | ND     | 0.0200          |      | mg/L  | 1                  | 10/28/2004    |

**Qualifiers:**

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- \* - Value exceeds Maximum Contaminant Level

- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual  
Lab ID: 0410220-06

Client Sample ID: RW-9  
Collection Date: 10/19/2004 1:15:00 PM  
Matrix: WATER

| Analyses                              | Result | Report Limit  | Qual | Units | Dilution Factor       | Date Analyzed          |
|---------------------------------------|--------|---------------|------|-------|-----------------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |        |               |      |       |                       |                        |
|                                       |        | <b>SW7470</b> |      |       | Prep Date: 10/28/2004 | Analyst: JCJ           |
| Mercury                               | ND     | 0.000200      |      | mg/L  | 1                     | 10/29/2004 12:12:23 PM |
| <b>ICP METALS, TOTAL</b>              |        |               |      |       |                       |                        |
|                                       |        | <b>SW6020</b> |      |       | Prep Date: 10/26/2004 | Analyst: ALR           |
| Aluminum                              | ND     | 0.0200        |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Arsenic                               | ND     | 0.0100        |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Barium                                | 0.0671 | 0.0100        |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Beryllium                             | ND     | 0.00400       |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Boron                                 | 0.482  | 0.200         |      | mg/L  | 10                    | 10/30/2004 7:49:00 PM  |
| Cadmium                               | ND     | 0.00200       |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Calcium                               | 152    | 5.00          |      | mg/L  | 10                    | 10/30/2004 7:49:00 PM  |
| Chromium                              | ND     | 0.00400       |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Cobalt                                | ND     | 0.00400       |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Copper                                | ND     | 0.00400       |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Iron                                  | 0.474  | 0.400         |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Lead                                  | ND     | 0.0100        |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Magnesium                             | 130    | 2.00          |      | mg/L  | 10                    | 10/30/2004 7:49:00 PM  |
| Manganese                             | 0.209  | 0.0500        |      | mg/L  | 10                    | 10/30/2004 7:49:00 PM  |
| Molybdenum                            | 0.0621 | 0.0100        |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Nickel                                | ND     | 0.0100        |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Potassium                             | 0.869  | 0.400         |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Selenium                              | ND     | 0.0100        |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Silver                                | ND     | 0.0100        |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Sodium                                | 224    | 10.0          |      | mg/L  | 50                    | 10/30/2004 5:20:00 PM  |
| Vanadium                              | ND     | 0.0100        |      | mg/L  | 2                     | 11/1/2004 6:07:00 PM   |
| Zinc                                  | ND     | 0.0100        |      | mg/L  | 2                     | 11/2/2004 6:45:00 PM   |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |               |      |       |                       |                        |
|                                       |        | <b>SW8270</b> |      |       | Prep Date: 10/26/2004 | Analyst: HV            |
| 1,2,4-Trichlorobenzene                | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |
| 2,4,5-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |
| 2,4,6-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |
| 2-Methylnaphthalene                   | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |
| 2-Methylphenol                        | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |
| 2-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |
| 2-Nitrophenol                         | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |
| 3&4-Methylphenol                      | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |
| 3-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |
| 4-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |
| 4-Nitrophenol                         | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |
| Acenaphthene                          | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |
| Acenaphthylene                        | ND     | 10            |      | µg/L  | 1                     | 11/4/2004 8:17:00 PM   |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-06

**Client Sample ID:** RW-9  
**Collection Date:** 10/19/2004 1:15:00 PM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units         | Dilution Factor    | Date Analyzed          |
|----------------------------|--------|--------------|------|---------------|--------------------|------------------------|
| Aniline                    | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Anthracene                 | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Benz(a)anthracene          | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Benzidine                  | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Hexachloroethane           | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Isophorone                 | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Naphthalene                | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Nitrobenzene               | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Pentachlorophenol          | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Phenanthrene               | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Phenol                     | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Pyrene                     | ND     | 10           |      | µg/L          | 1                  | 11/4/2004 8:17:00 PM   |
| Surr: 2,4,6-Tribromophenol | 81.5   | 39-153       |      | %REC          | 1                  | 11/4/2004 8:17:00 PM   |
| Surr: 2-Fluorobiphenyl     | 69.3   | 40-147       |      | %REC          | 1                  | 11/4/2004 8:17:00 PM   |
| Surr: 2-Fluorophenol       | 33.2   | 21-110       |      | %REC          | 1                  | 11/4/2004 8:17:00 PM   |
| Surr: 4-Terphenyl-d14      | 76.2   | 39-141       |      | %REC          | 1                  | 11/4/2004 8:17:00 PM   |
| Surr: Nitrobenzene-d5      | 66.8   | 37-140       |      | %REC          | 1                  | 11/4/2004 8:17:00 PM   |
| Surr: Phenol-d6            | 20.3   | 11-100       |      | %REC          | 1                  | 11/4/2004 8:17:00 PM   |
| <b>VOLATILES BY GC/MS</b>  |        |              |      | <b>SW8260</b> | <b>Analyst: PC</b> |                        |
| 1,1,1-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0          |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0          |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| 2-Butanone                 | ND     | 10           |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10           |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| 2-Hexanone                 | ND     | 10           |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10           |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| Acetone                    | ND     | 10           |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| Benzene                    | 2,600  | 120          |      | µg/L          | 25                 | 10/24/2004 7:34:00 PM  |
| Bromodichloromethane       | ND     | 5.0          |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| Bromoform                  | ND     | 5.0          |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| Bromomethane               | ND     | 5.0          |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| Carbon disulfide           | ND     | 10           |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |
| Carbon tetrachloride       | ND     | 5.0          |      | µg/L          | 1                  | 10/22/2004 10:23:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-06

**Client Sample ID:** RW-9  
**Collection Date:** 10/19/2004 1:15:00 PM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed          |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Ethylbenzene                        | 9.7    | 5.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| m,p-Xylene                          | 190    | 10            |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Xylenes, Total                      | 190    | 15            |      | µg/L                | 1               | 10/22/2004 10:23:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 81.3   | 71-126        |      | %REC                | 1               | 10/22/2004 10:23:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 84.0   | 71-126        |      | %REC                | 25              | 10/24/2004 7:34:00 PM  |
| Surr: 4-Bromofluorobenzene          | 92.1   | 74-125        |      | %REC                | 1               | 10/22/2004 10:23:00 PM |
| Surr: 4-Bromofluorobenzene          | 89.9   | 74-125        |      | %REC                | 25              | 10/24/2004 7:34:00 PM  |
| Surr: Dibromofluoromethane          | 87.8   | 73-126        |      | %REC                | 25              | 10/24/2004 7:34:00 PM  |
| Surr: Dibromofluoromethane          | 86.1   | 73-126        |      | %REC                | 1               | 10/22/2004 10:23:00 PM |
| Surr: Toluene-d8                    | 95.4   | 75-125        |      | %REC                | 1               | 10/22/2004 10:23:00 PM |
| Surr: Toluene-d8                    | 90.5   | 75-125        |      | %REC                | 25              | 10/24/2004 7:34:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | <b>Analyst: MG</b>  |                 |                        |
| Chloride                            | 170    | 5.00          |      | mg/L                | 10              | 10/21/2004 8:41:00 AM  |
| Fluoride                            | 1.40   | 0.100         |      | mg/L                | 1               | 10/21/2004 7:43:00 AM  |
| Sulfate                             | 366    | 10.0          |      | mg/L                | 10              | 10/21/2004 8:41:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 10/21/2004 7:43:00 AM  |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC                | 1               | 10/21/2004 7:43:00 AM  |
| Surr: Dichloroacetic acid (surr)    | 108    | 80-120        |      | %REC                | 10              | 10/21/2004 8:41:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | <b>Analyst: HDO</b> |                 |                        |
| Alkalinity, Bicarbonate (As CaCO3)  | 770    | 5.00          |      | mg/L                | 1               | 10/28/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/28/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/28/2004             |
| Alkalinity, Total (As CaCO3)        | 770    | 5.00          |      | mg/L                | 1               | 10/28/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | <b>Analyst: LMD</b> |                 |                        |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 10/28/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual  
Lab ID: 0410220-07

Client Sample ID: RW-10  
Collection Date: 10/19/2004 1:45:00 PM  
Matrix: WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                      |
|---------------------------------------|---------|---------------|------|-------|-----------------|------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                    |
|                                       |         | <b>SW7470</b> |      |       |                 | Prep Date: 10/28/2004 Analyst: JCJ |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | 10/29/2004 12:13:55 PM             |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                    |
|                                       |         | <b>SW6020</b> |      |       |                 | Prep Date: 10/26/2004 Analyst: ALR |
| Aluminum                              | ND      | 0.0200        |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Arsenic                               | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Barium                                | 0.0300  | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Beryllium                             | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Boron                                 | 0.358   | 0.200         |      | mg/L  | 10              | 10/30/2004 7:53:00 PM              |
| Cadmium                               | ND      | 0.00200       |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Calcium                               | 531     | 25.0          |      | mg/L  | 50              | 10/30/2004 5:24:00 PM              |
| Chromium                              | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Cobalt                                | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Copper                                | 0.00485 | 0.00400       |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Iron                                  | 1.39    | 0.400         |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Lead                                  | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Magnesium                             | 177     | 2.00          |      | mg/L  | 10              | 10/30/2004 7:53:00 PM              |
| Manganese                             | 0.273   | 0.0500        |      | mg/L  | 10              | 10/30/2004 7:53:00 PM              |
| Molybdenum                            | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Nickel                                | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Potassium                             | 3.46    | 0.400         |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Selenium                              | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Silver                                | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Sodium                                | 102     | 2.00          |      | mg/L  | 10              | 10/30/2004 7:53:00 PM              |
| Vanadium                              | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:12:00 PM               |
| Zinc                                  | ND      | 0.0100        |      | mg/L  | 2               | 11/2/2004 6:49:00 PM               |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                    |
|                                       |         | <b>SW8270</b> |      |       |                 | Prep Date: 10/26/2004 Analyst: HV  |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |
| 3&4-Methylphenol                      | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1               | 11/4/2004 8:41:00 PM               |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**
**Date:** November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-07

**Client Sample ID:** RW-10  
**Collection Date:** 10/19/2004 1:45:00 PM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed          |
|----------------------------|--------|---------------|------|-------|--------------------|------------------------|
| Aniline                    | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Anthracene                 | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Benz(a)anthracene          | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Benzidine                  | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Hexachloroethane           | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Isophorone                 | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Naphthalene                | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Nitrobenzene               | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Pentachlorophenol          | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Phenanthrene               | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Phenol                     | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Pyrene                     | ND     | 10            |      | µg/L  | 1                  | 11/4/2004 8:41:00 PM   |
| Surr: 2,4,6-Tribromophenol | 76.4   | 39-153        |      | %REC  | 1                  | 11/4/2004 8:41:00 PM   |
| Surr: 2-Fluorobiphenyl     | 68.1   | 40-147        |      | %REC  | 1                  | 11/4/2004 8:41:00 PM   |
| Surr: 2-Fluorophenol       | 29.6   | 21-110        |      | %REC  | 1                  | 11/4/2004 8:41:00 PM   |
| Surr: 4-Terphenyl-d14      | 72.6   | 39-141        |      | %REC  | 1                  | 11/4/2004 8:41:00 PM   |
| Surr: Nitrobenzene-d5      | 70.3   | 37-140        |      | %REC  | 1                  | 11/4/2004 8:41:00 PM   |
| Surr: Phenol-d6            | 20.0   | 11-100        |      | %REC  | 1                  | 11/4/2004 8:41:00 PM   |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | <b>Analyst: PC</b> |                        |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| Acetone                    | ND     | 10            |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| Benzene                    | 41     | 5.0           |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L  | 1                  | 10/22/2004 10:51:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-07

**Client Sample ID:** RW-10  
**Collection Date:** 10/19/2004 1:45:00 PM

**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed          |
|-------------------------------------|--------|---------------|------|-------|---------------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| m,p-Xylene                          | 14     | 10            |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Toluene                             | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Xylenes, Total                      | 16     | 15            |      | µg/L  | 1                   | 10/22/2004 10:51:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 85.1   | 71-126        |      | %REC  | 1                   | 10/22/2004 10:51:00 PM |
| Surr: 4-Bromofluorobenzene          | 99.6   | 74-125        |      | %REC  | 1                   | 10/22/2004 10:51:00 PM |
| Surr: Dibromofluoromethane          | 93.5   | 73-126        |      | %REC  | 1                   | 10/22/2004 10:51:00 PM |
| Surr: Toluene-d8                    | 96.2   | 75-125        |      | %REC  | 1                   | 10/22/2004 10:51:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | <b>Analyst: MG</b>  |                        |
| Chloride                            | 165    | 2.50          |      | mg/L  | 5                   | 10/21/2004 10:06:00 AM |
| Fluoride                            | 4.34   | 0.100         |      | mg/L  | 1                   | 10/21/2004 9:38:00 AM  |
| Sulfate                             | 1,410  | 100           |      | mg/L  | 100                 | 10/21/2004 11:03:00 AM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1                   | 10/21/2004 9:38:00 AM  |
| Surr: Dichloroacetic acid (surr)    | 113    | 80-120        |      | %REC  | 5                   | 10/21/2004 10:06:00 AM |
| Surr: Dichloroacetic acid (surr)    | 110    | 80-120        |      | %REC  | 100                 | 10/21/2004 11:03:00 AM |
| Surr: Dichloroacetic acid (surr)    | 111    | 80-120        |      | %REC  | 1                   | 10/21/2004 9:38:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | <b>Analyst: HDO</b> |                        |
| Alkalinity, Bicarbonate (As CaCO3)  | 390    | 5.00          |      | mg/L  | 1                   | 10/28/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 10/28/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 10/28/2004             |
| Alkalinity, Total (As CaCO3)        | 390    | 5.00          |      | mg/L  | 1                   | 10/28/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | <b>Analyst: LMD</b> |                        |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1                   | 10/28/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-08

**Client Sample ID:** RW-16  
**Collection Date:** 10/19/2004 2:15:00 PM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                                                |
|---------------------------------------|---------|---------------|------|-------|-----------------|--------------------------------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                                              |
|                                       |         | <b>SW7470</b> |      |       |                 |                                                              |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | Prep Date: 10/28/2004 Analyst: JCJ<br>10/29/2004 12:15:27 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                                              |
|                                       |         | <b>SW6020</b> |      |       |                 |                                                              |
| Aluminum                              | 0.653   | 0.100         |      | mg/L  | 10              | Prep Date: 10/26/2004 Analyst: ALR<br>10/30/2004 7:58:00 PM  |
| Arsenic                               | 0.0240  | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Barium                                | 0.0398  | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Beryllium                             | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Boron                                 | 1.15    | 0.200         |      | mg/L  | 10              | 10/30/2004 7:58:00 PM                                        |
| Cadmium                               | ND      | 0.00200       |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Calcium                               | 730     | 25.0          |      | mg/L  | 50              | 10/30/2004 5:29:00 PM                                        |
| Chromium                              | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Cobalt                                | 0.00447 | 0.00400       |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Copper                                | 0.0135  | 0.00400       |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Iron                                  | 2.61    | 0.400         |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Lead                                  | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Magnesium                             | 561     | 10.0          |      | mg/L  | 50              | 10/30/2004 5:29:00 PM                                        |
| Manganese                             | 0.950   | 0.0500        |      | mg/L  | 10              | 10/30/2004 7:58:00 PM                                        |
| Molybdenum                            | 0.0326  | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Nickel                                | 0.0225  | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Potassium                             | 4.43    | 0.400         |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Selenium                              | 0.0257  | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Silver                                | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Sodium                                | 792     | 10.0          |      | mg/L  | 50              | 10/30/2004 5:29:00 PM                                        |
| Vanadium                              | 0.0410  | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:17:00 PM                                         |
| Zinc                                  | 0.0328  | 0.0100        |      | mg/L  | 2               | 11/2/2004 6:54:00 PM                                         |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                                              |
|                                       |         | <b>SW8270</b> |      |       |                 |                                                              |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1               | Prep Date: 10/26/2004 Analyst: HV<br>11/4/2004 9:06:00 PM    |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 11/4/2004 9:06:00 PM                                         |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 11/4/2004 9:06:00 PM                                         |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1               | 11/4/2004 9:06:00 PM                                         |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 11/4/2004 9:06:00 PM                                         |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/4/2004 9:06:00 PM                                         |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 11/4/2004 9:06:00 PM                                         |
| 3&4-Methylphenol                      | ND      | 10            |      | µg/L  | 1               | 11/4/2004 9:06:00 PM                                         |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/4/2004 9:06:00 PM                                         |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/4/2004 9:06:00 PM                                         |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 11/4/2004 9:06:00 PM                                         |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1               | 11/4/2004 9:06:00 PM                                         |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1               | 11/4/2004 9:06:00 PM                                         |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-08

**Client Sample ID:** RW-16  
**Collection Date:** 10/19/2004 2:15:00 PM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 11/4/2004 9:06:00 PM |
| Surr: 2,4,6-Tribromophenol | 87.1   | 39-153       |      | %REC  | 1               | 11/4/2004 9:06:00 PM |
| Surr: 2-Fluorobiphenyl     | 74.2   | 40-147       |      | %REC  | 1               | 11/4/2004 9:06:00 PM |
| Surr: 2-Fluorophenol       | 35.3   | 21-110       |      | %REC  | 1               | 11/4/2004 9:06:00 PM |
| Surr: 4-Terphenyl-d14      | 77.7   | 39-141       |      | %REC  | 1               | 11/4/2004 9:06:00 PM |
| Surr: Nitrobenzene-d5      | 76.6   | 37-140       |      | %REC  | 1               | 11/4/2004 9:06:00 PM |
| Surr: Phenol-d6            | 21.9   | 11-100       |      | %REC  | 1               | 11/4/2004 9:06:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                        |
|---------------------------|----|-----|--|------|---|------------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| Benzene                   | 12 | 5.0 |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 10/22/2004 11:18:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 10/22/2004 11:18:00 PM |

**Qualifiers:**

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

E - Value above quantitation range

H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 08, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual  
Lab ID: 0410220-08

Client Sample ID: RW-16  
Collection Date: 10/19/2004 2:15:00 PM  
Matrix: WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|-----------------------------|--------|--------------|------|-------|-----------------|------------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 10/22/2004 11:18:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 87.8   | 71-126       |      | %REC  | 1               | 10/22/2004 11:18:00 PM |
| Surr: 4-Bromofluorobenzene  | 96.5   | 74-125       |      | %REC  | 1               | 10/22/2004 11:18:00 PM |
| Surr: Dibromofluoromethane  | 98.4   | 73-126       |      | %REC  | 1               | 10/22/2004 11:18:00 PM |
| Surr: Toluene-d8            | 97.6   | 75-125       |      | %REC  | 1               | 10/22/2004 11:18:00 PM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |       |        |      |     |                        |
|----------------------------------|-------|--------|------|-----|------------------------|
| Chloride                         | 818   | 50.0   | mg/L | 100 | 10/21/2004 2:23:00 PM  |
| Fluoride                         | 4.34  | 0.100  | mg/L | 1   | 10/21/2004 12:57:00 PM |
| Sulfate                          | 3,200 | 100    | mg/L | 100 | 10/21/2004 2:23:00 PM  |
| Nitrate/Nitrite (as N)           | 3.52  | 0.100  | mg/L | 1   | 10/21/2004 12:57:00 PM |
| Surr: Dichloroacetic acid (surr) | 110   | 80-120 | %REC | 1   | 10/21/2004 12:57:00 PM |
| Surr: Dichloroacetic acid (surr) | 111   | 80-120 | %REC | 100 | 10/21/2004 2:23:00 PM  |

**ALKALINITY****E310.1**Analyst: **HDO**

|                                    |     |      |      |   |            |
|------------------------------------|-----|------|------|---|------------|
| Alkalinity, Bicarbonate (As CaCO3) | 550 | 5.00 | mg/L | 1 | 10/28/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 | mg/L | 1 | 10/28/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 | mg/L | 1 | 10/28/2004 |
| Alkalinity, Total (As CaCO3)       | 550 | 5.00 | mg/L | 1 | 10/28/2004 |

**CYANIDE, TOTAL****E335.3**Analyst: **LMD**

|         |    |        |      |   |            |
|---------|----|--------|------|---|------------|
| Cyanide | ND | 0.0200 | mg/L | 1 | 10/28/2004 |
|---------|----|--------|------|---|------------|

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-09

**Client Sample ID:** RW-17  
**Collection Date:** 10/19/2004 2:45:00 PM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                      |
|---------------------------------------|---------|---------------|------|-------|-----------------|------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                    |
|                                       |         | <b>SW7470</b> |      |       |                 | Prep Date: 10/28/2004 Analyst: JCJ |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | 10/29/2004 12:16:59 PM             |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                    |
|                                       |         | <b>SW6020</b> |      |       |                 | Prep Date: 10/26/2004 Analyst: ALR |
| Aluminum                              | 0.0837  | 0.0200        |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Arsenic                               | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Barium                                | 0.0666  | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Beryllium                             | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Boron                                 | 0.774   | 0.200         |      | mg/L  | 10              | 10/30/2004 8:16:00 PM              |
| Cadmium                               | ND      | 0.00200       |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Calcium                               | 389     | 25.0          |      | mg/L  | 50              | 10/30/2004 5:33:00 PM              |
| Chromium                              | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Cobalt                                | ND      | 0.00400       |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Copper                                | 0.00764 | 0.00400       |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Iron                                  | 1.24    | 0.400         |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Lead                                  | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Magnesium                             | 347     | 10.0          |      | mg/L  | 50              | 10/30/2004 5:33:00 PM              |
| Manganese                             | 0.304   | 0.0500        |      | mg/L  | 10              | 10/30/2004 8:16:00 PM              |
| Molybdenum                            | 0.0117  | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Nickel                                | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Potassium                             | 8.32    | 0.400         |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Selenium                              | 0.0158  | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Silver                                | ND      | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Sodium                                | 250     | 10.0          |      | mg/L  | 50              | 10/30/2004 5:33:00 PM              |
| Vanadium                              | 0.0130  | 0.0100        |      | mg/L  | 2               | 11/1/2004 6:21:00 PM               |
| Zinc                                  | 0.0139  | 0.0100        |      | mg/L  | 2               | 11/2/2004 6:59:00 PM               |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                    |
|                                       |         | <b>SW8270</b> |      |       |                 | Prep Date: 10/26/2004 Analyst: HV  |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |
| 3&4-Methylphenol                      | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1               | 11/5/2004 11:10:00 PM              |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**
**Date:** November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-09

**Client Sample ID:** RW-17  
**Collection Date:** 10/19/2004 2:45:00 PM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit  | Qual | Units              | Dilution Factor | Date Analyzed          |
|----------------------------|--------|---------------|------|--------------------|-----------------|------------------------|
| Aniline                    | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Anthracene                 | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Benz(a)anthracene          | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Benzidine                  | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Hexachloroethane           | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Isophorone                 | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Naphthalene                | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Nitrobenzene               | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Pentachlorophenol          | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Phenanthrene               | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Phenol                     | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Pyrene                     | ND     | 10            |      | µg/L               | 1               | 11/5/2004 11:10:00 PM  |
| Surr: 2,4,6-Tribromophenol | 75.3   | 39-153        |      | %REC               | 1               | 11/5/2004 11:10:00 PM  |
| Surr: 2-Fluorobiphenyl     | 66.3   | 40-147        |      | %REC               | 1               | 11/5/2004 11:10:00 PM  |
| Surr: 2-Fluorophenol       | 30.5   | 21-110        |      | %REC               | 1               | 11/5/2004 11:10:00 PM  |
| Surr: 4-Terphenyl-d14      | 73.0   | 39-141        |      | %REC               | 1               | 11/5/2004 11:10:00 PM  |
| Surr: Nitrobenzene-d5      | 67.6   | 37-140        |      | %REC               | 1               | 11/5/2004 11:10:00 PM  |
| Surr: Phenol-d6            | 16.3   | 11-100        |      | %REC               | 1               | 11/5/2004 11:10:00 PM  |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      | <b>Analyst: PC</b> |                 |                        |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| Acetone                    | ND     | 10            |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| Benzene                    | 6.7    | 5.0           |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L               | 1               | 10/22/2004 11:45:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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\* - Value exceeds Maximum Contaminant Level

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P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 08, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410220  
**Project:** Annual  
**Lab ID:** 0410220-09

**Client Sample ID:** RW-17  
**Collection Date:** 10/19/2004 2:45:00 PM  
**Matrix:** WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|-----------------------------|--------|--------------|------|-------|-----------------|------------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 10/22/2004 11:45:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 88.1   | 71-126       |      | %REC  | 1               | 10/22/2004 11:45:00 PM |
| Surr: 4-Bromofluorobenzene  | 97.7   | 74-125       |      | %REC  | 1               | 10/22/2004 11:45:00 PM |
| Surr: Dibromofluoromethane  | 92.7   | 73-126       |      | %REC  | 1               | 10/22/2004 11:45:00 PM |
| Surr: Toluene-d8            | 92.6   | 75-125       |      | %REC  | 1               | 10/22/2004 11:45:00 PM |

**ANIONS BY ION CHROMATOGRAPHY**
**E300**

 Analyst: **MG**

|                                  |       |        |  |      |     |                       |
|----------------------------------|-------|--------|--|------|-----|-----------------------|
| Chloride                         | 111   | 2.50   |  | mg/L | 5   | 10/21/2004 3:20:00 PM |
| Fluoride                         | 1.83  | 0.100  |  | mg/L | 1   | 10/21/2004 2:51:00 PM |
| Sulfate                          | 1,960 | 100    |  | mg/L | 100 | 10/21/2004 4:17:00 PM |
| Nitrate/Nitrite (as N)           | 1.32  | 0.100  |  | mg/L | 1   | 10/21/2004 2:51:00 PM |
| Surr: Dichloroacetic acid (surr) | 100   | 80-120 |  | %REC | 1   | 10/21/2004 2:51:00 PM |
| Surr: Dichloroacetic acid (surr) | 108   | 80-120 |  | %REC | 5   | 10/21/2004 3:20:00 PM |
| Surr: Dichloroacetic acid (surr) | 109   | 80-120 |  | %REC | 100 | 10/21/2004 4:17:00 PM |

**ALKALINITY**
**E310.1**

 Analyst: **HDO**

|                                    |     |      |  |      |   |            |
|------------------------------------|-----|------|--|------|---|------------|
| Alkalinity, Bicarbonate (As CaCO3) | 190 | 5.00 |  | mg/L | 1 | 10/28/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 10/28/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 10/28/2004 |
| Alkalinity, Total (As CaCO3)       | 190 | 5.00 |  | mg/L | 1 | 10/28/2004 |

**CYANIDE, TOTAL**
**E335.3**

 Analyst: **LMD**

|         |    |        |  |      |   |            |
|---------|----|--------|--|------|---|------------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 10/28/2004 |
|---------|----|--------|--|------|---|------------|

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: Nov 08 2004

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10862 InstrumentID: ICP4500

MBLK Sample ID: MBLKW2-102604 Test Code: SW6020 Units: mg/L Analysis Date: 10/27/04 14:04

Client ID: Run ID: ICP4500\_041027A SeqNo: 561905 Prep Date: 10/26/2004 DF: 1

| Analyte    | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | ND     | 0.010  |         |               |      |               |               |      |           |      |
| Arsenic    | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Barium     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Cadmium    | ND     | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium    | ND     | 0.50   |         |               |      |               |               |      |           |      |
| Chromium   | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Copper     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Iron       | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Lead       | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium  | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Manganese  | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Molybdenum | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium  | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Selenium   | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Silver     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium     | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium   | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc       | ND     | 0.0050 |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW2-102604 Test Code: SW6020 Units: mg/L Analysis Date: 10/29/04 19:36

Client ID: Run ID: ICP4500\_041029A SeqNo: 563925 Prep Date: 10/26/2004 DF: 1

| Analyte   | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | ND     | 0.0020 |         |               |      |               |               |      |           |      |
| Boron     | ND     | 0.020  |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in assoc. Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

U - Analyzed for but not detected

O - Referenced analyte value is &gt; 4 times amount spiked

P - Dual Column results percent difference &gt; 40%

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10862 InstrumentID: ICP4500

LCS Sample ID: MLCSW2-102604 Test Code: SW6020 Units: mg/L Analysis Date: 10/27/04 14:09

Client ID: Run ID: ICP4500\_041027A SeqNo: 561906 Prep Date: 10/26/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.04112 | 0.010  | 0.05    | 0             | 82.2 | 79-126        | 0             |      |           |      |
| Arsenic    | 0.04758 | 0.0050 | 0.05    | 0             | 95.2 | 80-121        | 0             |      |           |      |
| Barium     | 0.04482 | 0.0050 | 0.05    | 0             | 89.6 | 79.8-119      | 0             |      |           |      |
| Cadmium    | 0.04839 | 0.0020 | 0.05    | 0             | 96.8 | 79.1-119      | 0             |      |           |      |
| Calcium    | 4.743   | 0.50   | 5       | 0             | 94.9 | 80-121        | 0             |      |           |      |
| Chromium   | 0.0437  | 0.0050 | 0.05    | 0             | 87.4 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04392 | 0.0050 | 0.05    | 0             | 87.8 | 82-121        | 0             |      |           |      |
| Copper     | 0.04325 | 0.0050 | 0.05    | 0             | 86.5 | 81-120        | 0             |      |           |      |
| Iron       | 4.634   | 0.20   | 5       | 0             | 92.7 | 80-120        | 0             |      |           |      |
| Lead       | 0.04323 | 0.0050 | 0.05    | 0             | 86.5 | 80-118        | 0             |      |           |      |
| Magnesium  | 4.78    | 0.20   | 5       | 0             | 95.6 | 80-120        | 0             |      |           |      |
| Manganese  | 0.04349 | 0.0050 | 0.05    | 0             | 87   | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04352 | 0.0050 | 0.05    | 0             | 87   | 81-115        | 0             |      |           |      |
| Nickel     | 0.04498 | 0.0050 | 0.05    | 0             | 90   | 82-120        | 0             |      |           |      |
| Potassium  | 4.685   | 0.20   | 5       | 0             | 93.7 | 80-120        | 0             |      |           |      |
| Selenium   | 0.04815 | 0.0050 | 0.05    | 0             | 96.3 | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04552 | 0.0050 | 0.05    | 0             | 91   | 80-117        | 0             |      |           |      |
| Sodium     | 4.55    | 0.20   | 5       | 0             | 91   | 80.6-119      | 0             |      |           |      |
| Vanadium   | 0.045   | 0.0050 | 0.05    | 0             | 90   | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.04493 | 0.0050 | 0.05    | 0             | 89.9 | 79-118        | 0             |      |           |      |

LCS Sample ID: MLCSW2-102604 Test Code: SW6020 Units: mg/L Analysis Date: 10/29/04 19:40

Client ID: Run ID: ICP4500\_041029A SeqNo: 563926 Prep Date: 10/26/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | 0.05309 | 0.0020 | 0.05    | 0             | 106  | 78.9-120      | 0             |      |           |      |
| Boron     | 0.5362  | 0.020  | 0.5     | 0             | 107  | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in assoc. Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

U - Analyzed for but not detected

O - Referenced analyte value is > 4 times amount spiked

P - Dual Column results percent difference > 40%

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10862 InstrumentID: ICP4500

MS Sample ID: 0410225-08CMS Test Code: SW6020 Units: mg/L Analysis Date: 10/27/04 14:31

Client ID: Run ID: ICP4500\_041027A SeqNo: 561911 Prep Date: 10/26/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.0456  | 0.010  | 0.05    | 0.0002146     | 90.8 | 79-126        | 0             |      |           |      |
| Arsenic    | 0.04741 | 0.0050 | 0.05    | -0.001188     | 97.2 | 80-121        | 0             |      |           |      |
| Barium     | 0.04617 | 0.0050 | 0.05    | 0.0009088     | 90.5 | 79.8-119      | 0             |      |           |      |
| Cadmium    | 0.0482  | 0.0020 | 0.05    | 0.00005498    | 96.3 | 79.1-119      | 0             |      |           |      |
| Calcium    | 4.79    | 0.50   | 5       | 0.09682       | 93.9 | 80-121        | 0             |      |           |      |
| Chromium   | 0.04517 | 0.0050 | 0.05    | 0.0004131     | 89.5 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04461 | 0.0050 | 0.05    | 0.0004069     | 88.4 | 82-121        | 0             |      |           |      |
| Copper     | 0.04473 | 0.0050 | 0.05    | 0.0001013     | 89.3 | 80-120        | 0             |      |           |      |
| Iron       | 4.703   | 0.20   | 5       | 0.01851       | 93.7 | 80-120        | 0             |      |           |      |
| Lead       | 0.04313 | 0.0050 | 0.05    | 0.00009188    | 86.1 | 80-118        | 0             |      |           |      |
| Magnesium  | 4.694   | 0.20   | 5       | 0.04154       | 93   | 80-120        | 0             |      |           |      |
| Manganese  | 0.047   | 0.0050 | 0.05    | 0.00278       | 88.4 | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04295 | 0.0050 | 0.05    | 0.001224      | 83.5 | 81-115        | 0             |      |           |      |
| Nickel     | 0.04574 | 0.0050 | 0.05    | -0.00005889   | 91.6 | 82-120        | 0             |      |           |      |
| Potassium  | 4.702   | 0.20   | 5       | 0.03225       | 93.4 | 80-120        | 0             |      |           |      |
| Selenium   | 0.04829 | 0.0050 | 0.05    | 0.00003129    | 96.5 | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04553 | 0.0050 | 0.05    | 0.0003438     | 90.4 | 80-117        | 0             |      |           |      |
| Sodium     | 4.57    | 0.20   | 5       | 0.09221       | 89.6 | 80.6-119      | 0             |      |           |      |
| Vanadium   | 0.04464 | 0.0050 | 0.05    | 0.00001488    | 89.3 | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.04492 | 0.0050 | 0.05    | 0.001819      | 86.2 | 79-118        | 0             |      |           |      |

MS Sample ID: 0410225-08CMS Test Code: SW6020 Units: mg/L Analysis Date: 10/29/04 19:54

Client ID: Run ID: ICP4500\_041029A SeqNo: 563929 Prep Date: 10/26/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | 0.05312 | 0.0020 | 0.05    | 0.00004241    | 106  | 78.9-120      | 0             |      |           |      |
| Boron     | 0.5305  | 0.020  | 0       | 0.009991      | 0    | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10862 InstrumentID: ICP4500

MSD Sample ID: 0410225-08CMSD Test Code: SW6020 Units: mg/L Analysis Date: 10/27/04 14:36

Client ID: Run ID: ICP4500\_041027A SeqNo: 561912 Prep Date: 10/26/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Aluminum   | 0.04562 | 0.010  | 0.05    | 0.0002146     | 90.8 | 79-126        | 0.0456        | 0.0439 | 15        |      |
| Arsenic    | 0.04639 | 0.0050 | 0.05    | -0.001188     | 95.2 | 80-121        | 0.04741       | 2.17   | 15        |      |
| Barium     | 0.04587 | 0.0050 | 0.05    | 0.0009088     | 89.9 | 79.8-119      | 0.04617       | 0.652  | 15        |      |
| Cadmium    | 0.04773 | 0.0020 | 0.05    | 0.00005498    | 95.4 | 79.1-119      | 0.0482        | 0.98   | 15        |      |
| Calcium    | 4.776   | 0.50   | 5       | 0.09682       | 93.6 | 80-121        | 4.79          | 0.293  | 15        |      |
| Chromium   | 0.04451 | 0.0050 | 0.05    | 0.0004131     | 88.2 | 79.3-121      | 0.04517       | 1.47   | 15        |      |
| Cobalt     | 0.04453 | 0.0050 | 0.05    | 0.0004069     | 88.2 | 82-121        | 0.04461       | 0.179  | 15        |      |
| Copper     | 0.04403 | 0.0050 | 0.05    | 0.0001013     | 87.9 | 81-120        | 0.04473       | 1.58   | 15        |      |
| Iron       | 4.649   | 0.20   | 5       | 0.01851       | 92.6 | 80-120        | 4.703         | 1.15   | 15        |      |
| Lead       | 0.04298 | 0.0050 | 0.05    | 0.00009188    | 85.8 | 80-118        | 0.04313       | 0.348  | 15        |      |
| Magnesium  | 4.66    | 0.20   | 5       | 0.04154       | 92.4 | 80-120        | 4.694         | 0.727  | 15        |      |
| Manganese  | 0.046   | 0.0050 | 0.05    | 0.00278       | 86.4 | 82-119        | 0.047         | 2.15   | 15        |      |
| Molybdenum | 0.04282 | 0.0050 | 0.05    | 0.001224      | 83.2 | 81-115        | 0.04295       | 0.303  | 15        |      |
| Nickel     | 0.04493 | 0.0050 | 0.05    | -0.00005889   | 90   | 82-120        | 0.04574       | 1.79   | 15        |      |
| Potassium  | 4.713   | 0.20   | 5       | 0.03225       | 93.6 | 80-120        | 4.702         | 0.234  | 15        |      |
| Selenium   | 0.04641 | 0.0050 | 0.05    | 0.00003129    | 92.8 | 79.2-118      | 0.04829       | 3.97   | 15        |      |
| Silver     | 0.04434 | 0.0050 | 0.05    | 0.0003438     | 88   | 80-117        | 0.04553       | 2.65   | 15        |      |
| Sodium     | 4.529   | 0.20   | 5       | 0.09221       | 88.7 | 80.6-119      | 4.57          | 0.901  | 15        |      |
| Vanadium   | 0.04434 | 0.0050 | 0.05    | 0.00001488    | 88.7 | 82.1-119      | 0.04464       | 0.674  | 15        |      |
| Zinc       | 0.04556 | 0.0050 | 0.05    | 0.001819      | 87.5 | 79-118        | 0.04492       | 1.41   | 15        |      |

MSD Sample ID: 0410225-08CMSD Test Code: SW6020 Units: mg/L Analysis Date: 10/29/04 19:59

Client ID: Run ID: ICP4500\_041029A SeqNo: 563930 Prep Date: 10/26/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | 0.04994 | 0.0020 | 0.05    | 0.00004241    | 99.8 | 78.9-120      | 0.05312       | 6.17 | 15        |      |
| Boron     | 0.5156  | 0.020  | 0       | 0.009991      | 0    | 80-120        | 0.5305        | 2.85 | 15        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10862 InstrumentID: ICP4500

DUP Sample ID: 0410225-08CDUP Test Code: SW6020 Units: mg/L Analysis Date: 10/27/04 14:27

Client ID: Run ID: ICP4500\_041027A SeqNo: 561910 Prep Date: 10/26/2004 DF: 1

| Analyte    | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|-----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | ND        | 0.010  | 0       | 0             | 0    | 0-0           | 0.0002146     | 0    | 25        |      |
| Arsenic    | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | -0.001188     | 0    | 25        |      |
| Barium     | 0.0009541 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0009088     | 0    | 25        | J    |
| Cadmium    | ND        | 0.0020 | 0       | 0             | 0    | 0-0           | 0.00005498    | 0    | 25        |      |
| Calcium    | ND        | 0.50   | 0       | 0             | 0    | 0-0           | 0.09682       | 0    | 25        |      |
| Chromium   | 0.0005351 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0004131     | 0    | 25        | J    |
| Cobalt     | 0.0003818 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0004069     | 0    | 25        | J    |
| Copper     | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0001013     | 0    | 25        |      |
| Iron       | ND        | 0.20   | 0       | 0             | 0    | 0-0           | 0.01851       | 0    | 25        |      |
| Lead       | 0.001886  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00009188    | 0    | 25        | J    |
| Magnesium  | 0.03988   | 0.20   | 0       | 0             | 0    | 0-0           | 0.04154       | 0    | 25        | J    |
| Manganese  | 0.0028    | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00278       | 0    | 25        | J    |
| Molybdenum | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.001224      | 0    | 25        |      |
| Nickel     | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | -0.00005889   | 0    | 25        |      |
| Potassium  | 0.02547   | 0.20   | 0       | 0             | 0    | 0-0           | 0.03225       | 0    | 25        | J    |
| Selenium   | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00003129    | 0    | 25        |      |
| Silver     | 0.0006316 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0003438     | 0    | 25        | J    |
| Sodium     | 0.09019   | 0.20   | 0       | 0             | 0    | 0-0           | 0.09221       | 0    | 25        | J    |
| Vanadium   | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00001488    | 0    | 25        |      |
| Zinc       | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.001819      | 0    | 25        |      |

DUP Sample ID: 0410225-08CDUP Test Code: SW6020 Units: mg/L Analysis Date: 10/29/04 19:49

Client ID: Run ID: ICP4500\_041029A SeqNo: 563928 Prep Date: 10/26/2004 DF: 1

| Analyte   | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | ND     | 0.0020 | 0       | 0             | 0    | 0-0           | 0.00004241    | 0    | 25        |      |
| Boron     | ND     | 0.020  | 0       | 0             | 0    | 0-0           | 0.009991      | 0    | 25        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410220-01C | 0410220-02C | 0410220-03C |
| 0410220-04C | 0410220-05C | 0410220-06C |
| 0410220-07C | 0410220-08C | 0410220-09C |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual

## QC BATCH REPORT

Batch ID: 10917 InstrumentID: Mercury

MBLK Sample ID: GBLKW1-102804 Test Code: SW7470 Units: mg/L Analysis Date: 10/29/04 11:41

Client ID: Run ID: MERCURY\_041029A SeqNo: 563457 Prep Date: 10/28/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW1-102804 Test Code: SW7470 Units: mg/L Analysis Date: 10/29/04 11:43

Client ID: Run ID: MERCURY\_041029A SeqNo: 563458 Prep Date: 10/28/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00492 | 0.00020 | 0.005   | 0             | 98.4 | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW1-102804 Test Code: SW7470 Units: mg/L Analysis Date: 10/29/04 11:52

Client ID: Run ID: MERCURY\_041029A SeqNo: 563459 Prep Date: 10/28/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00525 | 0.00020 | 0.005   | 0             | 105  | 83-115        | 0.00492       | 6.49 | 20        |      |

MS Sample ID: 0410220-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 10/29/04 12:00

Client ID: KWB-3R Run ID: MERCURY\_041029A SeqNo: 563462 Prep Date: 10/28/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00522 | 0.00020 | 0.005   | 0.00001       | 104  | 83-115        | 0             |      |           |      |

MSD Sample ID: 0410220-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 10/29/04 12:01

Client ID: KWB-3R Run ID: MERCURY\_041029A SeqNo: 563463 Prep Date: 10/28/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00529 | 0.00020 | 0.005   | 0.00001       | 106  | 83-115        | 0.00522       | 1.33 | 20        |      |

DUP Sample ID: 0410220-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 10/29/04 11:58

Client ID: KWB-3R Run ID: MERCURY\_041029A SeqNo: 563461 Prep Date: 10/28/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | 0.00001       | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410220-01C | 0410220-02C | 0410220-03C |
| 0410220-04C | 0410220-05C | 0410220-06C |
| 0410220-07C | 0410220-08C | 0410220-09C |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10847 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-041025 Test Code: SW8270 Units: µg/L Analysis Date: 10/27/04 13:40

Client ID: Run ID: SV-3\_041027A SeqNo: 562498 Prep Date: 10/25/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3&4-Methylphenol           | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 89.87  | 10  | 100     | 0             | 89.9 | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 78.41  | 10  | 100     | 0             | 78.4 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 37.87  | 10  | 100     | 0             | 37.9 | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 83.43  | 10  | 100     | 0             | 83.4 | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 78.27  | 10  | 100     | 0             | 78.3 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 23.21  | 10  | 100     | 0             | 23.2 | 11-100        |               | 0    |           |      |

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P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10847 InstrumentID: SV-3

LCS Sample ID: SLCSW1-041025 Test Code: SW8270 Units: µg/L Analysis Date: 10/27/04 14:07

Client ID: Run ID: SV-3\_041027A SeqNo: 562499 Prep Date: 10/25/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 34.36  | 10  | 50      | 0             | 68.7 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 76.11  | 10  | 100     | 0             | 76.1 | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 73.09  | 10  | 100     | 0             | 73.1 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 33.29  | 10  | 50      | 0             | 66.6 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 58.36  | 10  | 100     | 0             | 58.4 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 35.51  | 10  | 50      | 0             | 71   | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 74.41  | 10  | 100     | 0             | 74.4 | 60-119        | 0             |      |           |      |
| 3&4-Methylphenol           | 80.21  | 10  | 150     | 0             | 53.5 | 44-115        | 0             |      |           |      |
| 3-Nitroaniline             | 26.01  | 10  | 50      | 0             | 52   | 61-118        | 0             |      |           | S    |
| 4-Nitroaniline             | 31.83  | 10  | 50      | 0             | 63.7 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 34.57  | 10  | 100     | 0             | 34.6 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 36.6   | 10  | 50      | 0             | 73.2 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 35.99  | 10  | 50      | 0             | 72   | 67-116        | 0             |      |           |      |
| Aniline                    | 21.94  | 10  | 50      | 0             | 43.9 | 40-130        | 0             |      |           |      |
| Anthracene                 | 37.69  | 10  | 50      | 0             | 75.4 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 37.4   | 10  | 50      | 0             | 74.8 | 55-131        | 0             |      |           |      |
| Benzidine                  | 10.56  | 10  | 50      | 0             | 21.1 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 32.6   | 10  | 50      | 0             | 65.2 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 37.9   | 10  | 50      | 0             | 75.8 | 42-123        | 0             |      |           |      |
| Isophorone                 | 36.85  | 10  | 50      | 0             | 73.7 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 36.04  | 10  | 50      | 0             | 72.1 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 14.46  | 10  | 50      | 0             | 28.9 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 39.15  | 10  | 50      | 0             | 78.3 | 72-144        | 0             |      |           |      |
| Naphthalene                | 35.25  | 10  | 50      | 0             | 70.5 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 36.45  | 10  | 50      | 0             | 72.9 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 70.54  | 10  | 100     | 0             | 70.5 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 37.92  | 10  | 50      | 0             | 75.8 | 69-119        | 0             |      |           |      |
| Phenol                     | 25.85  | 10  | 100     | 0             | 25.8 | 16-115        | 0             |      |           |      |
| Pyrene                     | 35.39  | 10  | 50      | 0             | 70.8 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 83.67  | 10  | 100     | 0             | 83.7 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 76.26  | 10  | 100     | 0             | 76.3 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 37.46  | 10  | 100     | 0             | 37.5 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 79.11  | 10  | 100     | 0             | 79.1 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 76.93  | 10  | 100     | 0             | 76.9 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 26.76  | 10  | 100     | 0             | 26.8 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10847 InstrumentID: SV-3

LCSD Sample ID: SLCSWD1-041025 Test Code: SW8270 Units: µg/L Analysis Date: 10/27/04 14:32  
 Client ID: Run ID: SV-3\_041027A SeqNo: 562500 Prep Date: 10/25/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,2,4-Trichlorobenzene     | 35.11  | 10  | 50      | 0             | 70.2 | 50-115        | 34.36         | 2.17  | 30        |      |
| 2,4,5-Trichlorophenol      | 72.12  | 10  | 100     | 0             | 72.1 | 68-128        | 76.11         | 5.38  | 30        |      |
| 2,4,6-Trichlorophenol      | 75.89  | 10  | 100     | 0             | 75.9 | 66-125        | 73.09         | 3.75  | 30        |      |
| 2-Methylnaphthalene        | 33.19  | 10  | 50      | 0             | 66.4 | 47-122        | 33.29         | 0.307 | 30        |      |
| 2-Methylphenol             | 70.28  | 10  | 100     | 0             | 70.3 | 51-115        | 58.36         | 18.5  | 30        |      |
| 2-Nitroaniline             | 34.79  | 10  | 50      | 0             | 69.6 | 64-128        | 35.51         | 2.04  | 30        |      |
| 2-Nitrophenol              | 74.13  | 10  | 100     | 0             | 74.1 | 60-119        | 74.41         | 0.376 | 30        |      |
| 3&4-Methylphenol           | 98.31  | 10  | 150     | 0             | 65.5 | 44-115        | 80.21         | 20.3  | 30        |      |
| 3-Nitroaniline             | 26.1   | 10  | 50      | 0             | 52.2 | 61-118        | 26.01         | 0.35  | 30        | S    |
| 4-Nitroaniline             | 32.93  | 10  | 50      | 0             | 65.9 | 61-123        | 31.83         | 3.41  | 30        |      |
| 4-Nitrophenol              | 33.89  | 10  | 100     | 0             | 33.9 | 17-100        | 34.57         | 1.99  | 30        |      |
| Acenaphthene               | 37.43  | 10  | 50      | 0             | 74.9 | 68-115        | 36.6          | 2.22  | 30        |      |
| Acenaphthylene             | 36.48  | 10  | 50      | 0             | 73   | 67-116        | 35.99         | 1.36  | 30        |      |
| Aniline                    | 20.77  | 10  | 50      | 0             | 41.5 | 40-130        | 21.94         | 5.47  | 30        |      |
| Anthracene                 | 38.49  | 10  | 50      | 0             | 77   | 70-129        | 37.69         | 2.11  | 30        |      |
| Benz(a)anthracene          | 37.58  | 10  | 50      | 0             | 75.2 | 55-131        | 37.4          | 0.48  | 30        |      |
| Benzidine                  | 7.619  | 10  | 50      | 0             | 15.2 | 10-115        | 10.56         | 0     | 30        | J    |
| Hexachloroethane           | 41.02  | 10  | 50      | 0             | 82   | 46-115        | 32.6          | 22.9  | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 38.62  | 10  | 50      | 0             | 77.2 | 42-123        | 37.9          | 1.87  | 30        |      |
| Isophorone                 | 37.44  | 10  | 50      | 0             | 74.9 | 63-117        | 36.85         | 1.58  | 30        |      |
| N-Nitrosodi-n-propylamine  | 44.51  | 10  | 50      | 0             | 89   | 67-115        | 36.04         | 21    | 30        |      |
| N-Nitrosodimethylamine     | 17.45  | 10  | 50      | 0             | 34.9 | 28-115        | 14.46         | 18.8  | 30        |      |
| N-Nitrosodiphenylamine     | 41.22  | 10  | 50      | 0             | 82.4 | 72-144        | 39.15         | 5.15  | 30        |      |
| Naphthalene                | 35.57  | 10  | 50      | 0             | 71.1 | 52-115        | 35.25         | 0.914 | 30        |      |
| Nitrobenzene               | 35.78  | 10  | 50      | 0             | 71.6 | 65-115        | 36.45         | 1.86  | 30        |      |
| Pentachlorophenol          | 73.26  | 10  | 100     | 0             | 73.3 | 65-123        | 70.54         | 3.78  | 30        |      |
| Phenanthrene               | 38.47  | 10  | 50      | 0             | 76.9 | 69-119        | 37.92         | 1.44  | 30        |      |
| Phenol                     | 24.99  | 10  | 100     | 0             | 25   | 16-115        | 25.85         | 3.35  | 30        |      |
| Pyrene                     | 36.15  | 10  | 50      | 0             | 72.3 | 51-130        | 35.39         | 2.11  | 30        |      |
| Surr: 2,4,6-Tribromophenol | 84.77  | 10  | 100     | 0             | 84.8 | 39-153        | 83.67         | 1.3   | 30        |      |
| Surr: 2-Fluorobiphenyl     | 73.11  | 10  | 100     | 0             | 73.1 | 40-147        | 76.26         | 4.22  | 30        |      |
| Surr: 2-Fluorophenol       | 40.6   | 10  | 100     | 0             | 40.6 | 21-110        | 37.46         | 8.06  | 30        |      |
| Surr: 4-Terphenyl-d14      | 76.98  | 10  | 100     | 0             | 77   | 39-141        | 79.11         | 2.74  | 30        |      |
| Surr: Nitrobenzene-d5      | 73.47  | 10  | 100     | 0             | 73.5 | 37-140        | 76.93         | 4.59  | 30        |      |
| Surr: Phenol-d6            | 25.05  | 10  | 100     | 0             | 25.1 | 11-100        | 26.76         | 6.6   | 30        |      |

The following samples were analyzed in this batch:

0410220-01E

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10875 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-041026 Test Code: SW8270 Units: µg/L Analysis Date: 10/27/04 19:17

Client ID: Run ID: SV-3\_041027D SeqNo: 563529 Prep Date: 10/26/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3&4-Methylphenol           | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 80.23  | 10  | 100     | 0             | 80.2 | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 70.95  | 10  | 100     | 0             | 70.9 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 37.98  | 10  | 100     | 0             | 38   | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 77.42  | 10  | 100     | 0             | 77.4 | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 70.16  | 10  | 100     | 0             | 70.2 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 22.92  | 10  | 100     | 0             | 22.9 | 11-100        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10875 InstrumentID: SV-3

LCS Sample ID: SLCSW1-041026 Test Code: SW8270 Units: µg/L Analysis Date: 10/27/04 19:42

Client ID: Run ID: SV-3\_041027D SeqNo: 563530 Prep Date: 10/26/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 32.61  | 10  | 50      | 0             | 65.2 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 76.04  | 10  | 100     | 0             | 76   | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 73.93  | 10  | 100     | 0             | 73.9 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 32.28  | 10  | 50      | 0             | 64.6 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 59.82  | 10  | 100     | 0             | 59.8 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 35.95  | 10  | 50      | 0             | 71.9 | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 69.76  | 10  | 100     | 0             | 69.8 | 60-119        | 0             |      |           |      |
| 3&4-Methylphenol           | 83.2   | 10  | 150     | 0             | 55.5 | 44-115        | 0             |      |           |      |
| 3-Nitroaniline             | 31.01  | 10  | 50      | 0             | 62   | 61-118        | 0             |      |           |      |
| 4-Nitroaniline             | 34.38  | 10  | 50      | 0             | 68.8 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 34.03  | 10  | 100     | 0             | 34   | 17-100        | 0             |      |           |      |
| Acenaphthene               | 37.1   | 10  | 50      | 0             | 74.2 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 35.57  | 10  | 50      | 0             | 71.1 | 67-116        | 0             |      |           |      |
| Aniline                    | 28.54  | 10  | 50      | 0             | 57.1 | 40-130        | 0             |      |           |      |
| Anthracene                 | 38.89  | 10  | 50      | 0             | 77.8 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 36.82  | 10  | 50      | 0             | 73.6 | 55-131        | 0             |      |           |      |
| Benzidine                  | 17.37  | 10  | 50      | 0             | 34.7 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 31.89  | 10  | 50      | 0             | 63.8 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 35.69  | 10  | 50      | 0             | 71.4 | 42-123        | 0             |      |           |      |
| Isophorone                 | 35.03  | 10  | 50      | 0             | 70.1 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 35.24  | 10  | 50      | 0             | 70.5 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 18.06  | 10  | 50      | 0             | 36.1 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 41.12  | 10  | 50      | 0             | 82.2 | 72-144        | 0             |      |           |      |
| Naphthalene                | 34.53  | 10  | 50      | 0             | 69.1 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 34.76  | 10  | 50      | 0             | 69.5 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 65.81  | 10  | 100     | 0             | 65.8 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 38.77  | 10  | 50      | 0             | 77.5 | 69-119        | 0             |      |           |      |
| Phenol                     | 27.92  | 10  | 100     | 0             | 27.9 | 16-115        | 0             |      |           |      |
| Pyrene                     | 35.63  | 10  | 50      | 0             | 71.3 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 83.35  | 10  | 100     | 0             | 83.4 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 72.57  | 10  | 100     | 0             | 72.6 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 41.87  | 10  | 100     | 0             | 41.9 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 77.07  | 10  | 100     | 0             | 77.1 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 70.33  | 10  | 100     | 0             | 70.3 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 28.11  | 10  | 100     | 0             | 28.1 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10875 InstrumentID: SV-3

LCSD Sample ID: SLCSDW1-041026 Test Code: SW8270 Units: µg/L Analysis Date: 10/27/04 20:07

Client ID: Run ID: SV-3\_041027D SeqNo: 563531 Prep Date: 10/26/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,2,4-Trichlorobenzene     | 33.49  | 10  | 50      | 0             | 67   | 50-115        | 32.61         | 2.67   | 30        |      |
| 2,4,5-Trichlorophenol      | 71.62  | 10  | 100     | 0             | 71.6 | 68-128        | 76.04         | 5.97   | 30        |      |
| 2,4,6-Trichlorophenol      | 74.13  | 10  | 100     | 0             | 74.1 | 66-125        | 73.93         | 0.267  | 30        |      |
| 2-Methylnaphthalene        | 32.38  | 10  | 50      | 0             | 64.8 | 47-122        | 32.28         | 0.304  | 30        |      |
| 2-Methylphenol             | 59.55  | 10  | 100     | 0             | 59.6 | 51-115        | 59.82         | 0.442  | 30        |      |
| 2-Nitroaniline             | 35.2   | 10  | 50      | 0             | 70.4 | 64-128        | 35.95         | 2.12   | 30        |      |
| 2-Nitrophenol              | 70.56  | 10  | 100     | 0             | 70.6 | 60-119        | 69.76         | 1.14   | 30        |      |
| 3&4-Methylphenol           | 82.49  | 10  | 150     | 0             | 55   | 44-115        | 83.2          | 0.854  | 30        |      |
| 3-Nitroaniline             | 31.61  | 10  | 50      | 0             | 63.2 | 61-118        | 31.01         | 1.92   | 30        |      |
| 4-Nitroaniline             | 35.65  | 10  | 50      | 0             | 71.3 | 61-123        | 34.38         | 3.61   | 30        |      |
| 4-Nitrophenol              | 35.68  | 10  | 100     | 0             | 35.7 | 17-100        | 34.03         | 4.71   | 30        |      |
| Acenaphthene               | 36.61  | 10  | 50      | 0             | 73.2 | 68-115        | 37.1          | 1.34   | 30        |      |
| Acenaphthylene             | 35.96  | 10  | 50      | 0             | 71.9 | 67-116        | 35.57         | 1.09   | 30        |      |
| Aniline                    | 31.11  | 10  | 50      | 0             | 62.2 | 40-130        | 28.54         | 8.62   | 30        |      |
| Anthracene                 | 38.45  | 10  | 50      | 0             | 76.9 | 70-129        | 38.89         | 1.13   | 30        |      |
| Benz(a)anthracene          | 36.79  | 10  | 50      | 0             | 73.6 | 55-131        | 36.82         | 0.0829 | 30        |      |
| Benzidine                  | 16.64  | 10  | 50      | 0             | 33.3 | 10-115        | 17.37         | 4.27   | 30        |      |
| Hexachloroethane           | 32.7   | 10  | 50      | 0             | 65.4 | 46-115        | 31.89         | 2.53   | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 36.8   | 10  | 50      | 0             | 73.6 | 42-123        | 35.69         | 3.07   | 30        |      |
| Isophorone                 | 34.65  | 10  | 50      | 0             | 69.3 | 63-117        | 35.03         | 1.1    | 30        |      |
| N-Nitrosodi-n-propylamine  | 34.75  | 10  | 50      | 0             | 69.5 | 67-115        | 35.24         | 1.41   | 30        |      |
| N-Nitrosodimethylamine     | 16.91  | 10  | 50      | 0             | 33.8 | 28-115        | 18.06         | 6.55   | 30        |      |
| N-Nitrosodiphenylamine     | 40.81  | 10  | 50      | 0             | 81.6 | 72-144        | 41.12         | 0.736  | 30        |      |
| Naphthalene                | 34.24  | 10  | 50      | 0             | 68.5 | 52-115        | 34.53         | 0.85   | 30        |      |
| Nitrobenzene               | 34.02  | 10  | 50      | 0             | 68   | 65-115        | 34.76         | 2.16   | 30        |      |
| Pentachlorophenol          | 68.09  | 10  | 100     | 0             | 68.1 | 65-123        | 65.81         | 3.41   | 30        |      |
| Phenanthrene               | 38.72  | 10  | 50      | 0             | 77.4 | 69-119        | 38.77         | 0.119  | 30        |      |
| Phenol                     | 28.39  | 10  | 100     | 0             | 28.4 | 16-115        | 27.92         | 1.69   | 30        |      |
| Pyrene                     | 36.13  | 10  | 50      | 0             | 72.3 | 51-130        | 35.63         | 1.39   | 30        |      |
| Surr: 2,4,6-Tribromophenol | 82.4   | 10  | 100     | 0             | 82.4 | 39-153        | 83.35         | 1.15   | 30        |      |
| Surr: 2-Fluorobiphenyl     | 70.72  | 10  | 100     | 0             | 70.7 | 40-147        | 72.57         | 2.59   | 30        |      |
| Surr: 2-Fluorophenol       | 40.91  | 10  | 100     | 0             | 40.9 | 21-110        | 41.87         | 2.31   | 30        |      |
| Surr: 4-Terphenyl-d14      | 76.95  | 10  | 100     | 0             | 76.9 | 39-141        | 77.07         | 0.159  | 30        |      |
| Surr: Nitrobenzene-d5      | 67.95  | 10  | 100     | 0             | 67.9 | 37-140        | 70.33         | 3.45   | 30        |      |
| Surr: Phenol-d6            | 27.34  | 10  | 100     | 0             | 27.3 | 11-100        | 28.11         | 2.77   | 30        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410220-02E | 0410220-03E | 0410220-04E |
| 0410220-05E | 0410220-06E | 0410220-07E |
| 0410220-08E | 0410220-09E |             |

ND - Not Detected at the Reporting Limit

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U - Analyzed for but not detected

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CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24012 InstrumentID: VOA1

MBLK Sample ID: VBLKW-1021 Test Code: SW8260 Units: µg/L Analysis Date: 10/21/04 19:12

Client ID: Run ID: VOA1\_041021A SeqNo: 559232 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44.83  | 5.0 | 50      | 0             | 89.7 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 50.08  | 5.0 | 50      | 0             | 100  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.49  | 5.0 | 50      | 0             | 93   | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 46.73  | 5.0 | 50      | 0             | 93.5 | 75-125        | 0             |      |           |      |

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CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24012 InstrumentID: VOA1

LCS Sample ID: VLCSW-1021 Test Code: SW8260 Units: µg/L Analysis Date: 10/21/04 18:16

Client ID: Run ID: VOA1\_041021A SeqNo: 559231 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 55.79  | 5.0 | 50      | 0             | 112  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 51.07  | 5.0 | 50      | 0             | 102  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 51.98  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 52.46  | 5.0 | 50      | 0             | 105  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 51.41  | 5.0 | 50      | 0             | 103  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 48.33  | 5.0 | 50      | 0             | 96.7 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 103.4  | 10  | 100     | 0             | 103  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 105.1  | 10  | 100     | 0             | 105  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 115.3  | 10  | 100     | 0             | 115  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 111.8  | 10  | 100     | 0             | 112  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 97.87  | 10  | 100     | 0             | 97.9 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 50.09  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 50.97  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Bromoform                   | 48.89  | 5.0 | 50      | 0             | 97.8 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 50.56  | 5.0 | 50      | 0             | 101  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 106.8  | 10  | 100     | 0             | 107  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 52.88  | 5.0 | 50      | 0             | 106  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 50.31  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Chloroethane                | 52.68  | 5.0 | 50      | 0             | 105  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 53.22  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Chloromethane               | 50.56  | 5.0 | 50      | 0             | 101  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 50.03  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 48.36  | 5.0 | 50      | 0             | 96.7 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 51.24  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 104.6  | 10  | 100     | 0             | 105  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 47.95  | 10  | 50      | 0             | 95.9 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 52.28  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 52.26  | 5.0 | 50      | 0             | 105  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 52.86  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 50.98  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 49.5   | 5.0 | 50      | 0             | 99   | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 120.7  | 10  | 100     | 0             | 121  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 50.89  | 2.0 | 50      | 0             | 102  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 156.8  | 15  | 150     | 0             | 105  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.91  | 5.0 | 50      | 0             | 91.8 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 50.07  | 5.0 | 50      | 0             | 100  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.93  | 5.0 | 50      | 0             | 97.9 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 51.38  | 5.0 | 50      | 0             | 103  | 75-125        | 0             |      |           |      |

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CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24012 InstrumentID: VOA1

MS Sample ID: 0410247-01AMS Test Code: SW8260 Units: µg/L Analysis Date: 10/21/04 21:57

Client ID: Run ID: VOA1\_041021A SeqNo: 559238 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 1285   | 120 | 1250    | 0             | 103  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 1218   | 120 | 1250    | 0             | 97.4 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 1279   | 120 | 1250    | 0             | 102  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 1187   | 120 | 1250    | 0             | 95   | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 1147   | 120 | 1250    | 0             | 91.8 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 1182   | 120 | 1250    | 0             | 94.5 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 2217   | 250 | 2500    | 0             | 88.7 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 2633   | 250 | 2500    | 0             | 105  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 2413   | 250 | 2500    | 0             | 96.5 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 2423   | 250 | 2500    | 0             | 96.9 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 2221   | 250 | 2500    | 0             | 88.8 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 1196   | 120 | 1250    | 0             | 95.7 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 1300   | 120 | 1250    | 0             | 104  | 80-120        | 0             |      |           |      |
| Bromoform                   | 1167   | 120 | 1250    | 0             | 93.4 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 1244   | 120 | 1250    | 0             | 99.5 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 2370   | 250 | 2500    | 0             | 94.8 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 1274   | 120 | 1250    | 0             | 102  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 1261   | 120 | 1250    | 0             | 101  | 80-120        | 0             |      |           |      |
| Chloroethane                | 1288   | 120 | 1250    | 0             | 103  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 1317   | 120 | 1250    | 85.95         | 98.5 | 80-120        | 0             |      |           |      |
| Chloromethane               | 1258   | 120 | 1250    | 0             | 101  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 1242   | 120 | 1250    | 0             | 99.4 | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 1201   | 120 | 1250    | 0             | 96.1 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 1256   | 120 | 1250    | 0             | 100  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 2490   | 250 | 2500    | 0             | 99.6 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 1194   | 250 | 1250    | 0             | 95.5 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 1284   | 120 | 1250    | 0             | 103  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 1226   | 120 | 1250    | 0             | 98.1 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 1236   | 120 | 1250    | 0             | 98.9 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 1262   | 120 | 1250    | 0             | 101  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 1232   | 120 | 1250    | 0             | 98.6 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 2206   | 250 | 2500    | 0             | 88.2 | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 1260   | 50  | 1250    | 0             | 101  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 3762   | 380 | 3750    | 0             | 100  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 1138   | 120 | 1250    | 0             | 91.1 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 1224   | 120 | 1250    | 0             | 98   | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 1156   | 120 | 1250    | 0             | 92.5 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 1180   | 120 | 1250    | 0             | 94.4 | 75-125        | 0             |      |           |      |

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CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24012 InstrumentID: VOA1

| MSD                         | Sample ID: 0410247-01AMSD |                      |         | Test Code: SW8260 |      | Units: µg/L   |               | Analysis Date: 10/21/04 22:24 |           |      |
|-----------------------------|---------------------------|----------------------|---------|-------------------|------|---------------|---------------|-------------------------------|-----------|------|
| Client ID:                  |                           | Run ID: VOA1_041021A |         | SeqNo: 559239     |      | Prep Date:    |               | DF: 25                        |           |      |
| Analyte                     | Result                    | PQL                  | SPK Val | SPK Ref Value     | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 1287                      | 120                  | 1250    | 0                 | 103  | 75.2-120      | 1285          | 0.139                         | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 1191                      | 120                  | 1250    | 0                 | 95.3 | 72.4-121      | 1218          | 2.22                          | 20        |      |
| 1,1,2-Trichloroethane       | 1251                      | 120                  | 1250    | 0                 | 100  | 80-120        | 1279          | 2.24                          | 20        |      |
| 1,1-Dichloroethane          | 1276                      | 120                  | 1250    | 0                 | 102  | 76.9-120      | 1187          | 7.25                          | 20        |      |
| 1,1-Dichloroethene          | 1187                      | 120                  | 1250    | 0                 | 94.9 | 72.6-123      | 1147          | 3.37                          | 20        |      |
| 1,2-Dichloroethane          | 1256                      | 120                  | 1250    | 0                 | 100  | 80-120        | 1182          | 6.09                          | 20        |      |
| 2-Butanone                  | 2386                      | 250                  | 2500    | 0                 | 95.4 | 69-131        | 2217          | 7.34                          | 20        |      |
| 2-Chloroethyl vinyl ether   | 2623                      | 250                  | 2500    | 0                 | 105  | 60-135        | 2633          | 0.363                         | 20        |      |
| 2-Hexanone                  | 2346                      | 250                  | 2500    | 0                 | 93.9 | 55.6-126      | 2413          | 2.8                           | 20        |      |
| 4-Methyl-2-pentanone        | 2440                      | 250                  | 2500    | 0                 | 97.6 | 67.4-121      | 2423          | 0.69                          | 20        |      |
| Acetone                     | 2414                      | 250                  | 2500    | 0                 | 96.6 | 64.4-140      | 2221          | 8.33                          | 20        |      |
| Benzene                     | 1217                      | 120                  | 1250    | 0                 | 97.4 | 80-120        | 1196          | 1.74                          | 20        |      |
| Bromodichloromethane        | 1280                      | 120                  | 1250    | 0                 | 102  | 80-120        | 1300          | 1.56                          | 20        |      |
| Bromoform                   | 1158                      | 120                  | 1250    | 0                 | 92.7 | 77.9-121      | 1167          | 0.803                         | 20        |      |
| Bromomethane                | 1265                      | 120                  | 1250    | 0                 | 101  | 63.3-137      | 1244          | 1.71                          | 20        |      |
| Carbon disulfide            | 2622                      | 250                  | 2500    | 0                 | 105  | 74.1-123      | 2370          | 10.1                          | 20        |      |
| Carbon tetrachloride        | 1268                      | 120                  | 1250    | 0                 | 101  | 74.7-120      | 1274          | 0.497                         | 20        |      |
| Chlorobenzene               | 1230                      | 120                  | 1250    | 0                 | 98.4 | 80-120        | 1261          | 2.52                          | 20        |      |
| Chloroethane                | 1381                      | 120                  | 1250    | 0                 | 110  | 74.7-126      | 1288          | 6.92                          | 20        |      |
| Chloroform                  | 1411                      | 120                  | 1250    | 85.95             | 106  | 80-120        | 1317          | 6.83                          | 20        |      |
| Chloromethane               | 1265                      | 120                  | 1250    | 0                 | 101  | 64.5-132      | 1258          | 0.485                         | 20        |      |
| cis-1,3-Dichloropropene     | 1256                      | 120                  | 1250    | 0                 | 100  | 80-120        | 1242          | 1.1                           | 20        |      |
| Dibromochloromethane        | 1199                      | 120                  | 1250    | 0                 | 95.9 | 80-120        | 1201          | 0.213                         | 20        |      |
| Ethylbenzene                | 1206                      | 120                  | 1250    | 0                 | 96.5 | 80-120        | 1256          | 4.04                          | 20        |      |
| m,p-Xylene                  | 2336                      | 250                  | 2500    | 0                 | 93.4 | 80-120        | 2490          | 6.41                          | 20        |      |
| Methylene chloride          | 1286                      | 250                  | 1250    | 0                 | 103  | 76.2-120      | 1194          | 7.43                          | 20        |      |
| Styrene                     | 1293                      | 120                  | 1250    | 0                 | 103  | 80-120        | 1284          | 0.68                          | 20        |      |
| Tetrachloroethene           | 1227                      | 120                  | 1250    | 0                 | 98.2 | 68.5-130      | 1226          | 0.0961                        | 20        |      |
| Toluene                     | 1194                      | 120                  | 1250    | 0                 | 95.5 | 80-120        | 1236          | 3.44                          | 20        |      |
| trans-1,3-Dichloropropene   | 1291                      | 120                  | 1250    | 0                 | 103  | 80-120        | 1262          | 2.2                           | 20        |      |
| Trichloroethene             | 1249                      | 120                  | 1250    | 0                 | 99.9 | 78.9-120      | 1232          | 1.35                          | 20        |      |
| Vinyl acetate               | 2436                      | 250                  | 2500    | 0                 | 97.4 | 62.4-133      | 2206          | 9.89                          | 20        |      |
| Vinyl chloride              | 1328                      | 50                   | 1250    | 0                 | 106  | 72.7-128      | 1260          | 5.29                          | 20        |      |
| Xylenes, Total              | 3640                      | 380                  | 3750    | 0                 | 97.1 | 80-120        | 3762          | 3.31                          | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 1185                      | 120                  | 1250    | 0                 | 94.8 | 71-126        | 1138          | 3.99                          | 20        |      |
| Surr: 4-Bromofluorobenzene  | 1256                      | 120                  | 1250    | 0                 | 101  | 74-125        | 1224          | 2.58                          | 20        |      |
| Surr: Dibromofluoromethane  | 1190                      | 120                  | 1250    | 0                 | 95.2 | 73-126        | 1156          | 2.88                          | 20        |      |
| Surr: Toluene-d8            | 1193                      | 120                  | 1250    | 0                 | 95.4 | 75-125        | 1180          | 1.14                          | 20        |      |

The following samples were analyzed in this batch:

0410220-01A 0410220-02A 0410220-03A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24028 InstrumentID: VOA1

MBLK Sample ID: VBLKW-1022 Test Code: SW8260 Units: µg/L Analysis Date: 10/22/04 14:06

Client ID: Run ID: VOA1\_041022A SeqNo: 559635 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.82  | 5.0 | 50      | 0             | 91.6 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 50.03  | 5.0 | 50      | 0             | 100  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.65  | 5.0 | 50      | 0             | 93.3 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 48.36  | 5.0 | 50      | 0             | 96.7 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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P - Dual Column results percent difference > 40%

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E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24028 InstrumentID: VOA1

LCS Sample ID: VLCSW-1022 Test Code: SW8260 Units: µg/L Analysis Date: 10/22/04 12:43

Client ID: Run ID: VOA1\_041022A SeqNo: 559634 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 48.58  | 5.0 | 50      | 0             | 97.2 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 50.18  | 5.0 | 50      | 0             | 100  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 52.57  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 44.85  | 5.0 | 50      | 0             | 89.7 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 47.03  | 5.0 | 50      | 0             | 94.1 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 46.6   | 5.0 | 50      | 0             | 93.2 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 92.52  | 10  | 100     | 0             | 92.5 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 100.9  | 10  | 100     | 0             | 101  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 102.2  | 10  | 100     | 0             | 102  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 102.7  | 10  | 100     | 0             | 103  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 87.93  | 10  | 100     | 0             | 87.9 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 48.38  | 5.0 | 50      | 0             | 96.8 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 50.05  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Bromoform                   | 47.72  | 5.0 | 50      | 0             | 95.4 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 40.19  | 5.0 | 50      | 0             | 80.4 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 95.13  | 10  | 100     | 0             | 95.1 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 50.08  | 5.0 | 50      | 0             | 100  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 49.95  | 5.0 | 50      | 0             | 99.9 | 80-120        | 0             |      |           |      |
| Chloroethane                | 48.36  | 5.0 | 50      | 0             | 96.7 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 47.04  | 5.0 | 50      | 0             | 94.1 | 80-120        | 0             |      |           |      |
| Chloromethane               | 44.32  | 5.0 | 50      | 0             | 88.6 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 52.63  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 48.36  | 5.0 | 50      | 0             | 96.7 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 49.23  | 5.0 | 50      | 0             | 98.5 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 100.5  | 10  | 100     | 0             | 101  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 46.51  | 10  | 50      | 0             | 93   | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.5   | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 50.47  | 5.0 | 50      | 0             | 101  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 50.57  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 53.12  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 48.48  | 5.0 | 50      | 0             | 97   | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 107.5  | 10  | 100     | 0             | 108  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 46.92  | 2.0 | 50      | 0             | 93.8 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 150.7  | 15  | 150     | 0             | 100  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 41.45  | 5.0 | 50      | 0             | 82.9 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.87  | 5.0 | 50      | 0             | 97.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 43.6   | 5.0 | 50      | 0             | 87.2 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.7   | 5.0 | 50      | 0             | 99.4 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24028 InstrumentID: VOA1

MS Sample ID: 0410257-01CMS Test Code: SW8260 Units: µg/L Analysis Date: 10/22/04 15:29

Client ID: Run ID: VOA1\_041022A SeqNo: 559637 Prep Date: DF: 20

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 1024   | 100 | 1000    | 0             | 102  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 973.1  | 100 | 1000    | 0             | 97.3 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 997    | 100 | 1000    | 0             | 99.7 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 913.7  | 100 | 1000    | 0             | 91.4 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 912.8  | 100 | 1000    | 0             | 91.3 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 972.9  | 100 | 1000    | 0             | 97.3 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 1780   | 200 | 2000    | 113.8         | 83.3 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 1924   | 200 | 2000    | 0             | 96.2 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 1933   | 200 | 2000    | 0             | 96.6 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 2005   | 200 | 2000    | 0             | 100  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 1596   | 200 | 2000    | 0             | 79.8 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 967.2  | 100 | 1000    | 49.63         | 91.8 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 1024   | 100 | 1000    | 0             | 102  | 80-120        | 0             |      |           |      |
| Bromoform                   | 980.7  | 100 | 1000    | 0             | 98.1 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 787.3  | 100 | 1000    | 0             | 78.7 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 1939   | 200 | 2000    | 0             | 96.9 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 1004   | 100 | 1000    | 0             | 100  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 956.2  | 100 | 1000    | 0             | 95.6 | 80-120        | 0             |      |           |      |
| Chloroethane                | 904.6  | 100 | 1000    | 0             | 90.5 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 967.6  | 100 | 1000    | 0             | 96.8 | 80-120        | 0             |      |           |      |
| Chloromethane               | 778.3  | 100 | 1000    | 0             | 77.8 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 972.7  | 100 | 1000    | 0             | 97.3 | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 971.6  | 100 | 1000    | 0             | 97.2 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 3108   | 100 | 1000    | 2225          | 88.3 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 2460   | 200 | 2000    | 588.1         | 93.6 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 939.8  | 200 | 1000    | 44.38         | 89.5 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 1023   | 100 | 1000    | 0             | 102  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 972.4  | 100 | 1000    | 0             | 97.2 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 978.8  | 100 | 1000    | 11.65         | 96.7 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 990.1  | 100 | 1000    | 0             | 99   | 80-120        | 0             |      |           |      |
| Trichloroethene             | 895.4  | 100 | 1000    | 0             | 89.5 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 2282   | 200 | 2000    | 0             | 114  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 863.6  | 40  | 1000    | 0             | 86.4 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 3487   | 300 | 3000    | 602           | 96.2 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 892.1  | 100 | 1000    | 0             | 89.2 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 967.1  | 100 | 1000    | 0             | 96.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 945.4  | 100 | 1000    | 0             | 94.5 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 982.9  | 100 | 1000    | 0             | 98.3 | 75-125        | 0             |      |           |      |

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

# QC BATCH REPORT

Batch ID: R24028 InstrumentID: VOA1

MSD Sample ID: 0410257-01CMSD Test Code: SW8260 Units: µg/L Analysis Date: 10/22/04 15:57

Client ID: Run ID: VOA1\_041022A SeqNo: 559638 Prep Date: DF: 20

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 994.8  | 100 | 1000    | 0             | 99.5 | 75.2-120      | 1024          | 2.89   | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 1018   | 100 | 1000    | 0             | 102  | 72.4-121      | 973.1         | 4.5    | 20        |      |
| 1,1,2-Trichloroethane       | 1001   | 100 | 1000    | 0             | 100  | 80-120        | 997           | 0.384  | 20        |      |
| 1,1-Dichloroethane          | 913.1  | 100 | 1000    | 0             | 91.3 | 76.9-120      | 913.7         | 0.0698 | 20        |      |
| 1,1-Dichloroethene          | 904.8  | 100 | 1000    | 0             | 90.5 | 72.6-123      | 912.8         | 0.881  | 20        |      |
| 1,2-Dichloroethane          | 990.7  | 100 | 1000    | 0             | 99.1 | 80-120        | 972.9         | 1.81   | 20        |      |
| 2-Butanone                  | 1858   | 200 | 2000    | 113.8         | 87.2 | 69-131        | 1780          | 4.28   | 20        |      |
| 2-Chloroethyl vinyl ether   | 2035   | 200 | 2000    | 0             | 102  | 60-135        | 1924          | 5.62   | 20        |      |
| 2-Hexanone                  | 1980   | 200 | 2000    | 0             | 99   | 55.6-126      | 1933          | 2.42   | 20        |      |
| 4-Methyl-2-pentanone        | 2127   | 200 | 2000    | 0             | 106  | 67.4-121      | 2005          | 5.92   | 20        |      |
| Acetone                     | 1757   | 200 | 2000    | 0             | 87.9 | 64.4-140      | 1596          | 9.62   | 20        |      |
| Benzene                     | 995.4  | 100 | 1000    | 49.63         | 94.6 | 80-120        | 967.2         | 2.87   | 20        |      |
| Bromodichloromethane        | 1052   | 100 | 1000    | 0             | 105  | 80-120        | 1024          | 2.67   | 20        |      |
| Bromoform                   | 959.6  | 100 | 1000    | 0             | 96   | 77.9-121      | 980.7         | 2.17   | 20        |      |
| Bromomethane                | 813.2  | 100 | 1000    | 0             | 81.3 | 63.3-137      | 787.3         | 3.24   | 20        |      |
| Carbon disulfide            | 1954   | 200 | 2000    | 0             | 97.7 | 74.1-123      | 1939          | 0.769  | 20        |      |
| Carbon tetrachloride        | 1030   | 100 | 1000    | 0             | 103  | 74.7-120      | 1004          | 2.58   | 20        |      |
| Chlorobenzene               | 984.8  | 100 | 1000    | 0             | 98.5 | 80-120        | 956.2         | 2.94   | 20        |      |
| Chloroethane                | 989.1  | 100 | 1000    | 0             | 98.9 | 74.7-126      | 904.6         | 8.93   | 20        |      |
| Chloroform                  | 974.5  | 100 | 1000    | 0             | 97.4 | 80-120        | 967.6         | 0.708  | 20        |      |
| Chloromethane               | 850.8  | 100 | 1000    | 0             | 85.1 | 64.5-132      | 778.3         | 8.89   | 20        |      |
| cis-1,3-Dichloropropene     | 1027   | 100 | 1000    | 0             | 103  | 80-120        | 972.7         | 5.38   | 20        |      |
| Dibromochloromethane        | 975.3  | 100 | 1000    | 0             | 97.5 | 80-120        | 971.6         | 0.381  | 20        |      |
| Ethylbenzene                | 3086   | 100 | 1000    | 2225          | 86.1 | 80-120        | 3108          | 0.706  | 20        |      |
| m,p-Xylene                  | 2516   | 200 | 2000    | 588.1         | 96.4 | 80-120        | 2460          | 2.28   | 20        |      |
| Methylene chloride          | 984.7  | 200 | 1000    | 44.38         | 94   | 76.2-120      | 939.8         | 4.67   | 20        |      |
| Styrene                     | 987.2  | 100 | 1000    | 0             | 98.7 | 80-120        | 1023          | 3.6    | 20        |      |
| Tetrachloroethene           | 975.8  | 100 | 1000    | 0             | 97.6 | 68.5-130      | 972.4         | 0.344  | 20        |      |
| Toluene                     | 965.9  | 100 | 1000    | 11.65         | 95.4 | 80-120        | 978.8         | 1.32   | 20        |      |
| trans-1,3-Dichloropropene   | 1036   | 100 | 1000    | 0             | 104  | 80-120        | 990.1         | 4.57   | 20        |      |
| Trichloroethene             | 954.4  | 100 | 1000    | 0             | 95.4 | 78.9-120      | 895.4         | 6.38   | 20        |      |
| Vinyl acetate               | 2303   | 200 | 2000    | 0             | 115  | 62.4-133      | 2282          | 0.895  | 20        |      |
| Vinyl chloride              | 933.4  | 40  | 1000    | 0             | 93.3 | 72.7-128      | 863.6         | 7.76   | 20        |      |
| Xylenes, Total              | 3519   | 300 | 3000    | 602           | 97.2 | 80-120        | 3487          | 0.912  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 881.4  | 100 | 1000    | 0             | 88.1 | 71-126        | 892.1         | 1.21   | 20        |      |
| Surr: 4-Bromofluorobenzene  | 987.9  | 100 | 1000    | 0             | 98.8 | 74-125        | 967.1         | 2.13   | 20        |      |
| Surr: Dibromofluoromethane  | 902.1  | 100 | 1000    | 0             | 90.2 | 73-126        | 945.4         | 4.68   | 20        |      |
| Surr: Toluene-d8            | 980.1  | 100 | 1000    | 0             | 98   | 75-125        | 982.9         | 0.281  | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410220-03A | 0410220-04A | 0410220-05A |
| 0410220-06A | 0410220-07A | 0410220-08A |
| 0410220-09A |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24032 InstrumentID: VOA2

MBLK Sample ID: VBLKW-1024 Test Code: SW8260 Units: µg/L Analysis Date: 10/24/04 11:58

Client ID: Run ID: VOA2\_041024A SeqNo: 559723 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44.54  | 5.0 | 50      | 0             | 89.1 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 43.11  | 5.0 | 50      | 0             | 86.2 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 45.92  | 5.0 | 50      | 0             | 91.8 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 44.5   | 5.0 | 50      | 0             | 89   | 75-125        | 0             |      |           |      |

LCS Sample ID: VLCSW-1024 Test Code: SW8260 Units: µg/L Analysis Date: 10/24/04 11:07

Client ID: Run ID: VOA2\_041024A SeqNo: 559722 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 47.83  | 5.0 | 50      | 0             | 95.7 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 48.43  | 5.0 | 50      | 0             | 96.9 | 80-120        | 0             |      |           |      |
| Toluene                     | 46.89  | 5.0 | 50      | 0             | 93.8 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 40.22  | 5.0 | 50      | 0             | 80.4 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 44.71  | 5.0 | 50      | 0             | 89.4 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 41.98  | 5.0 | 50      | 0             | 84   | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 44.82  | 5.0 | 50      | 0             | 89.6 | 75-125        | 0             |      |           |      |

MS Sample ID: 0410241-01AMS Test Code: SW8260 Units: µg/L Analysis Date: 10/24/04 17:02

Client ID: Run ID: VOA2\_041024A SeqNo: 559734 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 4651   | 120 | 1250    | 3383          | 101  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 1284   | 120 | 1250    | 61.09         | 97.9 | 80-120        | 0             |      |           |      |
| Toluene                     | 1256   | 120 | 1250    | 50            | 96.5 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 1020   | 120 | 1250    | 0             | 81.6 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 1109   | 120 | 1250    | 0             | 88.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 1076   | 120 | 1250    | 0             | 86   | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 1127   | 120 | 1250    | 0             | 90.2 | 75-125        | 0             |      |           |      |

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual

## QC BATCH REPORT

Batch ID: R24032 InstrumentID: VOA2

MSD Sample ID: 0410241-01AMSD Test Code: SW8260 Units: µg/L Analysis Date: 10/24/04 17:28

Client ID: Run ID: VOA2\_041024A SeqNo: 559735 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Benzene                     | 4589   | 120 | 1250    | 3383          | 96.5 | 80-120        | 4651          | 1.34   | 20        |      |
| Ethylbenzene                | 1264   | 120 | 1250    | 61.09         | 96.2 | 80-120        | 1284          | 1.61   | 20        |      |
| Toluene                     | 1235   | 120 | 1250    | 50            | 94.8 | 80-120        | 1256          | 1.66   | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 1024   | 120 | 1250    | 0             | 81.9 | 71-126        | 1020          | 0.366  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 1107   | 120 | 1250    | 0             | 88.6 | 74-125        | 1109          | 0.137  | 20        |      |
| Surr: Dibromofluoromethane  | 1068   | 120 | 1250    | 0             | 85.5 | 73-126        | 1076          | 0.686  | 20        |      |
| Surr: Toluene-d8            | 1126   | 120 | 1250    | 0             | 90.1 | 75-125        | 1127          | 0.0855 | 20        |      |

The following samples were analyzed in this batch:

0410220-04A 0410220-05A 0410220-06A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23995 InstrumentID: IC201

MBLK Sample ID: WBLKW1-102004 Test Code: E300 Units: mg/L Analysis Date: 10/20/04 17:28

Client ID: Run ID: IC201\_041020A SeqNo: 558903 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.19   | 0.10 | 5       | 0             | 104  | 80-120        | 0             |      |           |      |

LCS Sample ID: WLCSW1-102004 Test Code: E300 Units: mg/L Analysis Date: 10/20/04 17:57

Client ID: Run ID: IC201\_041020A SeqNo: 558904 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 8.96   | 0.50 | 10      | 0             | 89.6 | 80-120        | 0             |      |           |      |
| Fluoride                         | 2      | 0.10 | 2       | 0             | 100  | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.78   | 1.0  | 10      | 0             | 97.8 | 80-120        | 0             |      |           |      |
| Nitrate/Nitrite (as N)           | 3.89   | 0.10 | 0       | 0             | 0    | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.43   | 0.10 | 5       | 0             | 109  | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-10200 Test Code: E300 Units: mg/L Analysis Date: 10/20/04 18:25

Client ID: Run ID: IC201\_041020A SeqNo: 558905 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 8.98   | 0.50 | 10      | 0             | 89.8 | 80-120        | 8.96          | 0.223 | 20        |      |
| Fluoride                         | 2.01   | 0.10 | 2       | 0             | 100  | 80-120        | 2             | 0.499 | 20        |      |
| Sulfate                          | 9.74   | 1.0  | 10      | 0             | 97.4 | 80-120        | 9.78          | 0.41  | 20        |      |
| Nitrate/Nitrite (as N)           | 3.97   | 0.10 | 0       | 0             | 0    | 80-120        | 3.89          | 2.04  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.5    | 0.10 | 5       | 0             | 110  | 80-120        | 5.43          | 1.28  | 20        |      |

MS Sample ID: 0410219-01AMS Test Code: E300 Units: mg/L Analysis Date: 10/20/04 19:51

Client ID: Run ID: IC201\_041020A SeqNo: 558908 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 67.53  | 0.50 | 10      | 55.31         | 122  | 75-125        | 0             |      |           | EO   |
| Fluoride                         | 2.45   | 0.10 | 2       | 0.32          | 106  | 75-125        | 0             |      |           |      |
| Sulfate                          | 135.6  | 1.0  | 10      | 124.2         | 114  | 75-125        | 0             |      |           | EO   |
| Nitrate/Nitrite (as N)           | 4.24   | 0.10 | 4       | 0.1           | 104  | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.39   | 0.10 | 5       | 0             | 108  | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

I - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23995 InstrumentID: IC201

|                                  |                           |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| MSD                              | Sample ID: 0410219-01AMSD |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/20/04 20:19 |           |      |
| Client ID:                       | Run ID: IC201_041020A     |      |         | SeqNo: 558909   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                    | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 67.02                     | 0.50 | 10      | 55.31           | 117  | 75-125        | 67.53         | 0.758                         | 20        | EO   |
| Fluoride                         | 2.36                      | 0.10 | 2       | 0.32            | 102  | 75-125        | 2.45          | 3.74                          | 20        |      |
| Sulfate                          | 136.1                     | 1.0  | 10      | 124.2           | 120  | 75-125        | 135.6         | 0.383                         | 20        | EO   |
| Nitrate/Nitrite (as N)           | 4.1                       | 0.10 | 4       | 0.1             | 100  | 75-125        | 4.24          | 3.36                          | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.46                      | 0.10 | 5       | 0               | 109  | 80-120        | 5.39          | 1.29                          | 20        |      |

|                                  |                           |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0410219-01ADUP |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/20/04 19:22 |           |      |
| Client ID:                       | Run ID: IC201_041020A     |      |         | SeqNo: 558907   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                    | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 55.68                     | 0.50 | 0       | 0               | 0    | 0-0           | 55.31         | 0.667                         | 20        | E    |
| Fluoride                         | 0.32                      | 0.10 | 0       | 0               | 0    | 0-0           | 0.32          | 0                             | 20        |      |
| Sulfate                          | 123.9                     | 1.0  | 0       | 0               | 0    | 0-0           | 124.2         | 0.202                         | 20        | E    |
| Nitrate/Nitrite (as N)           | 0.1                       | 0.10 | 0       | 0               | 0    | 0-0           | 0.1           | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.49                      | 0.10 | 5       | 0               | 110  | 80-120        | 5.36          | 2.4                           | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0410220-07BDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/21/04 11:32 |           |      |
| Client ID: RW-10                 | Run ID: IC201_041020A     |     |         | SeqNo: 558919   |      | Prep Date:    |               | DF: 100                       |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 127                       | 50  | 0       | 0               | 0    | 0-0           | 125           | 1.59                          | 20        |      |
| Fluoride                         | 4                         | 10  | 0       | 0               | 0    | 0-0           | 4             | 0                             | 20        | J    |
| Sulfate                          | 1416                      | 100 | 0       | 0               | 0    | 0-0           | 1407          | 0.638                         | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 558                       | 10  | 500     | 0               | 112  | 80-120        | 551           | 1.26                          | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0410220-09BDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/21/04 16:45 |           |      |
| Client ID: RW-17                 | Run ID: IC201_041020A     |     |         | SeqNo: 558927   |      | Prep Date:    |               | DF: 100                       |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 87                        | 50  | 0       | 0               | 0    | 0-0           | 87            | 0                             | 20        |      |
| Fluoride                         | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Sulfate                          | 1966                      | 100 | 0       | 0               | 0    | 0-0           | 1962          | 0.204                         | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 556                       | 10  | 500     | 0               | 111  | 80-120        | 544           | 2.18                          | 20        |      |

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B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual

## QC BATCH REPORT

Batch ID: R23995 InstrumentID: IC201

DUP Sample ID: 0410220-04BDUP Test Code: E300 Units: mg/L Analysis Date: 10/21/04 4:24

Client ID: MW-48 Run ID: IC201\_041020A SeqNo: 558937 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 402    | 50  | 0       | 0             | 0    | 0-0           | 404           | 0.496 | 20        |      |
| Fluoride                         | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Sulfate                          | 265    | 100 | 0       | 0             | 0    | 0-0           | 264           | 0.378 | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 546    | 10  | 500     | 0             | 109  | 80-120        | 547           | 0.183 | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410220-01B | 0410220-02B | 0410220-03B |
| 0410220-04B | 0410220-05B | 0410220-06B |
| 0410220-07B | 0410220-08B | 0410220-09B |

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24031 InstrumentID: IC201

|                                  |                          |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|--------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| MBLK                             | Sample ID: WBLKW1-102204 |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/22/04 18:25 |           |      |
| Client ID:                       | Run ID: IC201_041022A    |      |         | SeqNo: 559674   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                   | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | ND                       | 0.50 |         |                 |      |               |               |                               |           |      |
| Fluoride                         | ND                       | 0.10 |         |                 |      |               |               |                               |           |      |
| Sulfate                          | ND                       | 1.0  |         |                 |      |               |               |                               |           |      |
| Nitrate/Nitrite (as N)           | ND                       | 0.10 |         |                 |      |               |               |                               |           |      |
| Surr: Dichloroacetic acid (surr) | 5.16                     | 0.10 | 5       | 0               | 103  | 80-120        | 0             |                               |           |      |

|                                  |                           |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| LCS                              | Sample ID: WLC SW1-102204 |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/22/04 18:53 |           |      |
| Client ID:                       | Run ID: IC201_041022A     |      |         | SeqNo: 559675   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                    | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 8.99                      | 0.50 | 10      | 0               | 89.9 | 80-120        | 0             |                               |           |      |
| Fluoride                         | 1.91                      | 0.10 | 2       | 0               | 95.5 | 80-120        | 0             |                               |           |      |
| Sulfate                          | 9.79                      | 1.0  | 10      | 0               | 97.9 | 80-120        | 0             |                               |           |      |
| Nitrate/Nitrite (as N)           | 3.96                      | 0.10 | 0       | 0               | 0    | 80-120        | 0             |                               |           |      |
| Surr: Dichloroacetic acid (surr) | 5.55                      | 0.10 | 5       | 0               | 111  | 80-120        | 0             |                               |           |      |

|                                  |                          |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|--------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| LCSD                             | Sample ID: WLCSDW1-10220 |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/22/04 19:22 |           |      |
| Client ID:                       | Run ID: IC201_041022A    |      |         | SeqNo: 559676   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                   | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 9.02                     | 0.50 | 10      | 0               | 90.2 | 80-120        | 8.99          | 0.333                         | 20        |      |
| Fluoride                         | 1.95                     | 0.10 | 2       | 0               | 97.5 | 80-120        | 1.91          | 2.07                          | 20        |      |
| Sulfate                          | 9.84                     | 1.0  | 10      | 0               | 98.4 | 80-120        | 9.79          | 0.509                         | 20        |      |
| Nitrate/Nitrite (as N)           | 3.9                      | 0.10 | 0       | 0               | 0    | 80-120        | 3.96          | 1.53                          | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.04                     | 0.10 | 5       | 0               | 101  | 80-120        | 5.55          | 9.63                          | 20        |      |

|                                  |                          |     |         |                 |      |               |               |                              |           |      |
|----------------------------------|--------------------------|-----|---------|-----------------|------|---------------|---------------|------------------------------|-----------|------|
| MS                               | Sample ID: 0410139-18BMS |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/23/04 2:58 |           |      |
| Client ID:                       | Run ID: IC201_041022A    |     |         | SeqNo: 559694   |      | Prep Date:    |               | DF: 100                      |           |      |
| Analyte                          | Result                   | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                         | RPD Limit | Qual |
| Chloride                         | 3398                     | 50  | 1000    | 2177            | 122  | 75-125        | 0             |                              |           |      |
| Fluoride                         | 196                      | 10  | 200     | 0               | 98   | 75-125        | 0             |                              |           |      |
| Sulfate                          | 2398                     | 100 | 1000    | 1308            | 109  | 75-125        | 0             |                              |           |      |
| Nitrate/Nitrite (as N)           | 405                      | 10  | 400     | 0               | 101  | 75-125        | 0             |                              |           |      |
| Surr: Dichloroacetic acid (surr) | 554                      | 10  | 500     | 0               | 111  | 80-120        | 0             |                              |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual

## QC BATCH REPORT

Batch ID: R24031 InstrumentID: IC201

MSD Sample ID: 0410139-18BMSD Test Code: E300 Units: mg/L Analysis Date: 10/23/04 3:27

Client ID: Run ID: IC201\_041022A SeqNo: 559695 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 3299   | 50  | 1000    | 2177          | 112  | 75-125        | 3398          | 2.96  | 20        |      |
| Fluoride                         | 193    | 10  | 200     | 0             | 96.5 | 75-125        | 196           | 1.54  | 20        |      |
| Sulfate                          | 2376   | 100 | 1000    | 1308          | 107  | 75-125        | 2398          | 0.922 | 20        |      |
| Nitrate/Nitrite (as N)           | 392    | 10  | 400     | 0             | 98   | 75-125        | 405           | 3.26  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 557    | 10  | 500     | 0             | 111  | 80-120        | 554           | 0.54  | 20        |      |

DUP Sample ID: 0410139-14BDUP Test Code: E300 Units: mg/L Analysis Date: 10/22/04 23:10

Client ID: Run ID: IC201\_041022A SeqNo: 559684 Prep Date: DF: 50

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 1870   | 25  | 0       | 0             | 0    | 0-0           | 1870          | 0    | 20        |      |
| Fluoride                         | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Sulfate                          | 660    | 50  | 0       | 0             | 0    | 0-0           | 660           | 0    | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Surr: Dichloroacetic acid (surr) | 260.5  | 5.0 | 250     | 0             | 104  | 80-120        | 291           | 11.1 | 20        |      |

DUP Sample ID: 0410139-18BDUP Test Code: E300 Units: mg/L Analysis Date: 10/23/04 2:30

Client ID: Run ID: IC201\_041022A SeqNo: 559693 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 2169   | 50  | 0       | 0             | 0    | 0-0           | 2177          | 0.368 | 20        |      |
| Fluoride                         | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Sulfate                          | 1306   | 100 | 0       | 0             | 0    | 0-0           | 1308          | 0.153 | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 553    | 10  | 500     | 0             | 111  | 80-120        | 530           | 4.25  | 20        |      |

The following samples were analyzed in this batch:

0410220-01B 0410220-02B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410220  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24154 InstrumentID: WetChem

MBLK Sample ID: WBLKW1-102804 Test Code: E310.1 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: Run ID: WETCHEM\_041028A SeqNo: 562906 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-102804 Test Code: E310.1 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: Run ID: WETCHEM\_041028A SeqNo: 562907 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 1000   | 5.0 | 0       | 1             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Total (As CaCO3)       | 1000   | 5.0 | 1000    | 0             | 100  | 80-120        | 0             |      |           |      |

DUP Sample ID: 0410220-01BDUP Test Code: E310.1 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: KWB-3R Run ID: WETCHEM\_041028A SeqNo: 562917 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 380.1  | 5.0 | 0       | 0             | 0    | 0-0           | 380.1         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 380.1  | 5.0 | 0       | 0             | 0    | 0-0           | 380.1         | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410220-01B | 0410220-02B | 0410220-03B |
| 0410220-04B | 0410220-05B | 0410220-06B |
| 0410220-07B | 0410220-08B | 0410220-09B |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0410220  
Project: Annual

## QC BATCH REPORT

Batch ID: R24162 InstrumentID: UV-2101PC

MBLK Sample ID: WBLKW1-102604 Test Code: E335.3 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: Run ID: UV-2101PC\_041028B SeqNo: 563051 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-102604 Test Code: E335.3 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: Run ID: UV-2101PC\_041028B SeqNo: 563052 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.193  | 0.020 | 0.2     | 0             | 96.5 | 80-120        | 0             |      |           |      |

MS Sample ID: 0410252-26BMS Test Code: E335.3 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: Run ID: UV-2101PC\_041028B SeqNo: 563067 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1969 | 0.020 | 0.2     | 0.0039        | 96.5 | 75-125        | 0             |      |           |      |

MSD Sample ID: 0410252-26BMSD Test Code: E335.3 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: Run ID: UV-2101PC\_041028B SeqNo: 563068 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1989 | 0.020 | 0.2     | 0.0039        | 97.5 | 75-125        | 0.1969        | 1.01 | 25        |      |

DUP Sample ID: 0410252-26BDUP Test Code: E335.3 Units: mg/L Analysis Date: 10/28/04 0:00

Client ID: Run ID: UV-2101PC\_041028B SeqNo: 563070 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.0037 | 0.020 | 0       | 0             | 0    | 0-0           | 0.0039        | 0    | 20        | J    |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410220-01D | 0410220-02D | 0410220-03D |
| 0410220-04D | 0410220-05D | 0410220-06D |
| 0410220-07D | 0410220-08D | 0410220-09D |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

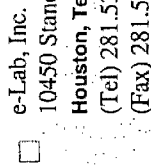
R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



## Chain of Custody Form

Page 1 of 1

**e-Lab, Inc.**  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

| Customer Information                                                                                                                                                 |                    |                 |                                                        | Project Information |                   |                                                                                                                                                                               |              | e-Lab Project Manager |                                                                                                                                                                                  |                |              | e-Lab Work Order # |              |                |              | Parameter/Method Request for Analysis |              |                |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------|--------------------------------------------------------|---------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------|--------------------|--------------|----------------|--------------|---------------------------------------|--------------|----------------|--|
| Purchase Order                                                                                                                                                       | Project Name       | Project Number  | Project Name                                           | Project Number      | Project Name      | Project Number                                                                                                                                                                | Project Name | Project Number        | Project Name                                                                                                                                                                     | Project Number | Project Name | Project Number     | Project Name | Project Number | Project Name | Project Number                        | Project Name | Project Number |  |
| Work Order                                                                                                                                                           |                    |                 |                                                        |                     |                   |                                                                                                                                                                               |              |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| Company Name                                                                                                                                                         | Monaco Refining    | Bill To Company | Some                                                   |                     |                   |                                                                                                                                                                               |              |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| Send Report To                                                                                                                                                       | Jeffrey Byrd       | Invoice Attn.   |                                                        |                     |                   |                                                                                                                                                                               |              |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| Address                                                                                                                                                              |                    | Address         |                                                        |                     |                   |                                                                                                                                                                               |              |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| City/State/Zip                                                                                                                                                       |                    | City/State/Zip  |                                                        |                     |                   |                                                                                                                                                                               |              |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| Phone                                                                                                                                                                |                    | Phone           |                                                        |                     |                   |                                                                                                                                                                               |              |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| Fax                                                                                                                                                                  |                    | Fax             |                                                        |                     |                   |                                                                                                                                                                               |              |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| e-Mail Address                                                                                                                                                       |                    |                 |                                                        |                     |                   |                                                                                                                                                                               |              |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| No.                                                                                                                                                                  | Sample Description | Date            | Time                                                   | Matrix              | Pres. Key Numbers | # Bottles                                                                                                                                                                     | A            | B                     | C                                                                                                                                                                                | D              | E            | F                  | G            | H              | I            | J                                     | Hold         |                |  |
| 1                                                                                                                                                                    | KWB-3R             | 10/19/04        | 1015                                                   | L                   |                   | 8                                                                                                                                                                             | X            |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| 2                                                                                                                                                                    | KWB-9              |                 | 1040                                                   |                     |                   |                                                                                                                                                                               | X            |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| 3                                                                                                                                                                    | KWB-MW-28          |                 | 1100                                                   |                     |                   |                                                                                                                                                                               | X            |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| 4                                                                                                                                                                    | MW-48              |                 | 1145                                                   |                     |                   |                                                                                                                                                                               | X            |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| 5                                                                                                                                                                    | RW-3               |                 | 1300                                                   |                     |                   |                                                                                                                                                                               | X            |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| 6                                                                                                                                                                    | RW-9               |                 | 1315                                                   |                     |                   |                                                                                                                                                                               | X            |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| 7                                                                                                                                                                    | RW-10              |                 | 1345                                                   |                     |                   |                                                                                                                                                                               | X            |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| 8                                                                                                                                                                    | RW-16              |                 | 1415                                                   |                     |                   |                                                                                                                                                                               | X            |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| 9                                                                                                                                                                    | RW-17              |                 | 1445                                                   |                     |                   |                                                                                                                                                                               | X            |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| 10                                                                                                                                                                   |                    |                 |                                                        |                     |                   |                                                                                                                                                                               |              |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| Sampler(s): Please Print & Sign                                                                                                                                      |                    |                 | Shipment Method:                                       |                     |                   | Required Turnaround Time: (Check Box)                                                                                                                                         |              |                       | Results Due Date                                                                                                                                                                 |                |              |                    |              |                |              |                                       |              |                |  |
| Relinquished by: <i>JB</i>                                                                                                                                           |                    |                 | Fed Ex                                                 |                     |                   | <input type="checkbox"/> 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 3 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour |              |                       | <input type="checkbox"/> Other: _____                                                                                                                                            |                |              |                    |              |                |              |                                       |              |                |  |
| Relinquished by: <i>JB</i>                                                                                                                                           |                    |                 | Received by:                                           |                     |                   | Date: 10/19 Time: 1015                                                                                                                                                        |              |                       | Notes: 3 cooler                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |
| Relinquished by:                                                                                                                                                     |                    |                 | Received by (Laboratory):                              |                     |                   | Date: 10/20/04 Time: 0830                                                                                                                                                     |              |                       | QC Package: (Check Box Below)                                                                                                                                                    |                |              |                    |              |                |              |                                       |              |                |  |
| Logged by (Laboratory):                                                                                                                                              |                    |                 | Checked by (Laboratory):                               |                     |                   | Date: Time:                                                                                                                                                                   |              |                       | <input type="checkbox"/> Level II: Standard QC <input type="checkbox"/> TRRP LRC <input type="checkbox"/> Level IV: SW845 Methods/CLP like <input type="checkbox"/> Other: _____ |                |              |                    |              |                |              |                                       |              |                |  |
| Preservative Key: 1-HG 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub> 6-NaHSO <sub>3</sub> 7-Other 8-2°C |                    |                 | Note: Any changes must be made in writing once samples |                     |                   |                                                                                                                                                                               |              |                       |                                                                                                                                                                                  |                |              |                    |              |                |              |                                       |              |                |  |

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 10/20/2004 8:50:00 AM

Work Order Number 0410220

Received by: RSZ

Checklist completed by

Signature

Date

Reviewed by

Initials

Date

Matrix:

Carrier name FedEx

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present: ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

Temperature(s)/Thermometer(s):

3.9,2.2,4.2C

002

Water - VOA vials have zero headspace?

Yes ☒

No ☐

No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

N/A ☐

Adjusted? \_\_\_\_\_

Checked by RSZ

Login Notes: No Trip Blank in coolers.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_

Date contacted: \_\_\_\_\_

Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_

Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_



**e-Lab Analytical, Inc.**

10450 Standliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

November 02, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: Annual

Work Order : **0410185**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 6 samples on 10/16/2004 8:40:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 46.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

**e-Lab Analytical, Inc.**

**Date:** November 02, 2004

**CLIENT:** Navajo Refining Company  
**Project:** Annual  
**Work Order:** 0410185

**Work Order Sample Summary**

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0410185-01           | KWB-1A                  | Water         |                   | 10/15/2004 09:10       | 10/16/2004 08:40     | <input type="checkbox"/> |
| 0410185-02           | KWB-1C                  | Water         |                   | 10/15/2004 10:00       | 10/16/2004 08:40     | <input type="checkbox"/> |
| 0410185-03           | KWB-10                  | Water         |                   | 10/15/2004 10:15       | 10/16/2004 08:40     | <input type="checkbox"/> |
| 0410185-04           | MW-58                   | Water         |                   | 10/15/2004 10:30       | 10/16/2004 08:40     | <input type="checkbox"/> |
| 0410185-05           | MW-57                   | Water         |                   | 10/15/2004 14:30       | 10/16/2004 08:40     | <input type="checkbox"/> |
| 0410185-06           | Trip Blank              | Water         |                   | 10/15/2004             | 10/16/2004 08:40     | <input type="checkbox"/> |



**e-Lab Analytical, Inc.****Date:** *November 02, 2004***CLIENT:** Navajo Refining Company**Project:** Annual**Work Order:** 0410185**Case Narrative**

Batch 10759 Seivolatiles MS/MSD was an unrelated sample.

Batch R23912 Volatiles MS/MSD was an unrelated sample.

# e-Lab Analytical, Inc.

Date: November 02, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410185  
Project: Annual  
Lab ID: 0410185-01

Client Sample ID: KWB-1A  
Collection Date: 10/15/2004 9:10:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor       | Date Analyzed          |
|---------------------------------------|---------|---------------|------|-------|-----------------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                       |                        |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: 10/26/2004 | Analyst: JCJ           |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                     | 10/26/2004 6:23:46 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                       |                        |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: 10/18/2004 | Analyst: ALR           |
| Aluminum                              | 0.0102  | 0.0100        |      | mg/L  | 1                     | 10/19/2004 6:50:00 PM  |
| Arsenic                               | 0.00620 | 0.00500       |      | mg/L  | 1                     | 10/18/2004 11:45:00 PM |
| Barium                                | 0.00871 | 0.00500       |      | mg/L  | 1                     | 10/19/2004 6:50:00 PM  |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                     | 10/18/2004 11:45:00 PM |
| Boron                                 | 0.931   | 0.200         |      | mg/L  | 10                    | 10/18/2004 10:32:00 PM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                     | 10/19/2004 6:50:00 PM  |
| Calcium                               | 468     | 25.0          |      | mg/L  | 50                    | 10/18/2004 9:55:00 PM  |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1                     | 10/19/2004 6:50:00 PM  |
| Cobalt                                | 0.00389 | 0.00200       |      | mg/L  | 1                     | 10/18/2004 11:45:00 PM |
| Copper                                | 0.00725 | 0.00200       |      | mg/L  | 1                     | 10/18/2004 11:45:00 PM |
| Iron                                  | 2.08    | 0.200         |      | mg/L  | 1                     | 10/18/2004 11:45:00 PM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                     | 10/19/2004 6:50:00 PM  |
| Magnesium                             | 382     | 10.0          |      | mg/L  | 50                    | 10/18/2004 9:55:00 PM  |
| Manganese                             | 0.261   | 0.0500        |      | mg/L  | 10                    | 10/18/2004 10:32:00 PM |
| Molybdenum                            | 0.0173  | 0.00500       |      | mg/L  | 1                     | 10/18/2004 11:45:00 PM |
| Nickel                                | 0.0195  | 0.00500       |      | mg/L  | 1                     | 10/18/2004 11:45:00 PM |
| Potassium                             | 1.28    | 0.200         |      | mg/L  | 1                     | 10/19/2004 6:50:00 PM  |
| Selenium                              | 0.00504 | 0.00500       |      | mg/L  | 1                     | 10/18/2004 11:45:00 PM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                     | 10/19/2004 6:50:00 PM  |
| Sodium                                | 267     | 10.0          |      | mg/L  | 50                    | 10/18/2004 9:55:00 PM  |
| Vanadium                              | 0.0201  | 0.00500       |      | mg/L  | 1                     | 10/18/2004 11:45:00 PM |
| Zinc                                  | 0.0184  | 0.00500       |      | mg/L  | 1                     | 10/18/2004 11:45:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                       |                        |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: 10/18/2004 | Analyst: HV            |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                     | 10/30/2004 11:25:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual  
**Lab ID:** 0410185-01

**Client Sample ID:** KWB-1A  
**Collection Date:** 10/15/2004 9:10:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report<br>Limit | Qual | Units | Dilution<br>Factor | Date Analyzed          |
|----------------------------|--------|-----------------|------|-------|--------------------|------------------------|
| Aniline                    | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Anthracene                 | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Benz(a)anthracene          | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Benzidine                  | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Hexachloroethane           | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Isophorone                 | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| N-Nitrosodi-n-propylamine  | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| N-Nitrosodimethylamine     | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| N-Nitrosodiphenylamine     | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Naphthalene                | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Nitrobenzene               | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Pentachlorophenol          | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Phenanthrene               | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Phenol                     | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Pyrene                     | ND     | 10              |      | µg/L  | 1                  | 10/30/2004 11:25:00 AM |
| Surr: 2,4,6-Tribromophenol | 106    | 39-153          |      | %REC  | 1                  | 10/30/2004 11:25:00 AM |
| Surr: 2-Fluorobiphenyl     | 96.5   | 40-147          |      | %REC  | 1                  | 10/30/2004 11:25:00 AM |
| Surr: 2-Fluorophenol       | 46.0   | 21-110          |      | %REC  | 1                  | 10/30/2004 11:25:00 AM |
| Surr: 4-Terphenyl-d14      | 107    | 39-141          |      | %REC  | 1                  | 10/30/2004 11:25:00 AM |
| Surr: Nitrobenzene-d5      | 94.7   | 37-140          |      | %REC  | 1                  | 10/30/2004 11:25:00 AM |
| Surr: Phenol-d6            | 29.5   | 11-100          |      | %REC  | 1                  | 10/30/2004 11:25:00 AM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                       |
|---------------------------|----|-----|--|------|---|-----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 10/18/2004 8:43:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 10/18/2004 8:43:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual  
**Lab ID:** 0410185-01

**Client Sample ID:** KWB-1A  
**Collection Date:** 10/15/2004 9:10:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed          |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 10/18/2004 8:43:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 82.5   | 71-126        |      | %REC                | 1               | 10/18/2004 8:43:00 PM  |
| Surr: 4-Bromofluorobenzene          | 91.2   | 74-125        |      | %REC                | 1               | 10/18/2004 8:43:00 PM  |
| Surr: Dibromofluoromethane          | 83.8   | 73-126        |      | %REC                | 1               | 10/18/2004 8:43:00 PM  |
| Surr: Toluene-d8                    | 87.0   | 75-125        |      | %REC                | 1               | 10/18/2004 8:43:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>LMD</b> |                 |                        |
| Chloride                            | 395    | 5.00          |      | mg/L                | 10              | 10/17/2004 12:37:00 PM |
| Fluoride                            | 0.890  | 0.100         |      | mg/L                | 1               | 10/17/2004 10:14:00 AM |
| Sulfate                             | 2,480  | 100           |      | mg/L                | 100             | 10/18/2004 9:39:00 PM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 10/17/2004 10:14:00 AM |
| Surr: Dichloroacetic acid (surr)    | 108    | 80-120        |      | %REC                | 1               | 10/17/2004 10:14:00 AM |
| Surr: Dichloroacetic acid (surr)    | 111    | 80-120        |      | %REC                | 10              | 10/17/2004 12:37:00 PM |
| Surr: Dichloroacetic acid (surr)    | 107    | 80-120        |      | %REC                | 100             | 10/18/2004 9:39:00 PM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>HDO</b> |                 |                        |
| Alkalinity, Bicarbonate (As CaCO3)  | 400    | 5.00          |      | mg/L                | 1               | 10/26/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/26/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/26/2004             |
| Alkalinity, Total (As CaCO3)        | 400    | 5.00          |      | mg/L                | 1               | 10/26/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                        |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 10/22/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual  
**Lab ID:** 0410185-02

**Client Sample ID:** KWB-1C  
**Collection Date:** 10/15/2004 10:00:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|---------------------------------------|---------|--------------|------|-------|-----------------|------------------------|
| <hr/>                                 |         |              |      |       |                 |                        |
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                        |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 10/26/2004 6:37:33 PM  |
|                                       |         |              |      |       |                 |                        |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                        |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1               | 10/19/2004 6:55:00 PM  |
| Arsenic                               | 0.00508 | 0.00500      |      | mg/L  | 1               | 10/18/2004 11:50:00 PM |
| Barium                                | 0.00926 | 0.00500      |      | mg/L  | 1               | 10/19/2004 6:55:00 PM  |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 10/18/2004 11:50:00 PM |
| Boron                                 | 0.884   | 0.200        |      | mg/L  | 10              | 10/18/2004 10:36:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 10/19/2004 6:55:00 PM  |
| Calcium                               | 438     | 25.0         |      | mg/L  | 50              | 10/18/2004 10:00:00 PM |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 10/19/2004 6:55:00 PM  |
| Cobalt                                | 0.00469 | 0.00200      |      | mg/L  | 1               | 10/18/2004 11:50:00 PM |
| Copper                                | 0.00585 | 0.00200      |      | mg/L  | 1               | 10/18/2004 11:50:00 PM |
| Iron                                  | 1.97    | 0.200        |      | mg/L  | 1               | 10/18/2004 11:50:00 PM |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 10/19/2004 6:55:00 PM  |
| Magnesium                             | 362     | 10.0         |      | mg/L  | 50              | 10/18/2004 10:00:00 PM |
| Manganese                             | 0.330   | 0.0500       |      | mg/L  | 10              | 10/18/2004 10:36:00 PM |
| Molybdenum                            | 0.0160  | 0.00500      |      | mg/L  | 1               | 10/18/2004 11:50:00 PM |
| Nickel                                | 0.0227  | 0.00500      |      | mg/L  | 1               | 10/18/2004 11:50:00 PM |
| Potassium                             | 1.24    | 0.200        |      | mg/L  | 1               | 10/19/2004 6:55:00 PM  |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 10/18/2004 11:50:00 PM |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 10/19/2004 6:55:00 PM  |
| Sodium                                | 258     | 10.0         |      | mg/L  | 50              | 10/18/2004 10:00:00 PM |
| Vanadium                              | 0.0317  | 0.00500      |      | mg/L  | 1               | 10/18/2004 11:50:00 PM |
| Zinc                                  | 0.0167  | 0.00500      |      | mg/L  | 1               | 10/18/2004 11:50:00 PM |
| <hr/>                                 |         |              |      |       |                 |                        |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                        |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 10/30/2004 11:50:00 AM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**
**Date:** November 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual  
**Lab ID:** 0410185-02

**Client Sample ID:** KWB-1C  
**Collection Date:** 10/15/2004 10:00:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed          |
|----------------------------|--------|---------------|------|-------|--------------------|------------------------|
| Aniline                    | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Anthracene                 | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Benz(a)anthracene          | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Benzidine                  | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Hexachloroethane           | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Isophorone                 | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Naphthalene                | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Nitrobenzene               | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Pentachlorophenol          | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Phenanthrene               | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Phenol                     | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Pyrene                     | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 11:50:00 AM |
| Surr: 2,4,6-Tribromophenol | 104    | 39-153        |      | %REC  | 1                  | 10/30/2004 11:50:00 AM |
| Surr: 2-Fluorobiphenyl     | 96.2   | 40-147        |      | %REC  | 1                  | 10/30/2004 11:50:00 AM |
| Surr: 2-Fluorophenol       | 45.6   | 21-110        |      | %REC  | 1                  | 10/30/2004 11:50:00 AM |
| Surr: 4-Terphenyl-d14      | 104    | 39-141        |      | %REC  | 1                  | 10/30/2004 11:50:00 AM |
| Surr: Nitrobenzene-d5      | 94.4   | 37-140        |      | %REC  | 1                  | 10/30/2004 11:50:00 AM |
| Surr: Phenol-d6            | 29.4   | 11-100        |      | %REC  | 1                  | 10/30/2004 11:50:00 AM |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | <b>Analyst: PC</b> |                        |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| Acetone                    | ND     | 10            |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| Benzene                    | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 9:11:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual  
**Lab ID:** 0410185-02

**Client Sample ID:** KWB-1C  
**Collection Date:** 10/15/2004 10:00:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed          |
|-------------------------------------|--------|---------------|------|-------|---------------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L  | 1                   | 10/18/2004 9:11:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 82.5   | 71-126        |      | %REC  | 1                   | 10/18/2004 9:11:00 PM  |
| Surr: 4-Bromofluorobenzene          | 100    | 74-125        |      | %REC  | 1                   | 10/18/2004 9:11:00 PM  |
| Surr: Dibromofluoromethane          | 82.8   | 73-126        |      | %REC  | 1                   | 10/18/2004 9:11:00 PM  |
| Surr: Toluene-d8                    | 90.1   | 75-125        |      | %REC  | 1                   | 10/18/2004 9:11:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>LMD</b> |                        |
| Chloride                            | 321    | 5.00          |      | mg/L  | 10                  | 10/17/2004 1:34:00 PM  |
| Fluoride                            | 1.14   | 0.100         |      | mg/L  | 1                   | 10/17/2004 10:43:00 AM |
| Sulfate                             | 2,360  | 100           |      | mg/L  | 100                 | 10/18/2004 11:05:00 PM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1                   | 10/17/2004 10:43:00 AM |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC  | 1                   | 10/17/2004 10:43:00 AM |
| Surr: Dichloroacetic acid (surr)    | 110    | 80-120        |      | %REC  | 10                  | 10/17/2004 1:34:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 111    | 80-120        |      | %REC  | 100                 | 10/18/2004 11:05:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>HDO</b> |                        |
| Alkalinity, Bicarbonate (As CaCO3)  | 440    | 5.00          |      | mg/L  | 1                   | 10/26/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 10/26/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 10/26/2004             |
| Alkalinity, Total (As CaCO3)        | 440    | 5.00          |      | mg/L  | 1                   | 10/26/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: <b>LMD</b> |                        |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1                   | 10/22/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual  
**Lab ID:** 0410185-03

**Client Sample ID:** KWB-10  
**Collection Date:** 10/15/2004 10:15:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                                               |
|---------------------------------------|---------|---------------|------|-------|-----------------|-------------------------------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                                             |
|                                       |         | <b>SW7470</b> |      |       |                 |                                                             |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | Prep Date: 10/26/2004 Analyst: JCJ<br>10/26/2004 6:48:14 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                                             |
|                                       |         | <b>SW6020</b> |      |       |                 |                                                             |
| Aluminum                              | 0.0686  | 0.0100        |      | mg/L  | 1               | Prep Date: 10/18/2004 Analyst: ALR<br>10/19/2004 7:00:00 PM |
| Arsenic                               | 0.0399  | 0.00500       |      | mg/L  | 1               | 10/18/2004 11:55:00 PM                                      |
| Barium                                | 0.708   | 0.0500        |      | mg/L  | 10              | 10/18/2004 10:41:00 PM                                      |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1               | 10/18/2004 11:55:00 PM                                      |
| Boron                                 | 0.319   | 0.0200        |      | mg/L  | 1               | 10/18/2004 11:55:00 PM                                      |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1               | 10/19/2004 7:00:00 PM                                       |
| Calcium                               | 136     | 5.00          |      | mg/L  | 10              | 10/18/2004 10:41:00 PM                                      |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1               | 10/19/2004 7:00:00 PM                                       |
| Cobalt                                | 0.00477 | 0.00200       |      | mg/L  | 1               | 10/18/2004 11:55:00 PM                                      |
| Copper                                | ND      | 0.00200       |      | mg/L  | 1               | 10/18/2004 11:55:00 PM                                      |
| Iron                                  | 1.27    | 0.200         |      | mg/L  | 1               | 10/18/2004 11:55:00 PM                                      |
| Lead                                  | 0.0739  | 0.00500       |      | mg/L  | 1               | 10/19/2004 7:00:00 PM                                       |
| Magnesium                             | 91.1    | 2.00          |      | mg/L  | 10              | 10/18/2004 10:41:00 PM                                      |
| Manganese                             | 0.464   | 0.0500        |      | mg/L  | 10              | 10/18/2004 10:41:00 PM                                      |
| Molybdenum                            | ND      | 0.00500       |      | mg/L  | 1               | 10/18/2004 11:55:00 PM                                      |
| Nickel                                | 0.0136  | 0.00500       |      | mg/L  | 1               | 10/18/2004 11:55:00 PM                                      |
| Potassium                             | 0.307   | 0.200         |      | mg/L  | 1               | 10/19/2004 7:00:00 PM                                       |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1               | 10/18/2004 11:55:00 PM                                      |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1               | 10/19/2004 7:00:00 PM                                       |
| Sodium                                | 117     | 2.00          |      | mg/L  | 10              | 10/18/2004 10:41:00 PM                                      |
| Vanadium                              | ND      | 0.00500       |      | mg/L  | 1               | 10/18/2004 11:55:00 PM                                      |
| Zinc                                  | ND      | 0.00500       |      | mg/L  | 1               | 10/18/2004 11:55:00 PM                                      |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                                             |
|                                       |         | <b>SW8270</b> |      |       |                 |                                                             |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1               | Prep Date: 10/21/2004 Analyst: HV<br>10/30/2004 12:15:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:15:00 PM                                      |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:15:00 PM                                      |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:15:00 PM                                      |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:15:00 PM                                      |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:15:00 PM                                      |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:15:00 PM                                      |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:15:00 PM                                      |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:15:00 PM                                      |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:15:00 PM                                      |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:15:00 PM                                      |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:15:00 PM                                      |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:15:00 PM                                      |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: November 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual  
**Lab ID:** 0410185-03

**Client Sample ID:** KWB-10  
**Collection Date:** 10/15/2004 10:15:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|----------------------------|--------|--------------|------|-------|-----------------|------------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:15:00 PM |
| Surr: 2,4,6-Tribromophenol | 96.4   | 39-153       |      | %REC  | 1               | 10/30/2004 12:15:00 PM |
| Surr: 2-Fluorobiphenyl     | 82.3   | 40-147       |      | %REC  | 1               | 10/30/2004 12:15:00 PM |
| Surr: 2-Fluorophenol       | 44.7   | 21-110       |      | %REC  | 1               | 10/30/2004 12:15:00 PM |
| Surr: 4-Terphenyl-d14      | 88.5   | 39-141       |      | %REC  | 1               | 10/30/2004 12:15:00 PM |
| Surr: Nitrobenzene-d5      | 75.2   | 37-140       |      | %REC  | 1               | 10/30/2004 12:15:00 PM |
| Surr: Phenol-d6            | 29.0   | 11-100       |      | %REC  | 1               | 10/30/2004 12:15:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                       |
|---------------------------|----|-----|--|------|---|-----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 10/18/2004 9:38:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 10/18/2004 9:38:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 02, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410185  
Project: Annual  
Lab ID: 0410185-03

Client Sample ID: KWB-10  
Collection Date: 10/15/2004 10:15:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed          |
|-------------------------------------|--------|---------------|------|-------|-----------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L  | 1               | 10/18/2004 9:38:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 87.3   | 71-126        |      | %REC  | 1               | 10/18/2004 9:38:00 PM  |
| Surr: 4-Bromofluorobenzene          | 96.1   | 74-125        |      | %REC  | 1               | 10/18/2004 9:38:00 PM  |
| Surr: Dibromofluoromethane          | 81.3   | 73-126        |      | %REC  | 1               | 10/18/2004 9:38:00 PM  |
| Surr: Toluene-d8                    | 89.3   | 75-125        |      | %REC  | 1               | 10/18/2004 9:38:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       |                 | Analyst: LMD           |
| Chloride                            | 151    | 5.00          |      | mg/L  | 10              | 10/17/2004 2:31:00 PM  |
| Fluoride                            | 0.970  | 0.100         |      | mg/L  | 1               | 10/17/2004 11:11:00 AM |
| Sulfate                             | 6.12   | 1.00          |      | mg/L  | 1               | 10/17/2004 11:11:00 AM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1               | 10/17/2004 11:11:00 AM |
| Surr: Dichloroacetic acid (surr)    | 101    | 80-120        |      | %REC  | 1               | 10/17/2004 11:11:00 AM |
| Surr: Dichloroacetic acid (surr)    | 113    | 80-120        |      | %REC  | 10              | 10/17/2004 2:31:00 PM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       |                 | Analyst: HDO           |
| Alkalinity, Bicarbonate (As CaCO3)  | 770    | 5.00          |      | mg/L  | 1               | 10/26/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1               | 10/26/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1               | 10/26/2004             |
| Alkalinity, Total (As CaCO3)        | 770    | 5.00          |      | mg/L  | 1               | 10/26/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       |                 | Analyst: LMD           |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1               | 10/22/2004             |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual  
**Lab ID:** 0410185-04

**Client Sample ID:** MW-58  
**Collection Date:** 10/15/2004 10:30:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                                                |
|---------------------------------------|---------|---------------|------|-------|-----------------|--------------------------------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                                              |
|                                       |         | <b>SW7470</b> |      |       |                 |                                                              |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | Prep Date: 10/26/2004 Analyst: JCJ<br>10/26/2004 6:49:46 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                                              |
|                                       |         | <b>SW6020</b> |      |       |                 |                                                              |
| Aluminum                              | 0.399   | 0.100         |      | mg/L  | 10              | Prep Date: 10/18/2004 Analyst: ALR<br>10/18/2004 10:46:00 PM |
| Arsenic                               | 0.0681  | 0.00500       |      | mg/L  | 1               | 10/19/2004                                                   |
| Barium                                | 0.537   | 0.0500        |      | mg/L  | 10              | 10/18/2004 10:46:00 PM                                       |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1               | 10/19/2004                                                   |
| Boron                                 | 0.403   | 0.0200        |      | mg/L  | 1               | 10/19/2004                                                   |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1               | 10/19/2004 7:05:00 PM                                        |
| Calcium                               | 218     | 5.00          |      | mg/L  | 10              | 10/18/2004 10:46:00 PM                                       |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1               | 10/19/2004 7:05:00 PM                                        |
| Cobalt                                | 0.00408 | 0.00200       |      | mg/L  | 1               | 10/19/2004                                                   |
| Copper                                | 0.00253 | 0.00200       |      | mg/L  | 1               | 10/19/2004                                                   |
| Iron                                  | 6.94    | 0.200         |      | mg/L  | 1               | 10/19/2004                                                   |
| Lead                                  | 0.00517 | 0.00500       |      | mg/L  | 1               | 10/19/2004 7:05:00 PM                                        |
| Magnesium                             | 146     | 2.00          |      | mg/L  | 10              | 10/18/2004 10:46:00 PM                                       |
| Manganese                             | 0.765   | 0.0500        |      | mg/L  | 10              | 10/18/2004 10:46:00 PM                                       |
| Molybdenum                            | ND      | 0.00500       |      | mg/L  | 1               | 10/19/2004                                                   |
| Nickel                                | 0.0113  | 0.00500       |      | mg/L  | 1               | 10/19/2004                                                   |
| Potassium                             | 0.341   | 0.200         |      | mg/L  | 1               | 10/19/2004 7:05:00 PM                                        |
| Selenium                              | 0.00653 | 0.00500       |      | mg/L  | 1               | 10/19/2004                                                   |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1               | 10/19/2004 7:05:00 PM                                        |
| Sodium                                | 87.3    | 2.00          |      | mg/L  | 10              | 10/18/2004 10:46:00 PM                                       |
| Vanadium                              | ND      | 0.00500       |      | mg/L  | 1               | 10/19/2004                                                   |
| Zinc                                  | 0.00768 | 0.00500       |      | mg/L  | 1               | 10/19/2004                                                   |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                                              |
|                                       |         | <b>SW8270</b> |      |       |                 |                                                              |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1               | Prep Date: 10/21/2004 Analyst: HV<br>10/30/2004 12:40:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:40:00 PM                                       |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:40:00 PM                                       |
| 2-Methylnaphthalene                   | 33      | 10            |      | µg/L  | 1               | 10/30/2004 12:40:00 PM                                       |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:40:00 PM                                       |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:40:00 PM                                       |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:40:00 PM                                       |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:40:00 PM                                       |
| 4-Methylphenol                        | 24      | 10            |      | µg/L  | 1               | 10/30/2004 12:40:00 PM                                       |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:40:00 PM                                       |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:40:00 PM                                       |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:40:00 PM                                       |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1               | 10/30/2004 12:40:00 PM                                       |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual  
**Lab ID:** 0410185-04

**Client Sample ID:** MW-58  
**Collection Date:** 10/15/2004 10:30:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|----------------------------|--------|--------------|------|-------|-----------------|------------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Naphthalene                | 89     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Phenol                     | 14     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 10/30/2004 12:40:00 PM |
| Surr: 2,4,6-Tribromophenol | 106    | 39-153       |      | %REC  | 1               | 10/30/2004 12:40:00 PM |
| Surr: 2-Fluorobiphenyl     | 92.3   | 40-147       |      | %REC  | 1               | 10/30/2004 12:40:00 PM |
| Surr: 2-Fluorophenol       | 40.3   | 21-110       |      | %REC  | 1               | 10/30/2004 12:40:00 PM |
| Surr: 4-Terphenyl-d14      | 97.0   | 39-141       |      | %REC  | 1               | 10/30/2004 12:40:00 PM |
| Surr: Nitrobenzene-d5      | 85.7   | 37-140       |      | %REC  | 1               | 10/30/2004 12:40:00 PM |
| Surr: Phenol-d6            | 28.4   | 11-100       |      | %REC  | 1               | 10/30/2004 12:40:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |       |     |  |      |    |                        |
|---------------------------|-------|-----|--|------|----|------------------------|
| 1,1,1-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| 1,1,2,2-Tetrachloroethane | ND    | 5.0 |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| 1,1,2-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| 1,1-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| 1,1-Dichloroethene        | ND    | 5.0 |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| 1,2-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| 2-Butanone                | ND    | 10  |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| 2-Chloroethyl vinyl ether | ND    | 10  |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| 2-Hexanone                | 14    | 10  |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| 4-Methyl-2-pentanone      | ND    | 10  |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| Acetone                   | ND    | 10  |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| Benzene                   | 4,800 | 120 |  | µg/L | 25 | 10/19/2004 3:44:00 PM  |
| Bromodichloromethane      | ND    | 5.0 |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| Bromoform                 | ND    | 5.0 |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| Bromomethane              | ND    | 5.0 |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| Carbon disulfide          | ND    | 10  |  | µg/L | 1  | 10/18/2004 10:05:00 PM |
| Carbon tetrachloride      | ND    | 5.0 |  | µg/L | 1  | 10/18/2004 10:05:00 PM |

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**e-Lab Analytical, Inc.**

Date: November 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual  
**Lab ID:** 0410185-04

**Client Sample ID:** MW-58  
**Collection Date:** 10/15/2004 10:30:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed          |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| Ethylbenzene                        | 610    | 120           |      | µg/L                | 25              | 10/19/2004 3:44:00 PM  |
| m,p-Xylene                          | 530    | 250           |      | µg/L                | 25              | 10/19/2004 3:44:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| Toluene                             | 490    | 120           |      | µg/L                | 25              | 10/19/2004 3:44:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 10/18/2004 10:05:00 PM |
| Xylenes, Total                      | 930    | 380           |      | µg/L                | 25              | 10/19/2004 3:44:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 81.5   | 71-126        |      | %REC                | 1               | 10/18/2004 10:05:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 83.6   | 71-126        |      | %REC                | 25              | 10/19/2004 3:44:00 PM  |
| Surr: 4-Bromofluorobenzene          | 96.9   | 74-125        |      | %REC                | 1               | 10/18/2004 10:05:00 PM |
| Surr: 4-Bromofluorobenzene          | 91.1   | 74-125        |      | %REC                | 25              | 10/19/2004 3:44:00 PM  |
| Surr: Dibromofluoromethane          | 87.0   | 73-126        |      | %REC                | 25              | 10/19/2004 3:44:00 PM  |
| Surr: Dibromofluoromethane          | 78.3   | 73-126        |      | %REC                | 1               | 10/18/2004 10:05:00 PM |
| Surr: Toluene-d8                    | 93.9   | 75-125        |      | %REC                | 1               | 10/18/2004 10:05:00 PM |
| Surr: Toluene-d8                    | 90.5   | 75-125        |      | %REC                | 25              | 10/19/2004 3:44:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>LMD</b> |                 |                        |
| Chloride                            | 366    | 5.00          |      | mg/L                | 10              | 10/17/2004 5:22:00 PM  |
| Fluoride                            | 1.11   | 0.100         |      | mg/L                | 1               | 10/17/2004 11:40:00 AM |
| Sulfate                             | 146    | 10.0          |      | mg/L                | 10              | 10/17/2004 5:22:00 PM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 10/17/2004 11:40:00 AM |
| Surr: Dichloroacetic acid (surr)    | 103    | 80-120        |      | %REC                | 1               | 10/17/2004 11:40:00 AM |
| Surr: Dichloroacetic acid (surr)    | 108    | 80-120        |      | %REC                | 10              | 10/17/2004 5:22:00 PM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>HDO</b> |                 |                        |
| Alkalinity, Bicarbonate (As CaCO3)  | 740    | 5.00          |      | mg/L                | 1               | 10/26/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/26/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/26/2004             |
| Alkalinity, Total (As CaCO3)        | 740    | 5.00          |      | mg/L                | 1               | 10/26/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                        |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 10/22/2004             |

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**e-Lab Analytical, Inc.**

Date: November 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual  
**Lab ID:** 0410185-05

**Client Sample ID:** MW-57  
**Collection Date:** 10/15/2004 2:30:00 PM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor              | Date Analyzed          |
|---------------------------------------|---------|---------------|------|-------|------------------------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                              |                        |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: <b>10/26/2004</b> | Analyst: <b>JCJ</b>    |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                            | 10/26/2004 6:54:25 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                              |                        |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: <b>10/18/2004</b> | Analyst: <b>ALR</b>    |
| Aluminum                              | 16.2    | 1.00          |      | mg/L  | 100                          | 10/20/2004 5:25:00 PM  |
| Arsenic                               | 0.0306  | 0.00500       |      | mg/L  | 1                            | 10/19/2004 12:04:00 AM |
| Barium                                | 0.440   | 0.0500        |      | mg/L  | 10                           | 10/18/2004 10:50:00 PM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                            | 10/19/2004 12:04:00 AM |
| Boron                                 | 0.452   | 0.0200        |      | mg/L  | 1                            | 10/19/2004 12:04:00 AM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                            | 10/19/2004 7:09:00 PM  |
| Calcium                               | 372     | 25.0          |      | mg/L  | 50                           | 10/18/2004 10:27:00 PM |
| Chromium                              | 0.0131  | 0.00200       |      | mg/L  | 1                            | 10/19/2004 7:09:00 PM  |
| Cobalt                                | 0.00625 | 0.00200       |      | mg/L  | 1                            | 10/19/2004 12:04:00 AM |
| Copper                                | 0.00821 | 0.00200       |      | mg/L  | 1                            | 10/19/2004 12:04:00 AM |
| Iron                                  | 12.9    | 0.200         |      | mg/L  | 1                            | 10/19/2004 12:04:00 AM |
| Lead                                  | 0.0110  | 0.00500       |      | mg/L  | 1                            | 10/19/2004 7:09:00 PM  |
| Magnesium                             | 98.6    | 2.00          |      | mg/L  | 10                           | 10/18/2004 10:50:00 PM |
| Manganese                             | 1.18    | 0.0500        |      | mg/L  | 10                           | 10/18/2004 10:50:00 PM |
| Molybdenum                            | ND      | 0.00500       |      | mg/L  | 1                            | 10/19/2004 12:04:00 AM |
| Nickel                                | 0.0192  | 0.00500       |      | mg/L  | 1                            | 10/19/2004 12:04:00 AM |
| Potassium                             | 3.54    | 0.200         |      | mg/L  | 1                            | 10/19/2004 7:09:00 PM  |
| Selenium                              | 0.00517 | 0.00500       |      | mg/L  | 1                            | 10/19/2004 12:04:00 AM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                            | 10/19/2004 7:09:00 PM  |
| Sodium                                | 101     | 2.00          |      | mg/L  | 10                           | 10/18/2004 10:50:00 PM |
| Vanadium                              | 0.0218  | 0.00500       |      | mg/L  | 1                            | 10/19/2004 12:04:00 AM |
| Zinc                                  | 0.0489  | 0.00500       |      | mg/L  | 1                            | 10/19/2004 12:04:00 AM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                              |                        |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: <b>10/21/2004</b> | Analyst: <b>HV</b>     |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                            | 10/30/2004 1:06:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
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**e-Lab Analytical, Inc.**

Date: November 02, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410185  
Project: Annual  
Lab ID: 0410185-05

Client Sample ID: MW-57  
Collection Date: 10/15/2004 2:30:00 PM  
Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed          |
|----------------------------|--------|---------------|------|-------|--------------------|------------------------|
| Aniline                    | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Anthracene                 | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Benz(a)anthracene          | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Benzidine                  | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Hexachloroethane           | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Isophorone                 | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Naphthalene                | 21     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Nitrobenzene               | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Pentachlorophenol          | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Phenanthrene               | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Phenol                     | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Pyrene                     | ND     | 10            |      | µg/L  | 1                  | 10/30/2004 1:06:00 PM  |
| Surr: 2,4,6-Tribromophenol | 105    | 39-153        |      | %REC  | 1                  | 10/30/2004 1:06:00 PM  |
| Surr: 2-Fluorobiphenyl     | 91.9   | 40-147        |      | %REC  | 1                  | 10/30/2004 1:06:00 PM  |
| Surr: 2-Fluorophenol       | 45.7   | 21-110        |      | %REC  | 1                  | 10/30/2004 1:06:00 PM  |
| Surr: 4-Terphenyl-d14      | 84.6   | 39-141        |      | %REC  | 1                  | 10/30/2004 1:06:00 PM  |
| Surr: Nitrobenzene-d5      | 86.3   | 37-140        |      | %REC  | 1                  | 10/30/2004 1:06:00 PM  |
| Surr: Phenol-d6            | 29.1   | 11-100        |      | %REC  | 1                  | 10/30/2004 1:06:00 PM  |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | Analyst: <b>PC</b> |                        |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| Acetone                    | ND     | 10            |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| Benzene                    | 100    | 5.0           |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L  | 1                  | 10/18/2004 10:33:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual  
**Lab ID:** 0410185-05

**Client Sample ID:** MW-57  
**Collection Date:** 10/15/2004 2:30:00 PM  
**Matrix:** WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|-----------------------------|--------|--------------|------|-------|-----------------|------------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Ethylbenzene                | 160    | 5.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| m,p-Xylene                  | 26     | 10           |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Xylenes, Total              | 29     | 15           |      | µg/L  | 1               | 10/18/2004 10:33:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 81.0   | 71-126       |      | %REC  | 1               | 10/18/2004 10:33:00 PM |
| Surr: 4-Bromofluorobenzene  | 97.2   | 74-125       |      | %REC  | 1               | 10/18/2004 10:33:00 PM |
| Surr: Dibromofluoromethane  | 80.8   | 73-126       |      | %REC  | 1               | 10/18/2004 10:33:00 PM |
| Surr: Toluene-d8            | 90.5   | 75-125       |      | %REC  | 1               | 10/18/2004 10:33:00 PM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **LMD**

|                                  |       |        |  |      |    |                        |
|----------------------------------|-------|--------|--|------|----|------------------------|
| Chloride                         | 103   | 5.00   |  | mg/L | 10 | 10/17/2004 6:19:00 PM  |
| Fluoride                         | 0.350 | 0.100  |  | mg/L | 1  | 10/17/2004 12:08:00 PM |
| Sulfate                          | 219   | 10.0   |  | mg/L | 10 | 10/17/2004 6:19:00 PM  |
| Nitrate/Nitrite (as N)           | ND    | 0.100  |  | mg/L | 1  | 10/17/2004 12:08:00 PM |
| Surr: Dichloroacetic acid (surr) | 106   | 80-120 |  | %REC | 1  | 10/17/2004 12:08:00 PM |
| Surr: Dichloroacetic acid (surr) | 111   | 80-120 |  | %REC | 10 | 10/17/2004 6:19:00 PM  |

**ALKALINITY****E310.1**Analyst: **HDO**

|                                    |     |      |  |      |   |            |
|------------------------------------|-----|------|--|------|---|------------|
| Alkalinity, Bicarbonate (As CaCO3) | 690 | 5.00 |  | mg/L | 1 | 10/26/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 10/26/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 10/26/2004 |
| Alkalinity, Total (As CaCO3)       | 690 | 5.00 |  | mg/L | 1 | 10/26/2004 |

**CYANIDE, TOTAL****E335.3**Analyst: **LMD**

|         |    |        |  |      |   |            |
|---------|----|--------|--|------|---|------------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 10/22/2004 |
|---------|----|--------|--|------|---|------------|

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



## e-Lab Analytical, Inc.

Date: Nov 02 2004

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10745 InstrumentID: ICP4500

MBLK Sample ID: MBLKW4-101804 Test Code: SW6020 Units: mg/L Analysis Date: 10/18/04 21:46  
 Client ID: Run ID: ICP4500\_041018A SeqNo: 556770 Prep Date: 10/18/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | ND      | 0.010  |         |               |      |               |               |      |           |      |
| Arsenic    | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Barium     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Beryllium  | ND      | 0.0020 |         |               |      |               |               |      |           |      |
| Boron      | ND      | 0.020  |         |               |      |               |               |      |           |      |
| Cadmium    | ND      | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium    | ND      | 0.50   |         |               |      |               |               |      |           |      |
| Chromium   | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Copper     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Iron       | ND      | 0.20   |         |               |      |               |               |      |           |      |
| Lead       | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium  | ND      | 0.20   |         |               |      |               |               |      |           |      |
| Manganese  | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Molybdenum | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium  | ND      | 0.20   |         |               |      |               |               |      |           |      |
| Selenium   | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Silver     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium     | 0.08228 | 0.20   |         |               |      |               |               |      |           | J    |
| Vanadium   | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc       | ND      | 0.0050 |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is &gt; 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10745 InstrumentID: ICP4500

LCS Sample ID: MLCSW4-101804 Test Code: SW6020 Units: mg/L Analysis Date: 10/18/04 21:51

Client ID: Run ID: ICP4500\_041018A SeqNo: 556771 Prep Date: 10/18/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.04669 | 0.010  | 0.05    | 0             | 93.4 | 79-126        | 0             |      |           |      |
| Arsenic    | 0.04988 | 0.0050 | 0.05    | 0             | 99.8 | 80-121        | 0             |      |           |      |
| Barium     | 0.04485 | 0.0050 | 0.05    | 0             | 89.7 | 79.8-119      | 0             |      |           |      |
| Beryllium  | 0.05336 | 0.0020 | 0.05    | 0             | 107  | 78.9-120      | 0             |      |           |      |
| Boron      | 0.5437  | 0.020  | 0       | -0.0009227    | 0    | 80-120        | 0             |      |           |      |
| Cadmium    | 0.05061 | 0.0020 | 0.05    | 0             | 101  | 79.1-119      | 0             |      |           |      |
| Calcium    | 4.856   | 0.50   | 5       | 0             | 97.1 | 80-121        | 0             |      |           |      |
| Chromium   | 0.04536 | 0.0050 | 0.05    | 0             | 90.7 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04566 | 0.0050 | 0.05    | 0             | 91.3 | 82-121        | 0             |      |           |      |
| Copper     | 0.04635 | 0.0050 | 0.05    | 0             | 92.7 | 81-120        | 0             |      |           |      |
| Iron       | 4.749   | 0.20   | 5       | 0             | 95   | 80-120        | 0             |      |           |      |
| Lead       | 0.04468 | 0.0050 | 0.05    | 0             | 89.4 | 80-118        | 0             |      |           |      |
| Magnesium  | 4.939   | 0.20   | 5       | 0             | 98.8 | 80-120        | 0             |      |           |      |
| Manganese  | 0.04541 | 0.0050 | 0.05    | 0             | 90.8 | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04485 | 0.0050 | 0.05    | 0             | 89.7 | 81-115        | 0             |      |           |      |
| Nickel     | 0.04612 | 0.0050 | 0.05    | 0             | 92.2 | 82-120        | 0             |      |           |      |
| Potassium  | 4.751   | 0.20   | 5       | 0             | 95   | 80-120        | 0             |      |           |      |
| Selenium   | 0.04808 | 0.0050 | 0.05    | 0             | 96.2 | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04169 | 0.0050 | 0.05    | 0             | 83.4 | 80-117        | 0             |      |           |      |
| Sodium     | 4.803   | 0.20   | 5       | 0             | 96.1 | 80.6-119      | 0             |      |           |      |
| Vanadium   | 0.04532 | 0.0050 | 0.05    | 0             | 90.6 | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.04717 | 0.0050 | 0.05    | 0             | 94.3 | 79-118        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10745 InstrumentID: ICP4500

MS Sample ID: 0410166-08CMS Test Code: SW6020 Units: mg/L Analysis Date: 10/18/04 23:04

Client ID: Run ID: ICP4500\_041018A SeqNo: 556786 Prep Date: 10/18/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.04436 | 0.010  | 0.05    | 0.002056      | 84.6 | 79-126        | 0             |      |           |      |
| Arsenic    | 0.04845 | 0.0050 | 0.05    | 0.0009915     | 94.9 | 80-121        | 0             |      |           |      |
| Barium     | 0.04353 | 0.0050 | 0.05    | 0.0002264     | 86.6 | 79.8-119      | 0             |      |           |      |
| Beryllium  | 0.05366 | 0.0020 | 0.05    | -0.00002272   | 107  | 78.9-120      | 0             |      |           |      |
| Boron      | 0.5394  | 0.020  | 0       | -0.007361     | 0    | 80-120        | 0             |      |           |      |
| Cadmium    | 0.049   | 0.0020 | 0.05    | -0.00003823   | 98.1 | 79.1-119      | 0             |      |           |      |
| Calcium    | 4.565   | 0.50   | 5       | 0.02736       | 90.8 | 80-121        | 0             |      |           |      |
| Chromium   | 0.04473 | 0.0050 | 0.05    | 0.000514      | 88.4 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04464 | 0.0050 | 0.05    | -0.00002679   | 89.3 | 82-121        | 0             |      |           |      |
| Copper     | 0.04412 | 0.0050 | 0.05    | 0.000141      | 88   | 80-120        | 0             |      |           |      |
| Iron       | 4.698   | 0.20   | 5       | 0.0001478     | 94   | 80-120        | 0             |      |           |      |
| Lead       | 0.04349 | 0.0050 | 0.05    | 0.000007664   | 87   | 80-118        | 0             |      |           |      |
| Magnesium  | 4.73    | 0.20   | 5       | 0.01873       | 94.2 | 80-120        | 0             |      |           |      |
| Manganese  | 0.04549 | 0.0050 | 0.05    | 0.0004209     | 90.1 | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04299 | 0.0050 | 0.05    | 0.00002916    | 85.9 | 81-115        | 0             |      |           |      |
| Nickel     | 0.04496 | 0.0050 | 0.05    | -0.0000699    | 90.1 | 82-120        | 0             |      |           |      |
| Potassium  | 4.514   | 0.20   | 5       | -0.0651       | 91.6 | 80-120        | 0             |      |           |      |
| Selenium   | 0.04689 | 0.0050 | 0.05    | -0.000123     | 94   | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04055 | 0.0050 | 0.05    | -0.0000227    | 81.1 | 80-117        | 0             |      |           |      |
| Sodium     | 4.629   | 0.20   | 5       | 0.05642       | 91.5 | 80.6-119      | 0             |      |           |      |
| Vanadium   | 0.04535 | 0.0050 | 0.05    | 0.0003537     | 90   | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.04655 | 0.0050 | 0.05    | 0.0008419     | 91.4 | 79-118        | 0             |      |           |      |

MSD Sample ID: 0410166-08CMSD Test Code: SW6020 Units: mg/L Analysis Date: 10/18/04 23:22

Client ID: Run ID: ICP4500\_041018A SeqNo: 556789 Prep Date: 10/18/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Arsenic    | 0.04838 | 0.0050 | 0.05    | 0.0009915     | 94.8 | 80-121        | 0.04845       | 0.145 | 15        |      |
| Beryllium  | 0.05038 | 0.0020 | 0.05    | -0.00002272   | 101  | 78.9-120      | 0.05366       | 6.31  | 15        |      |
| Boron      | 0.5021  | 0.020  | 0       | -0.007361     | 0    | 80-120        | 0.5394        | 7.16  | 15        |      |
| Cobalt     | 0.04509 | 0.0050 | 0.05    | -0.00002679   | 90.2 | 82-121        | 0.04464       | 1     | 15        |      |
| Copper     | 0.04537 | 0.0050 | 0.05    | 0.000141      | 90.5 | 81-120        | 0.04412       | 2.79  | 15        |      |
| Iron       | 4.676   | 0.20   | 5       | 0.0001478     | 93.5 | 80-120        | 4.698         | 0.469 | 15        |      |
| Magnesium  | 4.764   | 0.20   | 5       | 0.01873       | 94.9 | 80-120        | 4.73          | 0.716 | 15        |      |
| Molybdenum | 0.04425 | 0.0050 | 0.05    | 0.00002916    | 88.4 | 81-115        | 0.04299       | 2.89  | 15        |      |
| Nickel     | 0.04538 | 0.0050 | 0.05    | -0.0000699    | 90.9 | 82-120        | 0.04496       | 0.93  | 15        |      |
| Selenium   | 0.05009 | 0.0050 | 0.05    | -0.000123     | 100  | 79.2-118      | 0.04689       | 6.6   | 15        |      |
| Vanadium   | 0.04433 | 0.0050 | 0.05    | 0.0003537     | 88   | 82.1-119      | 0.04535       | 2.27  | 15        |      |
| Zinc       | 0.04661 | 0.0050 | 0.05    | 0.0008419     | 91.5 | 79-118        | 0.04655       | 0.129 | 15        |      |

ND - Not Detected at the Reporting Limit

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O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10745 Instrument ID: ICP4500

|            |                           |        |         |                   |      |                       |               |                               |           |      |
|------------|---------------------------|--------|---------|-------------------|------|-----------------------|---------------|-------------------------------|-----------|------|
| MSD        | Sample ID: 0410166-08CMSD |        |         | Test Code: SW6020 |      | Units: mg/L           |               | Analysis Date: 10/19/04 18:14 |           |      |
| Client ID: | Run ID: ICP4500_041019A   |        |         | SeqNo: 557461     |      | Prep Date: 10/18/2004 |               | DF: 1                         |           |      |
| Analyte    | Result                    | PQL    | SPK Val | SPK Ref Value     | %REC | Control Limit         | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Aluminum   | 0.04571                   | 0.010  | 0.05    | 0.002056          | 87.3 | 79-126                | 0.04436       | 3                             | 15        |      |
| Barium     | 0.04299                   | 0.0050 | 0.05    | 0                 | 86   | 79.8-119              | 0.04353       | 1.25                          | 15        |      |
| Cadmium    | 0.04816                   | 0.0020 | 0.05    | 0                 | 96.3 | 79.1-119              | 0.049         | 1.73                          | 15        |      |
| Calcium    | 4.709                     | 0.50   | 5       | 0                 | 94.2 | 80-121                | 4.565         | 3.11                          | 15        |      |
| Chromium   | 0.04413                   | 0.0050 | 0.05    | 0.000514          | 87.2 | 79.3-121              | 0.04473       | 1.35                          | 15        |      |
| Lead       | 0.04202                   | 0.0050 | 0.05    | 0                 | 84   | 80-118                | 0.04349       | 3.44                          | 15        |      |
| Manganese  | 0.04412                   | 0.0050 | 0.05    | 0                 | 88.2 | 82-119                | 0.04549       | 3.06                          | 15        |      |
| Potassium  | 4.702                     | 0.20   | 5       | 0                 | 94   | 80-120                | 4.514         | 4.08                          | 15        |      |
| Silver     | 0.04183                   | 0.0050 | 0.05    | 0                 | 83.7 | 80-117                | 0.04055       | 3.11                          | 15        |      |
| Sodium     | 4.925                     | 0.20   | 5       | 0.05642           | 97.4 | 80.6-119              | 4.629         | 6.2                           | 15        |      |

| DUP        | Sample ID: 0410166-08CDUP |                 |         | Test Code: SW6020 |        | Units: mg/L           |               | Analysis Date: 10/18/04 22:59 |           |      |
|------------|---------------------------|-----------------|---------|-------------------|--------|-----------------------|---------------|-------------------------------|-----------|------|
| Client ID: | Run ID:                   | ICP4500_041018A |         | SeqNo:            | 556785 | Prep Date: 10/18/2004 |               | DF: 1                         |           |      |
| Analyte    | Result                    | PQL             | SPK Val | SPK Ref Value     | %REC   | Control Limit         | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Aluminum   | ND                        | 0.010           | 0       | 0                 | 0      | 0-0                   | 0.002056      | 0                             | 25        |      |
| Arsenic    | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | 0.0009915     | 0                             | 25        |      |
| Barium     | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | 0.0002264     | 0                             | 25        |      |
| Beryllium  | ND                        | 0.0020          | 0       | 0                 | 0      | 0-0                   | -0.00002272   | 0                             | 25        |      |
| Boron      | ND                        | 0.020           | 0       | 0                 | 0      | 0-0                   | -0.007361     | 0                             | 25        |      |
| Cadmium    | ND                        | 0.0020          | 0       | 0                 | 0      | 0-0                   | -0.00003823   | 0                             | 25        |      |
| Calcium    | ND                        | 0.50            | 0       | 0                 | 0      | 0-0                   | 0.02736       | 0                             | 25        |      |
| Chromium   | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | 0.000514      | 0                             | 25        |      |
| Cobalt     | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | -0.00002679   | 0                             | 25        |      |
| Copper     | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | 0.000141      | 0                             | 25        |      |
| Iron       | ND                        | 0.20            | 0       | 0                 | 0      | 0-0                   | 0.0001478     | 0                             | 25        |      |
| Lead       | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | 0.000007664   | 0                             | 25        |      |
| Magnesium  | ND                        | 0.20            | 0       | 0                 | 0      | 0-0                   | 0.01873       | 0                             | 25        |      |
| Manganese  | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | 0.0004209     | 0                             | 25        |      |
| Molybdenum | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | 0.00002916    | 0                             | 25        |      |
| Nickel     | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | -0.0000699    | 0                             | 25        |      |
| Potassium  | ND                        | 0.20            | 0       | 0                 | 0      | 0-0                   | -0.0651       | 0                             | 25        |      |
| Selenium   | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | -0.000123     | 0                             | 25        |      |
| Silver     | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | -0.0000227    | 0                             | 25        |      |
| Sodium     | ND                        | 0.20            | 0       | 0                 | 0      | 0-0                   | 0.05642       | 0                             | 25        |      |
| Vanadium   | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | 0.0003537     | 0                             | 25        |      |
| Zinc       | ND                        | 0.0050          | 0       | 0                 | 0      | 0-0                   | 0.0008419     | 0                             | 25        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410185-01C | 0410185-02C | 0410185-03C |
| 0410185-04C | 0410185-05C |             |

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CLIENT: Navajo Refining Company  
Work Order: 0410185  
Project: Annual

## QC BATCH REPORT

Batch ID: 10869 InstrumentID: Mercury

MBLK Sample ID: GBLKW2-102604 Test Code: SW7470 Units: mg/L Analysis Date: 10/26/04 18:12

Client ID: Run ID: MERCURY\_041026C SeqNo: 561367 Prep Date: 10/26/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW2-102604 Test Code: SW7470 Units: mg/L Analysis Date: 10/26/04 18:13

Client ID: Run ID: MERCURY\_041026C SeqNo: 561368 Prep Date: 10/26/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00497 | 0.00020 | 0.005   | 0             | 99.4 | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW2-102604 Test Code: SW7470 Units: mg/L Analysis Date: 10/26/04 18:15

Client ID: Run ID: MERCURY\_041026C SeqNo: 561369 Prep Date: 10/26/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00504 | 0.00020 | 0.005   | 0             | 101  | 83-115        | 0.00497       | 1.4  | 20        |      |

MS Sample ID: 0410185-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 10/26/04 18:29

Client ID: KWB-1A Run ID: MERCURY\_041026C SeqNo: 561372 Prep Date: 10/26/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00423 | 0.00020 | 0.005   | -0.000007     | 84.7 | 83-115        | 0             |      |           |      |

MSD Sample ID: 0410185-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 10/26/04 18:31

Client ID: KWB-1A Run ID: MERCURY\_041026C SeqNo: 561373 Prep Date: 10/26/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.0043 | 0.00020 | 0.005   | -0.000007     | 86.1 | 83-115        | 0.00423       | 1.64 | 20        |      |

DUP Sample ID: 0410185-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 10/26/04 18:25

Client ID: KWB-1A Run ID: MERCURY\_041026C SeqNo: 561371 Prep Date: 10/26/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | -0.000007     | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410185-01C | 0410185-02C | 0410185-03C |
| 0410185-04C | 0410185-05C |             |

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CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10759 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-041018 Test Code: SW8270 Units: µg/L Analysis Date: 10/20/04 17:35

Client ID: Run ID: SV-3\_041020A SeqNo: 558507 Prep Date: 10/18/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 86.9   | 10  | 100     | 0             | 86.9 | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 82.75  | 10  | 100     | 0             | 82.8 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 45.27  | 10  | 100     | 0             | 45.3 | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 85.92  | 10  | 100     | 0             | 85.9 | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 84.8   | 10  | 100     | 0             | 84.8 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 27.68  | 10  | 100     | 0             | 27.7 | 11-100        |               | 0    |           |      |

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CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10759 InstrumentID: SV-3

LCS Sample ID: SLCSW1-041018 Test Code: SW8270 Units: µg/L Analysis Date: 10/20/04 18:01

Client ID: Run ID: SV-3\_041020A SeqNo: 558508 Prep Date: 10/18/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 41.07  | 10  | 50      | 0             | 82.1 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 91.95  | 10  | 100     | 0             | 92   | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 82.66  | 10  | 100     | 0             | 82.7 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 40.26  | 10  | 50      | 0             | 80.5 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 68.2   | 10  | 100     | 0             | 68.2 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 44.53  | 10  | 50      | 0             | 89.1 | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 85.16  | 10  | 100     | 0             | 85.2 | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 40.27  | 10  | 50      | 0             | 80.5 | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 92.13  | 10  | 150     | 0             | 61.4 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 39.29  | 10  | 50      | 0             | 78.6 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 45.88  | 10  | 100     | 0             | 45.9 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 42.34  | 10  | 50      | 0             | 84.7 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 42.41  | 10  | 50      | 0             | 84.8 | 67-116        | 0             |      |           |      |
| Aniline                    | 29.36  | 10  | 50      | 0             | 58.7 | 40-130        | 0             |      |           |      |
| Anthracene                 | 44.64  | 10  | 50      | 0             | 89.3 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 44.57  | 10  | 50      | 0             | 89.1 | 55-131        | 0             |      |           |      |
| Benzidine                  | 18.85  | 10  | 50      | 0             | 37.7 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 39.94  | 10  | 50      | 0             | 79.9 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 43.89  | 10  | 50      | 0             | 87.8 | 42-123        | 0             |      |           |      |
| Isophorone                 | 43.45  | 10  | 50      | 0             | 86.9 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 41.53  | 10  | 50      | 0             | 83.1 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 22.41  | 10  | 50      | 0             | 44.8 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 45.38  | 10  | 50      | 0             | 90.8 | 72-144        | 0             |      |           |      |
| Naphthalene                | 42.19  | 10  | 50      | 0             | 84.4 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 42.98  | 10  | 50      | 0             | 86   | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 91.04  | 10  | 100     | 0             | 91   | 65-123        | 0             |      |           |      |
| Phenanthrene               | 43.26  | 10  | 50      | 0             | 86.5 | 69-119        | 0             |      |           |      |
| Phenol                     | 32.1   | 10  | 100     | 0             | 32.1 | 16-115        | 0             |      |           |      |
| Pyrene                     | 42.89  | 10  | 50      | 0             | 85.8 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 90.84  | 10  | 100     | 0             | 90.8 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 81.46  | 10  | 100     | 0             | 81.5 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 51.01  | 10  | 100     | 0             | 51   | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 88.3   | 10  | 100     | 0             | 88.3 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 83.99  | 10  | 100     | 0             | 84   | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 32.79  | 10  | 100     | 0             | 32.8 | 11-100        | 0             |      |           |      |

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E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10759 InstrumentID: SV-3

MS Sample ID: 0410139-18DMS Test Code: SW8270 Units: µg/L Analysis Date: 10/21/04 15:20

Client ID: Run ID: SV-3\_041020A SeqNo: 558630 Prep Date: 10/18/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 45.05  | 10  | 50      | 0             | 90.1 | 50-115        |               | 0    |           |      |
| 2,4,5-Trichlorophenol      | 98.04  | 10  | 100     | 0             | 98   | 68-128        |               | 0    |           |      |
| 2,4,6-Trichlorophenol      | 100.6  | 10  | 100     | 0             | 101  | 66-125        |               | 0    |           |      |
| 2-Methylnaphthalene        | 43.41  | 10  | 50      | 0             | 86.8 | 47-122        |               | 0    |           |      |
| 2-Methylphenol             | 73.36  | 10  | 100     | 0             | 73.4 | 51-115        |               | 0    |           |      |
| 2-Nitroaniline             | 47.56  | 10  | 50      | 0             | 95.1 | 64-128        |               | 0    |           |      |
| 2-Nitrophenol              | 97.99  | 10  | 100     | 0             | 98   | 60-119        |               | 0    |           |      |
| 3-Nitroaniline             | 37.98  | 10  | 50      | 0             | 76   | 61-118        |               | 0    |           |      |
| 4-Methylphenol             | 97.31  | 10  | 150     | 0             | 64.9 | 44-115        |               | 0    |           |      |
| 4-Nitroaniline             | 48.71  | 10  | 50      | 0             | 97.4 | 61-123        |               | 0    |           |      |
| 4-Nitrophenol              | 51.02  | 10  | 100     | 0             | 51   | 17-100        |               | 0    |           |      |
| Acenaphthene               | 47.55  | 10  | 50      | 0             | 95.1 | 68-115        |               | 0    |           |      |
| Acenaphthylene             | 46.72  | 10  | 50      | 0             | 93.4 | 67-116        |               | 0    |           |      |
| Aniline                    | 25.86  | 10  | 50      | 0             | 51.7 | 40-130        |               | 0    |           |      |
| Anthracene                 | 50.27  | 10  | 50      | 0             | 101  | 70-129        |               | 0    |           |      |
| Benz(a)anthracene          | 51.08  | 10  | 50      | 0             | 102  | 55-131        |               | 0    |           |      |
| Benzidine                  | 3.405  | 10  | 50      | 0             | 6.81 | 10-115        |               | 0    |           | JS   |
| Hexachloroethane           | 40.1   | 10  | 50      | 0             | 80.2 | 46-115        |               | 0    |           |      |
| Indeno(1,2,3-cd)pyrene     | 39.83  | 10  | 50      | 0             | 79.7 | 42-123        |               | 0    |           |      |
| Isophorone                 | 47.17  | 10  | 50      | 0             | 94.3 | 63-117        |               | 0    |           |      |
| N-Nitrosodi-n-propylamine  | 45.02  | 10  | 50      | 0             | 90   | 67-115        |               | 0    |           |      |
| N-Nitrosodimethylamine     | 26.62  | 10  | 50      | 0             | 53.2 | 28-115        |               | 0    |           |      |
| N-Nitrosodiphenylamine     | 51.96  | 10  | 50      | 0             | 104  | 72-144        |               | 0    |           |      |
| Naphthalene                | 45.63  | 10  | 50      | 0             | 91.3 | 52-115        |               | 0    |           |      |
| Nitrobenzene               | 46.77  | 10  | 50      | 0             | 93.5 | 65-115        |               | 0    |           |      |
| Pentachlorophenol          | 107.5  | 10  | 100     | 0             | 107  | 65-123        |               | 0    |           |      |
| Phenanthrene               | 49.01  | 10  | 50      | 0             | 98   | 69-119        |               | 0    |           |      |
| Phenol                     | 34.2   | 10  | 100     | 0             | 34.2 | 16-115        |               | 0    |           |      |
| Pyrene                     | 47.94  | 10  | 50      | 0             | 95.9 | 51-130        |               | 0    |           |      |
| Surr: 2,4,6-Tribromophenol | 105    | 10  | 100     | 0             | 105  | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 92.34  | 10  | 100     | 0             | 92.3 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 55.78  | 10  | 100     | 0             | 55.8 | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 97.26  | 10  | 100     | 0             | 97.3 | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 90.67  | 10  | 100     | 0             | 90.7 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 35.62  | 10  | 100     | 0             | 35.6 | 11-100        |               | 0    |           |      |

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P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10759 InstrumentID: SV-3

MSD Sample ID: 0410139-18DMSD Test Code: SW8270 Units: µg/L Analysis Date: 10/21/04 15:46

Client ID: Run ID: SV-3\_041020A SeqNo: 558631 Prep Date: 10/18/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,2,4-Trichlorobenzene     | 44.98  | 10  | 50      | 0             | 90   | 50-115        | 45.05         | 0.157 | 30        |      |
| 2,4,5-Trichlorophenol      | 100.9  | 10  | 100     | 0             | 101  | 68-128        | 98.04         | 2.84  | 30        |      |
| 2,4,6-Trichlorophenol      | 93.11  | 10  | 100     | 0             | 93.1 | 66-125        | 100.6         | 7.77  | 30        |      |
| 2-Methylnaphthalene        | 43.18  | 10  | 50      | 0             | 86.4 | 47-122        | 43.41         | 0.527 | 30        |      |
| 2-Methylphenol             | 72.24  | 10  | 100     | 0             | 72.2 | 51-115        | 73.36         | 1.54  | 30        |      |
| 2-Nitroaniline             | 46.79  | 10  | 50      | 0             | 93.6 | 64-128        | 47.56         | 1.63  | 30        |      |
| 2-Nitrophenol              | 96.66  | 10  | 100     | 0             | 96.7 | 60-119        | 97.99         | 1.37  | 30        |      |
| 3-Nitroaniline             | 36.36  | 10  | 50      | 0             | 72.7 | 61-118        | 37.98         | 4.35  | 30        |      |
| 4-Methylphenol             | 97.05  | 10  | 150     | 0             | 64.7 | 44-115        | 97.31         | 0.27  | 30        |      |
| 4-Nitroaniline             | 46.82  | 10  | 50      | 0             | 93.6 | 61-123        | 48.71         | 3.94  | 30        |      |
| 4-Nitrophenol              | 51.25  | 10  | 100     | 0             | 51.3 | 17-100        | 51.02         | 0.451 | 30        |      |
| Acenaphthene               | 46.86  | 10  | 50      | 0             | 93.7 | 68-115        | 47.55         | 1.45  | 30        |      |
| Acenaphthylene             | 46.14  | 10  | 50      | 0             | 92.3 | 67-116        | 46.72         | 1.24  | 30        |      |
| Aniline                    | 25.15  | 10  | 50      | 0             | 50.3 | 40-130        | 25.86         | 2.78  | 30        |      |
| Anthracene                 | 51.05  | 10  | 50      | 0             | 102  | 70-129        | 50.27         | 1.54  | 30        |      |
| Benz(a)anthracene          | 47.92  | 10  | 50      | 0             | 95.8 | 55-131        | 51.08         | 6.39  | 30        |      |
| Benzidine                  | 3.484  | 10  | 50      | 0             | 6.97 | 10-115        | 3.405         | 0     | 30        | JS   |
| Hexachloroethane           | 39.71  | 10  | 50      | 0             | 79.4 | 46-115        | 40.1          | 0.972 | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 42.58  | 10  | 50      | 0             | 85.2 | 42-123        | 39.83         | 6.68  | 30        |      |
| Isophorone                 | 47.31  | 10  | 50      | 0             | 94.6 | 63-117        | 47.17         | 0.297 | 30        |      |
| N-Nitrosodi-n-propylamine  | 44.1   | 10  | 50      | 0             | 88.2 | 67-115        | 45.02         | 2.06  | 30        |      |
| N-Nitrosodimethylamine     | 26.57  | 10  | 50      | 0             | 53.1 | 28-115        | 26.62         | 0.206 | 30        |      |
| N-Nitrosodiphenylamine     | 52.65  | 10  | 50      | 0             | 105  | 72-144        | 51.96         | 1.32  | 30        |      |
| Naphthalene                | 45.57  | 10  | 50      | 0             | 91.1 | 52-115        | 45.63         | 0.128 | 30        |      |
| Nitrobenzene               | 47.17  | 10  | 50      | 0             | 94.3 | 65-115        | 46.77         | 0.838 | 30        |      |
| Pentachlorophenol          | 104.9  | 10  | 100     | 0             | 105  | 65-123        | 107.5         | 2.38  | 30        |      |
| Phenanthrene               | 49.48  | 10  | 50      | 0             | 99   | 69-119        | 49.01         | 0.962 | 30        |      |
| Phenol                     | 33.73  | 10  | 100     | 0             | 33.7 | 16-115        | 34.2          | 1.38  | 30        |      |
| Pyrene                     | 47.36  | 10  | 50      | 0             | 94.7 | 51-130        | 47.94         | 1.22  | 30        |      |
| Surr: 2,4,6-Tribromophenol | 106.5  | 10  | 100     | 0             | 106  | 39-153        | 105           | 1.36  | 30        |      |
| Surr: 2-Fluorobiphenyl     | 93.56  | 10  | 100     | 0             | 93.6 | 40-147        | 92.34         | 1.31  | 30        |      |
| Surr: 2-Fluorophenol       | 53.78  | 10  | 100     | 0             | 53.8 | 21-110        | 55.78         | 3.63  | 30        |      |
| Surr: 4-Terphenyl-d14      | 96.25  | 10  | 100     | 0             | 96.2 | 39-141        | 97.26         | 1.04  | 30        |      |
| Surr: Nitrobenzene-d5      | 90.97  | 10  | 100     | 0             | 91   | 37-140        | 90.67         | 0.331 | 30        |      |
| Surr: Phenol-d6            | 34.98  | 10  | 100     | 0             | 35   | 11-100        | 35.62         | 1.81  | 30        |      |

The following samples were analyzed in this batch:

0410185-01E 0410185-02E

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410185  
**Project:** Annual

## QC BATCH REPORT

Batch ID: **10814**      InstrumentID: **SV-3**

**MBLK**      Sample ID: **SBLKW1-041021**      Test Code: **SW8270**      Units: **µg/L**      Analysis Date: **10/25/04 14:38**

Client ID:      Run ID: **SV-3\_041025B**      SeqNo: **560362**      Prep Date: **10/21/2004**      DF: **1**

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 94.89  | 10  | 100     | 0             | 94.9 | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 90.66  | 10  | 100     | 0             | 90.7 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 49.76  | 10  | 100     | 0             | 49.8 | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 97.26  | 10  | 100     | 0             | 97.3 | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 89.5   | 10  | 100     | 0             | 89.5 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 29.82  | 10  | 100     | 0             | 29.8 | 11-100        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: 10814 InstrumentID: SV-3

LCS Sample ID: SLCSW1-041021 Test Code: SW8270 Units: µg/L Analysis Date: 10/25/04 9:37

Client ID: Run ID: SV-3\_041025B SeqNo: 560360 Prep Date: 10/21/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 45.99  | 10  | 50      | 0             | 92   | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 95.95  | 10  | 100     | 0             | 95.9 | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 93.17  | 10  | 100     | 0             | 93.2 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 44.94  | 10  | 50      | 0             | 89.9 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 74.26  | 10  | 100     | 0             | 74.3 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 46.18  | 10  | 50      | 0             | 92.4 | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 96.71  | 10  | 100     | 0             | 96.7 | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 43.83  | 10  | 50      | 0             | 87.7 | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 96.67  | 10  | 150     | 0             | 64.4 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 46.88  | 10  | 50      | 0             | 93.8 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 43.56  | 10  | 100     | 0             | 43.6 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 46.35  | 10  | 50      | 0             | 92.7 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 46.49  | 10  | 50      | 0             | 93   | 67-116        | 0             |      |           |      |
| Aniline                    | 28.99  | 10  | 50      | 0             | 58   | 40-130        | 0             |      |           |      |
| Anthracene                 | 49.03  | 10  | 50      | 0             | 98.1 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 50.32  | 10  | 50      | 0             | 101  | 55-131        | 0             |      |           |      |
| Benzidine                  | 12.92  | 10  | 50      | 0             | 25.8 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 43.07  | 10  | 50      | 0             | 86.1 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 49.76  | 10  | 50      | 0             | 99.5 | 42-123        | 0             |      |           |      |
| Isophorone                 | 47.86  | 10  | 50      | 0             | 95.7 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 45.02  | 10  | 50      | 0             | 90   | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 16.61  | 10  | 50      | 0             | 33.2 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 49.72  | 10  | 50      | 0             | 99.4 | 72-144        | 0             |      |           |      |
| Naphthalene                | 46.48  | 10  | 50      | 0             | 93   | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 44.32  | 10  | 50      | 0             | 88.6 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 89.71  | 10  | 100     | 0             | 89.7 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 47.98  | 10  | 50      | 0             | 96   | 69-119        | 0             |      |           |      |
| Phenol                     | 37.46  | 10  | 100     | 0             | 37.5 | 16-115        | 0             |      |           |      |
| Pyrene                     | 47.38  | 10  | 50      | 0             | 94.8 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 99.27  | 10  | 100     | 0             | 99.3 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 89.75  | 10  | 100     | 0             | 89.8 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 55.86  | 10  | 100     | 0             | 55.9 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 97.84  | 10  | 100     | 0             | 97.8 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 90.57  | 10  | 100     | 0             | 90.6 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 35.4   | 10  | 100     | 0             | 35.4 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

# QC BATCH REPORT

Batch ID: 10814 InstrumentID: SV-3

LCSD Sample ID: SLCSDW1-041021 Test Code: SW8270 Units: µg/L Analysis Date: 10/25/04 10:02

Client ID: Run ID: SV-3\_041025B SeqNo: 560361 Prep Date: 10/21/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,2,4-Trichlorobenzene     | 47.06  | 10  | 50      | 0             | 94.1 | 50-115        | 45.99         | 2.3   | 30        |      |
| 2,4,5-Trichlorophenol      | 93.72  | 10  | 100     | 0             | 93.7 | 68-128        | 95.95         | 2.35  | 30        |      |
| 2,4,6-Trichlorophenol      | 92.34  | 10  | 100     | 0             | 92.3 | 66-125        | 93.17         | 0.897 | 30        |      |
| 2-Methylnaphthalene        | 44.31  | 10  | 50      | 0             | 88.6 | 47-122        | 44.94         | 1.41  | 30        |      |
| 2-Methylphenol             | 71.31  | 10  | 100     | 0             | 71.3 | 51-115        | 74.26         | 4.06  | 30        |      |
| 2-Nitroaniline             | 45.16  | 10  | 50      | 0             | 90.3 | 64-128        | 46.18         | 2.23  | 30        |      |
| 2-Nitrophenol              | 97.55  | 10  | 100     | 0             | 97.5 | 60-119        | 96.71         | 0.863 | 30        |      |
| 3-Nitroaniline             | 41.88  | 10  | 50      | 0             | 83.8 | 61-118        | 43.83         | 4.53  | 30        |      |
| 4-Methylphenol             | 93.79  | 10  | 150     | 0             | 62.5 | 44-115        | 96.67         | 3.03  | 30        |      |
| 4-Nitroaniline             | 47.83  | 10  | 50      | 0             | 95.7 | 61-123        | 46.88         | 2     | 30        |      |
| 4-Nitrophenol              | 43.2   | 10  | 100     | 0             | 43.2 | 17-100        | 43.56         | 0.824 | 30        |      |
| Acenaphthene               | 46.12  | 10  | 50      | 0             | 92.2 | 68-115        | 46.35         | 0.496 | 30        |      |
| Acenaphthylene             | 46.02  | 10  | 50      | 0             | 92   | 67-116        | 46.49         | 1.01  | 30        |      |
| Aniline                    | 29.3   | 10  | 50      | 0             | 58.6 | 40-130        | 28.99         | 1.05  | 30        |      |
| Anthracene                 | 49.44  | 10  | 50      | 0             | 98.9 | 70-129        | 49.03         | 0.846 | 30        |      |
| Benz(a)anthracene          | 49.75  | 10  | 50      | 0             | 99.5 | 55-131        | 50.32         | 1.15  | 30        |      |
| Benzidine                  | 10.23  | 10  | 50      | 0             | 20.5 | 10-115        | 12.92         | 23.3  | 30        |      |
| Hexachloroethane           | 41.83  | 10  | 50      | 0             | 83.7 | 46-115        | 43.07         | 2.92  | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 52.1   | 10  | 50      | 0             | 104  | 42-123        | 49.76         | 4.59  | 30        |      |
| Isophorone                 | 47.57  | 10  | 50      | 0             | 95.1 | 63-117        | 47.86         | 0.593 | 30        |      |
| N-Nitrosodi-n-propylamine  | 43.85  | 10  | 50      | 0             | 87.7 | 67-115        | 45.02         | 2.63  | 30        |      |
| N-Nitrosodimethylamine     | 17.58  | 10  | 50      | 0             | 35.2 | 28-115        | 16.61         | 5.71  | 30        |      |
| N-Nitrosodiphenylamine     | 50.5   | 10  | 50      | 0             | 101  | 72-144        | 49.72         | 1.56  | 30        |      |
| Naphthalene                | 46.31  | 10  | 50      | 0             | 92.6 | 52-115        | 46.48         | 0.382 | 30        |      |
| Nitrobenzene               | 44.73  | 10  | 50      | 0             | 89.5 | 65-115        | 44.32         | 0.927 | 30        |      |
| Pentachlorophenol          | 87.66  | 10  | 100     | 0             | 87.7 | 65-123        | 89.71         | 2.3   | 30        |      |
| Phenanthrene               | 48.86  | 10  | 50      | 0             | 97.7 | 69-119        | 47.98         | 1.81  | 30        |      |
| Phenol                     | 36.65  | 10  | 100     | 0             | 36.6 | 16-115        | 37.46         | 2.2   | 30        |      |
| Pyrene                     | 47.16  | 10  | 50      | 0             | 94.3 | 51-130        | 47.38         | 0.448 | 30        |      |
| Surr: 2,4,6-Tribromophenol | 102    | 10  | 100     | 0             | 102  | 39-153        | 99.27         | 2.74  | 30        |      |
| Surr: 2-Fluorobiphenyl     | 88.7   | 10  | 100     | 0             | 88.7 | 40-147        | 89.75         | 1.18  | 30        |      |
| Surr: 2-Fluorophenol       | 53.66  | 10  | 100     | 0             | 53.7 | 21-110        | 55.86         | 4.01  | 30        |      |
| Surr: 4-Terphenyl-d14      | 97.64  | 10  | 100     | 0             | 97.6 | 39-141        | 97.84         | 0.204 | 30        |      |
| Surr: Nitrobenzene-d5      | 89.33  | 10  | 100     | 0             | 89.3 | 37-140        | 90.57         | 1.38  | 30        |      |
| Surr: Phenol-d6            | 34.66  | 10  | 100     | 0             | 34.7 | 11-100        | 35.4          | 2.12  | 30        |      |

The following samples were analyzed in this batch:

0410185-03E 0410185-04E 0410185-05E

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23912 InstrumentID: VOA1

MBLK Sample ID: VBLKW-1018 Test Code: SW8260 Units: µg/L Analysis Date: 10/18/04 14:43

Client ID: Run ID: VOA1\_041018A SeqNo: 556854 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.46  | 5.0 | 50      | 0             | 92.9 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 46.78  | 5.0 | 50      | 0             | 93.6 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.56  | 5.0 | 50      | 0             | 93.1 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 45.21  | 5.0 | 50      | 0             | 90.4 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23912 InstrumentID: VOA1

LCS Sample ID: VLCSW-1018 Test Code: SW8260 Units: µg/L Analysis Date: 10/18/04 13:48

Client ID: Run ID: VOA1\_041018A SeqNo: 556853 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 48.33  | 5.0 | 50      | 0             | 96.7 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 47.17  | 5.0 | 50      | 0             | 94.3 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 45.78  | 5.0 | 50      | 0             | 91.6 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 42.39  | 5.0 | 50      | 0             | 84.8 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 45.04  | 5.0 | 50      | 0             | 90.1 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 50.94  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 87.89  | 10  | 100     | 0             | 87.9 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 103.5  | 10  | 100     | 0             | 103  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 104.6  | 10  | 100     | 0             | 105  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 103.6  | 10  | 100     | 0             | 104  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 78     | 10  | 100     | 0             | 78   | 64.4-140      | 0             |      |           |      |
| Benzene                     | 45.35  | 5.0 | 50      | 0             | 90.7 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 49.91  | 5.0 | 50      | 0             | 99.8 | 80-120        | 0             |      |           |      |
| Bromoform                   | 51.67  | 5.0 | 50      | 0             | 103  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 41.85  | 5.0 | 50      | 0             | 83.7 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 90.65  | 10  | 100     | 0             | 90.6 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 52.24  | 5.0 | 50      | 0             | 104  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 45.51  | 5.0 | 50      | 0             | 91   | 80-120        | 0             |      |           |      |
| Chloroethane                | 43.56  | 5.0 | 50      | 0             | 87.1 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 45.26  | 5.0 | 50      | 0             | 90.5 | 80-120        | 0             |      |           |      |
| Chloromethane               | 41.14  | 5.0 | 50      | 0             | 82.3 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 50.12  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 52.16  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 46.81  | 5.0 | 50      | 0             | 93.6 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 90.74  | 10  | 100     | 0             | 90.7 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 44.12  | 10  | 50      | 0             | 88.2 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 45.38  | 5.0 | 50      | 0             | 90.8 | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 47.63  | 5.0 | 50      | 0             | 95.3 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 45.09  | 5.0 | 50      | 0             | 90.2 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 54.88  | 5.0 | 50      | 0             | 110  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 47.25  | 5.0 | 50      | 0             | 94.5 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 105.4  | 10  | 100     | 0             | 105  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 44.52  | 2.0 | 50      | 0             | 89   | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 137    | 15  | 150     | 0             | 91.3 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.79  | 5.0 | 50      | 0             | 91.6 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 46.92  | 5.0 | 50      | 0             | 93.8 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 45.17  | 5.0 | 50      | 0             | 90.3 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 46.02  | 5.0 | 50      | 0             | 92   | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23912 InstrumentID: VOA1

| MS                          | Sample ID: 0410173-01AMS |     |         | Test Code: SW8260 |      | Units: µg/L   |               | Analysis Date: 10/18/04 15:39 |           |      |
|-----------------------------|--------------------------|-----|---------|-------------------|------|---------------|---------------|-------------------------------|-----------|------|
| Client ID:                  | Run ID: VOA1_041018A     |     |         | SeqNo: 556856     |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                     | Result                   | PQL | SPK Val | SPK Ref Value     | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 48.85                    | 5.0 | 50      | 0                 | 97.7 | 75.2-120      | 0             |                               |           |      |
| 1,1,2,2-Tetrachloroethane   | 50.79                    | 5.0 | 50      | 0                 | 102  | 72.4-121      | 0             |                               |           |      |
| 1,1,2-Trichloroethane       | 46.65                    | 5.0 | 50      | 0                 | 93.3 | 80-120        | 0             |                               |           |      |
| 1,1-Dichloroethane          | 44.3                     | 5.0 | 50      | 0                 | 88.6 | 76.9-120      | 0             |                               |           |      |
| 1,1-Dichloroethene          | 45.49                    | 5.0 | 50      | 0                 | 91   | 72.6-123      | 0             |                               |           |      |
| 1,2-Dichloroethane          | 51.12                    | 5.0 | 50      | 0                 | 102  | 80-120        | 0             |                               |           |      |
| 2-Butanone                  | 87.32                    | 10  | 100     | 0                 | 87.3 | 69-131        | 0             |                               |           |      |
| 2-Chloroethyl vinyl ether   | 19.28                    | 10  | 100     | 0                 | 19.3 | 60-135        | 0             |                               |           | S    |
| 2-Hexanone                  | 108                      | 10  | 100     | 0                 | 108  | 55.6-126      | 0             |                               |           |      |
| 4-Methyl-2-pentanone        | 108.7                    | 10  | 100     | 0                 | 109  | 67.4-121      | 0             |                               |           |      |
| Acetone                     | 78.03                    | 10  | 100     | 0                 | 78   | 64.4-140      | 0             |                               |           |      |
| Benzene                     | 44.85                    | 5.0 | 50      | 0                 | 89.7 | 80-120        | 0             |                               |           |      |
| Bromodichloromethane        | 51.49                    | 5.0 | 50      | 0                 | 103  | 80-120        | 0             |                               |           |      |
| Bromoform                   | 52.58                    | 5.0 | 50      | 0                 | 105  | 77.9-121      | 0             |                               |           |      |
| Bromomethane                | 41.88                    | 5.0 | 50      | 0                 | 83.8 | 63.3-137      | 0             |                               |           |      |
| Carbon disulfide            | 93.12                    | 10  | 100     | 0                 | 93.1 | 74.1-123      | 0             |                               |           |      |
| Carbon tetrachloride        | 54.09                    | 5.0 | 50      | 0                 | 108  | 74.7-120      | 0             |                               |           |      |
| Chlorobenzene               | 46.69                    | 5.0 | 50      | 0                 | 93.4 | 80-120        | 0             |                               |           |      |
| Chloroethane                | 44.52                    | 5.0 | 50      | 0                 | 89   | 74.7-126      | 0             |                               |           |      |
| Chloroform                  | 45.78                    | 5.0 | 50      | 0                 | 91.6 | 80-120        | 0             |                               |           |      |
| Chloromethane               | 40.85                    | 5.0 | 50      | 0                 | 81.7 | 64.5-132      | 0             |                               |           |      |
| cis-1,3-Dichloropropene     | 48.94                    | 5.0 | 50      | 0                 | 97.9 | 80-120        | 0             |                               |           |      |
| Dibromochloromethane        | 54.37                    | 5.0 | 50      | 0                 | 109  | 80-120        | 0             |                               |           |      |
| Ethylbenzene                | 49.2                     | 5.0 | 50      | 0                 | 98.4 | 80-120        | 0             |                               |           |      |
| m,p-Xylene                  | 94.46                    | 10  | 100     | 0                 | 94.5 | 80-120        | 0             |                               |           |      |
| Methylene chloride          | 44.86                    | 10  | 50      | 0                 | 89.7 | 76.2-120      | 0             |                               |           |      |
| Styrene                     | 47.57                    | 5.0 | 50      | 0                 | 95.1 | 80-120        | 0             |                               |           |      |
| Tetrachloroethene           | 50.07                    | 5.0 | 50      | 0                 | 100  | 68.5-130      | 0             |                               |           |      |
| Toluene                     | 46.42                    | 5.0 | 50      | 0                 | 92.8 | 80-120        | 0             |                               |           |      |
| trans-1,3-Dichloropropene   | 54.57                    | 5.0 | 50      | 0                 | 109  | 80-120        | 0             |                               |           |      |
| Trichloroethene             | 48.1                     | 5.0 | 50      | 0                 | 96.2 | 78.9-120      | 0             |                               |           |      |
| Vinyl acetate               | 109.8                    | 10  | 100     | 0                 | 110  | 62.4-133      | 0             |                               |           |      |
| Vinyl chloride              | 44.2                     | 2.0 | 50      | 0                 | 88.4 | 72.7-128      | 0             |                               |           |      |
| Xylenes, Total              | 141.7                    | 15  | 150     | 0                 | 94.5 | 80-120        | 0             |                               |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.4                     | 5.0 | 50      | 0                 | 92.8 | 71-126        | 0             |                               |           |      |
| Surr: 4-Bromofluorobenzene  | 46.41                    | 5.0 | 50      | 0                 | 92.8 | 74-125        | 0             |                               |           |      |
| Surr: Dibromofluoromethane  | 45.63                    | 5.0 | 50      | 0                 | 91.3 | 73-126        | 0             |                               |           |      |
| Surr: Toluene-d8            | 45.13                    | 5.0 | 50      | 0                 | 90.3 | 75-125        | 0             |                               |           |      |

ND - Not Detected at the Reporting Limit

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23912 InstrumentID: VOA1

MSD Sample ID: 0410173-01AMSD Test Code: SW8260 Units: µg/L Analysis Date: 10/18/04 16:06

Client ID: Run ID: VOA1\_041018A SeqNo: 556857 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,1,1-Trichloroethane       | 52.03  | 5.0 | 50      | 0             | 104  | 75.2-120      | 48.85         | 6.3   | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 51.12  | 5.0 | 50      | 0             | 102  | 72.4-121      | 50.79         | 0.641 | 20        |      |
| 1,1,2-Trichloroethane       | 48.08  | 5.0 | 50      | 0             | 96.2 | 80-120        | 46.65         | 3.03  | 20        |      |
| 1,1-Dichloroethane          | 45.46  | 5.0 | 50      | 0             | 90.9 | 76.9-120      | 44.3          | 2.59  | 20        |      |
| 1,1-Dichloroethene          | 47.7   | 5.0 | 50      | 0             | 95.4 | 72.6-123      | 45.49         | 4.74  | 20        |      |
| 1,2-Dichloroethane          | 51.86  | 5.0 | 50      | 0             | 104  | 80-120        | 51.12         | 1.44  | 20        |      |
| 2-Butanone                  | 94.74  | 10  | 100     | 0             | 94.7 | 69-131        | 87.32         | 8.15  | 20        |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 60-135        | 19.28         | 0     | 20        | S    |
| 2-Hexanone                  | 114.2  | 10  | 100     | 0             | 114  | 55.6-126      | 108           | 5.67  | 20        |      |
| 4-Methyl-2-pentanone        | 112.8  | 10  | 100     | 0             | 113  | 67.4-121      | 108.7         | 3.77  | 20        |      |
| Acetone                     | 76.89  | 10  | 100     | 0             | 76.9 | 64.4-140      | 78.03         | 1.48  | 20        |      |
| Benzene                     | 47.38  | 5.0 | 50      | 0             | 94.8 | 80-120        | 44.85         | 5.49  | 20        |      |
| Bromodichloromethane        | 55.05  | 5.0 | 50      | 0             | 110  | 80-120        | 51.49         | 6.68  | 20        |      |
| Bromoform                   | 53.98  | 5.0 | 50      | 0             | 108  | 77.9-121      | 52.58         | 2.62  | 20        |      |
| Bromomethane                | 46.09  | 5.0 | 50      | 0             | 92.2 | 63.3-137      | 41.88         | 9.57  | 20        |      |
| Carbon disulfide            | 97.99  | 10  | 100     | 0             | 98   | 74.1-123      | 93.12         | 5.09  | 20        |      |
| Carbon tetrachloride        | 56.95  | 5.0 | 50      | 0             | 114  | 74.7-120      | 54.09         | 5.15  | 20        |      |
| Chlorobenzene               | 49.01  | 5.0 | 50      | 0             | 98   | 80-120        | 46.69         | 4.83  | 20        |      |
| Chloroethane                | 47.05  | 5.0 | 50      | 0             | 94.1 | 74.7-126      | 44.52         | 5.52  | 20        |      |
| Chloroform                  | 48.14  | 5.0 | 50      | 0             | 96.3 | 80-120        | 45.78         | 5.03  | 20        |      |
| Chloromethane               | 46.04  | 5.0 | 50      | 0             | 92.1 | 64.5-132      | 40.85         | 12    | 20        |      |
| cis-1,3-Dichloropropene     | 53.28  | 5.0 | 50      | 0             | 107  | 80-120        | 48.94         | 8.5   | 20        |      |
| Dibromochloromethane        | 55.11  | 5.0 | 50      | 0             | 110  | 80-120        | 54.37         | 1.34  | 20        |      |
| Ethylbenzene                | 49.65  | 5.0 | 50      | 0             | 99.3 | 80-120        | 49.2          | 0.907 | 20        |      |
| m,p-Xylene                  | 98.23  | 10  | 100     | 0             | 98.2 | 80-120        | 94.46         | 3.92  | 20        |      |
| Methylene chloride          | 47.3   | 10  | 50      | 0             | 94.6 | 76.2-120      | 44.86         | 5.28  | 20        |      |
| Styrene                     | 49.83  | 5.0 | 50      | 0             | 99.7 | 80-120        | 47.57         | 4.64  | 20        |      |
| Tetrachloroethene           | 51.56  | 5.0 | 50      | 0             | 103  | 68.5-130      | 50.07         | 2.93  | 20        |      |
| Toluene                     | 47.34  | 5.0 | 50      | 0             | 94.7 | 80-120        | 46.42         | 1.96  | 20        |      |
| trans-1,3-Dichloropropene   | 57.74  | 5.0 | 50      | 0             | 115  | 80-120        | 54.57         | 5.64  | 20        |      |
| Trichloroethene             | 50.79  | 5.0 | 50      | 0             | 102  | 78.9-120      | 48.1          | 5.45  | 20        |      |
| Vinyl acetate               | 111.7  | 10  | 100     | 0             | 112  | 62.4-133      | 109.8         | 1.77  | 20        |      |
| Vinyl chloride              | 48.71  | 2.0 | 50      | 0             | 97.4 | 72.7-128      | 44.2          | 9.72  | 20        |      |
| Xylenes, Total              | 149.3  | 15  | 150     | 0             | 99.6 | 80-120        | 141.7         | 5.24  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 45.1   | 5.0 | 50      | 0             | 90.2 | 71-126        | 46.4          | 2.85  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 46.07  | 5.0 | 50      | 0             | 92.1 | 74-125        | 46.41         | 0.74  | 20        |      |
| Surr: Dibromofluoromethane  | 45.83  | 5.0 | 50      | 0             | 91.7 | 73-126        | 45.63         | 0.456 | 20        |      |
| Surr: Toluene-d8            | 46.31  | 5.0 | 50      | 0             | 92.6 | 75-125        | 45.13         | 2.58  | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410185-01A | 0410185-02A | 0410185-03A |
| 0410185-04A | 0410185-05A |             |

ND - Not Detected at the Reporting Limit

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R - RPD outside accepted recovery limits

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U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23942 InstrumentID: VOA2

MBLK Sample ID: VBLKW-1019 Test Code: SW8260 Units: µg/L Analysis Date: 10/19/04 11:55

Client ID: Run ID: VOA2\_041019A SeqNo: 557558 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44.85  | 5.0 | 50      | 0             | 89.7 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 43.09  | 5.0 | 50      | 0             | 86.2 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 45.42  | 5.0 | 50      | 0             | 90.8 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 45.01  | 5.0 | 50      | 0             | 90   | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23942 InstrumentID: VOA2

LCS Sample ID: VLCSW-1019 Test Code: SW8260 Units: µg/L Analysis Date: 10/19/04 11:04

Client ID: Run ID: VOA2\_041019A SeqNo: 557557 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 48.59  | 5.0 | 50      | 0             | 97.2 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 47.08  | 5.0 | 50      | 0             | 94.2 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 47.71  | 5.0 | 50      | 0             | 95.4 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 47.54  | 5.0 | 50      | 0             | 95.1 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 50.03  | 5.0 | 50      | 0             | 100  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 47.82  | 5.0 | 50      | 0             | 95.6 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 102.7  | 10  | 100     | 0             | 103  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 100.6  | 10  | 100     | 0             | 101  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 104.9  | 10  | 100     | 0             | 105  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 102.3  | 10  | 100     | 0             | 102  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 101    | 10  | 100     | 0             | 101  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 48.57  | 5.0 | 50      | 0             | 97.1 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 48.38  | 5.0 | 50      | 0             | 96.8 | 80-120        | 0             |      |           |      |
| Bromoform                   | 48.82  | 5.0 | 50      | 0             | 97.6 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 48.86  | 5.0 | 50      | 0             | 97.7 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 96.66  | 10  | 100     | 0             | 96.7 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 49.37  | 5.0 | 50      | 0             | 98.7 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 47.61  | 5.0 | 50      | 0             | 95.2 | 80-120        | 0             |      |           |      |
| Chloroethane                | 48.02  | 5.0 | 50      | 0             | 96   | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 47.25  | 5.0 | 50      | 0             | 94.5 | 80-120        | 0             |      |           |      |
| Chloromethane               | 38.31  | 5.0 | 50      | 0             | 76.6 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 49.85  | 5.0 | 50      | 0             | 99.7 | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 48.09  | 5.0 | 50      | 0             | 96.2 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 50     | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 99.38  | 10  | 100     | 0             | 99.4 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 46.08  | 10  | 50      | 0             | 92.2 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.08  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 48.93  | 5.0 | 50      | 0             | 97.9 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 49.08  | 5.0 | 50      | 0             | 98.2 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 49.2   | 5.0 | 50      | 0             | 98.4 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 48.39  | 5.0 | 50      | 0             | 96.8 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 109.1  | 10  | 100     | 0             | 109  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 48.08  | 2.0 | 50      | 0             | 96.2 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 149.2  | 15  | 150     | 0             | 99.5 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 40.83  | 5.0 | 50      | 0             | 81.7 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 45.39  | 5.0 | 50      | 0             | 90.8 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 41.73  | 5.0 | 50      | 0             | 83.5 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 44.98  | 5.0 | 50      | 0             | 90   | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: **R23942** InstrumentID: **VOA2**

MS Sample ID: **0410190-01AMS** Test Code: **SW8260** Units: **µg/L** Analysis Date: **10/19/04 14:28**

Client ID: Run ID: **VOA2\_041019A** SeqNo: **557564** Prep Date: DF: **25**

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 1208   | 120 | 1250    | 0             | 96.6 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 1267   | 120 | 1250    | 0             | 101  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 1212   | 120 | 1250    | 0             | 97   | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 1202   | 120 | 1250    | 0             | 96.1 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 1242   | 120 | 1250    | 0             | 99.4 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 1255   | 120 | 1250    | 0             | 100  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 2846   | 250 | 2500    | 0             | 114  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 2602   | 250 | 2500    | 0             | 104  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 2702   | 250 | 2500    | 0             | 108  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 2662   | 250 | 2500    | 0             | 106  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 2894   | 250 | 2500    | 0             | 116  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 1301   | 120 | 1250    | 51.18         | 100  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 1260   | 120 | 1250    | 0             | 101  | 80-120        | 0             |      |           |      |
| Bromoform                   | 1253   | 120 | 1250    | 0             | 100  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 1147   | 120 | 1250    | 0             | 91.8 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 2433   | 250 | 2500    | 0             | 97.3 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 1316   | 120 | 1250    | 67.57         | 99.9 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 1494   | 120 | 1250    | 297           | 95.8 | 80-120        | 0             |      |           |      |
| Chloroethane                | 1215   | 120 | 1250    | 0             | 97.2 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 1736   | 120 | 1250    | 587.6         | 91.9 | 80-120        | 0             |      |           |      |
| Chloromethane               | 1022   | 120 | 1250    | 0             | 81.8 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 1265   | 120 | 1250    | 0             | 101  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 1230   | 120 | 1250    | 0             | 98.4 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 1256   | 120 | 1250    | 0             | 101  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 2508   | 250 | 2500    | 21.56         | 99.4 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 1225   | 250 | 1250    | 81.35         | 91.5 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 1258   | 120 | 1250    | 0             | 101  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 1228   | 120 | 1250    | 0             | 98.2 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 1250   | 120 | 1250    | 21.3          | 98.3 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 1279   | 120 | 1250    | 0             | 102  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 1232   | 120 | 1250    | 0             | 98.5 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 2817   | 250 | 2500    | 0             | 113  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 1180   | 50  | 1250    | 0             | 94.4 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 3780   | 380 | 3750    | 21.56         | 100  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 1027   | 120 | 1250    | 0             | 82.2 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 1117   | 120 | 1250    | 0             | 89.4 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 1068   | 120 | 1250    | 0             | 85.4 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 1105   | 120 | 1250    | 0             | 88.4 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23942 InstrumentID: VOA2

MSD Sample ID: 0410190-01AMSD Test Code: SW8260 Units: µg/L Analysis Date: 10/19/04 14:53

Client ID: Run ID: VOA2\_041019A SeqNo: 557565 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 1164   | 120 | 1250    | 0             | 93.1 | 75.2-120      | 1208          | 3.73   | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 1229   | 120 | 1250    | 0             | 98.3 | 72.4-121      | 1267          | 3      | 20        |      |
| 1,1,2-Trichloroethane       | 1244   | 120 | 1250    | 0             | 99.5 | 80-120        | 1212          | 2.59   | 20        |      |
| 1,1-Dichloroethane          | 1190   | 120 | 1250    | 0             | 95.2 | 76.9-120      | 1202          | 0.978  | 20        |      |
| 1,1-Dichloroethene          | 1211   | 120 | 1250    | 0             | 96.9 | 72.6-123      | 1242          | 2.52   | 20        |      |
| 1,2-Dichloroethane          | 1252   | 120 | 1250    | 0             | 100  | 80-120        | 1255          | 0.269  | 20        |      |
| 2-Butanone                  | 2967   | 250 | 2500    | 0             | 119  | 69-131        | 2846          | 4.17   | 20        |      |
| 2-Chloroethyl vinyl ether   | 2752   | 250 | 2500    | 0             | 110  | 60-135        | 2602          | 5.59   | 20        |      |
| 2-Hexanone                  | 2891   | 250 | 2500    | 0             | 116  | 55.6-126      | 2702          | 6.77   | 20        |      |
| 4-Methyl-2-pentanone        | 2817   | 250 | 2500    | 0             | 113  | 67.4-121      | 2662          | 5.65   | 20        |      |
| Acetone                     | 3038   | 250 | 2500    | 0             | 122  | 64.4-140      | 2894          | 4.87   | 20        |      |
| Benzene                     | 1269   | 120 | 1250    | 51.18         | 97.5 | 80-120        | 1301          | 2.48   | 20        |      |
| Bromodichloromethane        | 1245   | 120 | 1250    | 0             | 99.6 | 80-120        | 1260          | 1.18   | 20        |      |
| Bromoform                   | 1279   | 120 | 1250    | 0             | 102  | 77.9-121      | 1253          | 2.03   | 20        |      |
| Bromomethane                | 1210   | 120 | 1250    | 0             | 96.8 | 63.3-137      | 1147          | 5.32   | 20        |      |
| Carbon disulfide            | 2389   | 250 | 2500    | 0             | 95.5 | 74.1-123      | 2433          | 1.84   | 20        |      |
| Carbon tetrachloride        | 1269   | 120 | 1250    | 67.57         | 96.1 | 74.7-120      | 1316          | 3.62   | 20        |      |
| Chlorobenzene               | 1485   | 120 | 1250    | 297           | 95.1 | 80-120        | 1494          | 0.624  | 20        |      |
| Chloroethane                | 1182   | 120 | 1250    | 0             | 94.6 | 74.7-126      | 1215          | 2.72   | 20        |      |
| Chloroform                  | 1740   | 120 | 1250    | 587.6         | 92.2 | 80-120        | 1736          | 0.205  | 20        |      |
| Chloromethane               | 1015   | 120 | 1250    | 0             | 81.2 | 64.5-132      | 1022          | 0.751  | 20        |      |
| cis-1,3-Dichloropropene     | 1266   | 120 | 1250    | 0             | 101  | 80-120        | 1265          | 0.12   | 20        |      |
| Dibromochloromethane        | 1247   | 120 | 1250    | 0             | 99.8 | 80-120        | 1230          | 1.4    | 20        |      |
| Ethylbenzene                | 1238   | 120 | 1250    | 0             | 99   | 80-120        | 1256          | 1.48   | 20        |      |
| m,p-Xylene                  | 2504   | 250 | 2500    | 21.56         | 99.3 | 80-120        | 2508          | 0.126  | 20        |      |
| Methylene chloride          | 1245   | 250 | 1250    | 81.35         | 93.1 | 76.2-120      | 1225          | 1.67   | 20        |      |
| Styrene                     | 1261   | 120 | 1250    | 0             | 101  | 80-120        | 1258          | 0.227  | 20        |      |
| Tetrachloroethene           | 1198   | 120 | 1250    | 0             | 95.9 | 68.5-130      | 1228          | 2.44   | 20        |      |
| Toluene                     | 1217   | 120 | 1250    | 21.3          | 95.7 | 80-120        | 1250          | 2.66   | 20        |      |
| trans-1,3-Dichloropropene   | 1282   | 120 | 1250    | 0             | 103  | 80-120        | 1279          | 0.278  | 20        |      |
| Trichloroethene             | 1202   | 120 | 1250    | 0             | 96.2 | 78.9-120      | 1232          | 2.46   | 20        |      |
| Vinyl acetate               | 2688   | 250 | 2500    | 0             | 108  | 62.4-133      | 2817          | 4.69   | 20        |      |
| Vinyl chloride              | 1167   | 50  | 1250    | 0             | 93.3 | 72.7-128      | 1180          | 1.11   | 20        |      |
| Xylenes, Total              | 3766   | 380 | 3750    | 21.56         | 99.9 | 80-120        | 3780          | 0.371  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 1051   | 120 | 1250    | 0             | 84.1 | 71-126        | 1027          | 2.28   | 20        |      |
| Surr: 4-Bromofluorobenzene  | 1111   | 120 | 1250    | 0             | 88.9 | 74-125        | 1117          | 0.525  | 20        |      |
| Surr: Dibromofluoromethane  | 1072   | 120 | 1250    | 0             | 85.8 | 73-126        | 1068          | 0.362  | 20        |      |
| Surr: Toluene-d8            | 1105   | 120 | 1250    | 0             | 88.4 | 75-125        | 1105          | 0.0369 | 20        |      |

The following samples were analyzed in this batch:

0410185-04A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23904 InstrumentID: IC201

|                                  |                          |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|--------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| MBLK                             | Sample ID: WBLKW1-101604 |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/16/04 13:20 |           |      |
| Client ID:                       | Run ID: IC201_041016A    |      |         | SeqNo: 556485   |      | Prep Date:    |               | DF: 1                         |           |      |
|                                  |                          |      |         |                 |      |               |               |                               |           |      |
| Analyte                          | Result                   | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | ND                       | 0.50 |         |                 |      |               |               |                               |           |      |
| Fluoride                         | ND                       | 0.10 |         |                 |      |               |               |                               |           |      |
| Sulfate                          | ND                       | 1.0  |         |                 |      |               |               |                               |           |      |
| Nitrate/Nitrite (as N)           | ND                       | 0.10 |         |                 |      |               |               |                               |           |      |
| Surr: Dichloroacetic acid (surr) | 5.15                     | 0.10 | 5       | 0               | 103  | 80-120        | 0             |                               |           |      |

|                                  |                          |      |               |                 |            |               |               |                               |           |      |
|----------------------------------|--------------------------|------|---------------|-----------------|------------|---------------|---------------|-------------------------------|-----------|------|
| LCS                              | Sample ID: WLCSW1-101604 |      |               | Test Code: E300 |            | Units: mg/L   |               | Analysis Date: 10/16/04 13:48 |           |      |
| Client ID:                       | Run ID: IC201_041016A    |      | SeqNo: 556486 |                 | Prep Date: |               | DF: 1         |                               |           |      |
| Analyte                          | Result                   | PQL  | SPK Val       | SPK Ref Value   | %REC       | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 8.99                     | 0.50 | 10            | 0               | 89.9       | 80-120        | 0             |                               |           |      |
| Fluoride                         | 1.92                     | 0.10 | 2             | 0               | 96         | 80-120        | 0             |                               |           |      |
| Sulfate                          | 9.87                     | 1.0  | 10            | 0               | 98.7       | 80-120        | 0             |                               |           |      |
| Nitrate/Nitrite (as N)           | 3.9                      | 0.10 | 0             | 0               | 0          | 80-120        | 0             |                               |           |      |
| Surr: Dichloroacetic acid (surr) | 5.28                     | 0.10 | 5             | 0               | 106        | 80-120        | 0             |                               |           |      |

|                                  |                          |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|--------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| LCSD                             | Sample ID: WLCSDW1-10160 |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/16/04 14:17 |           |      |
| Client ID:                       | Run ID: IC201_041016A    |      |         | SeqNo: 556487   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                   | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 8.94                     | 0.50 | 10      | 0               | 89.4 | 80-120        | 8.99          | 0.558                         | 20        |      |
| Fluoride                         | 1.87                     | 0.10 | 2       | 0               | 93.5 | 80-120        | 1.92          | 2.64                          | 20        |      |
| Sulfate                          | 9.71                     | 1.0  | 10      | 0               | 97.1 | 80-120        | 9.87          | 1.63                          | 20        |      |
| Nitrate/Nitrite (as N)           | 3.94                     | 0.10 | 0       | 0               | 0    | 80-120        | 3.9           | 1.02                          | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.59                     | 0.10 | 5       | 0               | 112  | 80-120        | 5.28          | 5.7                           | 20        |      |

|                                  |                          |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|--------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| MS                               | Sample ID: 0410181-03CMS |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 10/16/04 22:50 |           |      |
| Client ID:                       | Run ID: IC201_041016A    |      |         | SeqNo: 556504   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                   | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 233.6                    | 0.50 | 10      | 221.5           | 121  | 75-125        | 0             |                               |           | EO   |
| Fluoride                         | 3.19                     | 0.10 | 2       | 1.13            | 103  | 75-125        | 0             |                               |           |      |
| Sulfate                          | 119                      | 1.0  | 10      | 107.1           | 120  | 75-125        | 0             |                               |           | EO   |
| Nitrate/Nitrite (as N)           | 6.92                     | 0.10 | 4       | 2.83            | 102  | 75-125        | 0             |                               |           |      |
| Surr: Dichloroacetic acid (surr) | 5.25                     | 0.10 | 5       | 0               | 105  | 80-120        | 0             |                               |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23904 InstrumentID: IC201

MSD Sample ID: 0410181-03CMSD Test Code: E300 Units: mg/L Analysis Date: 10/16/04 23:19

Client ID: Run ID: IC201\_041016A SeqNo: 556505 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 232.6  | 0.50 | 10      | 221.5         | 111  | 75-125        | 233.6         | 0.425  | 20        | EO   |
| Fluoride                         | 3.13   | 0.10 | 2       | 1.13          | 100  | 75-125        | 3.19          | 1.9    | 20        |      |
| Sulfate                          | 119    | 1.0  | 10      | 107.1         | 119  | 75-125        | 119           | 0.0588 | 20        | EO   |
| Nitrate/Nitrite (as N)           | 6.93   | 0.10 | 4       | 2.83          | 102  | 75-125        | 6.92          | 0.144  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.17   | 0.10 | 5       | 0             | 103  | 80-120        | 5.25          | 1.54   | 20        |      |

DUP Sample ID: 0410181-03CDUP Test Code: E300 Units: mg/L Analysis Date: 10/16/04 17:08

Client ID: Run ID: IC201\_041016A SeqNo: 556493 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Fluoride                         | 1.07   | 0.10 | 0       | 0             | 0    | 0-0           | 1.13          | 5.45 | 20        |      |
| Nitrate/Nitrite (as N)           | 2.83   | 0.10 | 0       | 0             | 0    | 0-0           | 2.83          | 0    | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.58   | 0.10 | 5       | 0             | 112  | 80-120        | 5.52          | 1.08 | 20        |      |

DUP Sample ID: 0410181-03CDUP Test Code: E300 Units: mg/L Analysis Date: 10/17/04 0:16

Client ID: Run ID: IC201\_041016A SeqNo: 556507 Prep Date: DF: 5

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 190    | 2.5  | 0       | 0             | 0    | 0-0           | 189.9         | 0.079  | 20        |      |
| Fluoride                         | 0.85   | 0.50 | 0       | 0             | 0    | 0-0           | 0.9           | 5.71   | 20        |      |
| Sulfate                          | 87.95  | 5.0  | 0       | 0             | 0    | 0-0           | 88            | 0.0568 | 20        |      |
| Nitrate/Nitrite (as N)           | 2.65   | 0.50 | 0       | 0             | 0    | 0-0           | 2.65          | 0      | 20        |      |
| Surr: Dichloroacetic acid (surr) | 28.15  | 0.50 | 25      | 0             | 113  | 80-120        | 28.05         | 0.356  | 20        |      |

DUP Sample ID: 0410185-03BDUP Test Code: E300 Units: mg/L Analysis Date: 10/17/04 14:59

Client ID: KWB-10 Run ID: IC201\_041016A SeqNo: 556518 Prep Date: DF: 10

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 150.8  | 5.0 | 0       | 0             | 0    | 0-0           | 150.6         | 0.133 | 20        |      |
| Fluoride                         | 0.6    | 1.0 | 0       | 0             | 0    | 0-0           | 0.5           | 0     | 20        | J    |
| Sulfate                          | 6      | 10  | 0       | 0             | 0    | 0-0           | 6             | 0     | 20        | J    |
| Nitrate/Nitrite (as N)           | ND     | 1.0 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 54.7   | 1.0 | 50      | 0             | 109  | 80-120        | 56.5          | 3.24  | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410185-01B | 0410185-02B | 0410185-03B |
| 0410185-04B | 0410185-05B |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23926 InstrumentID: IC201

MBLK Sample ID: WBLKW1-101804 Test Code: E300 Units: mg/L Analysis Date: 10/18/04 18:19

Client ID: Run ID: IC201\_041018A SeqNo: 557120 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.66   | 0.10 | 5       | 0             | 113  | 80-120        | 0             |      |           |      |

LCS Sample ID: WLCSW1-101804 Test Code: E300 Units: mg/L Analysis Date: 10/18/04 18:48

Client ID: Run ID: IC201\_041018A SeqNo: 557121 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.16   | 0.50 | 10      | 0             | 91.6 | 80-120        | 0             |      |           |      |
| Fluoride                         | 2.08   | 0.10 | 2       | 0             | 104  | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.67   | 1.0  | 10      | 0             | 96.7 | 80-120        | 0             |      |           |      |
| Nitrate/Nitrite (as N)           | 3.85   | 0.10 | 0       | 0             | 0    | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.08   | 0.10 | 5       | 0             | 102  | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-10180 Test Code: E300 Units: mg/L Analysis Date: 10/18/04 19:16

Client ID: Run ID: IC201\_041018A SeqNo: 557122 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 9.29   | 0.50 | 10      | 0             | 92.9 | 80-120        | 9.16          | 1.41  | 20        |      |
| Fluoride                         | 2.03   | 0.10 | 2       | 0             | 101  | 80-120        | 2.08          | 2.43  | 20        |      |
| Sulfate                          | 9.72   | 1.0  | 10      | 0             | 97.2 | 80-120        | 9.67          | 0.516 | 20        |      |
| Nitrate/Nitrite (as N)           | 3.85   | 0.10 | 0       | 0             | 0    | 80-120        | 3.85          | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.08   | 0.10 | 5       | 0             | 102  | 80-120        | 5.08          | 0     | 20        |      |

MS Sample ID: 0410181-07CMS Test Code: E300 Units: mg/L Analysis Date: 10/18/04 20:42

Client ID: Run ID: IC201\_041018A SeqNo: 557125 Prep Date: DF: 10

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 309.6  | 5.0 | 100     | 189           | 121  | 75-125        | 0             |      |           |      |
| Fluoride                         | 20.5   | 1.0 | 20      | 0.6           | 99.5 | 75-125        | 0             |      |           |      |
| Sulfate                          | 371.2  | 10  | 100     | 255.7         | 116  | 75-125        | 0             |      |           |      |
| Nitrate/Nitrite (as N)           | 42.5   | 1.0 | 40      | 2.8           | 99.2 | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 52.7   | 1.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: R23926 InstrumentID: IC201

MSD Sample ID: 0410181-07CMSD Test Code: E300 Units: mg/L Analysis Date: 10/18/04 21:11

Client ID: Run ID: IC201\_041018A SeqNo: 557126 Prep Date: DF: 10

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 304.8  | 5.0 | 100     | 189           | 116  | 75-125        | 309.6         | 1.56  | 20        |      |
| Fluoride                         | 19.3   | 1.0 | 20      | 0.6           | 93.5 | 75-125        | 20.5          | 6.03  | 20        |      |
| Sulfate                          | 372.6  | 10  | 100     | 255.7         | 117  | 75-125        | 371.2         | 0.376 | 20        |      |
| Nitrate/Nitrite (as N)           | 41.3   | 1.0 | 40      | 2.8           | 96.2 | 75-125        | 42.5          | 2.86  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 55.8   | 1.0 | 50      | 0             | 112  | 80-120        | 52.7          | 5.71  | 20        |      |

DUP Sample ID: 0410181-07CDUP Test Code: E300 Units: mg/L Analysis Date: 10/18/04 20:14

Client ID: Run ID: IC201\_041018A SeqNo: 557124 Prep Date: DF: 10

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 188.4  | 5.0 | 0       | 0             | 0    | 0-0           | 189           | 0.318 | 20        |      |
| Fluoride                         | 0.6    | 1.0 | 0       | 0             | 0    | 0-0           | 0.6           | 0     | 20        | J    |
| Sulfate                          | 254.3  | 10  | 0       | 0             | 0    | 0-0           | 255.7         | 0.549 | 20        |      |
| Nitrate/Nitrite (as N)           | 2.8    | 1.0 | 0       | 0             | 0    | 0-0           | 2.8           | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 55.2   | 1.0 | 50      | 0             | 110  | 80-120        | 57.7          | 4.43  | 20        |      |

DUP Sample ID: 0410139-06EDUP Test Code: E300 Units: mg/L Analysis Date: 10/19/04 14:17

Client ID: Run ID: IC201\_041018A SeqNo: 557145 Prep Date: DF: 50

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 937.5  | 25  | 0       | 0             | 0    | 0-0           | 938           | 0.0533 | 20        |      |
| Fluoride                         | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0      | 20        |      |
| Sulfate                          | 589.5  | 50  | 0       | 0             | 0    | 0-0           | 589.5         | 0      | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0      | 20        |      |
| Surr: Dichloroacetic acid (surr) | 288.5  | 5.0 | 250     | 0             | 115  | 80-120        | 261           | 10     | 20        |      |

DUP Sample ID: 0410137-14BDUP Test Code: E300 Units: mg/L Analysis Date: 10/19/04 3:50

Client ID: Run ID: IC201\_041018A SeqNo: 557148 Prep Date: DF: 50

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 1104   | 25  | 0       | 0             | 0    | 0-0           | 1106          | 0.136 | 20        |      |
| Fluoride                         | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Sulfate                          | 1764   | 50  | 0       | 0             | 0    | 0-0           | 1771          | 0.424 | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 286    | 5.0 | 250     | 0             | 114  | 80-120        | 280           | 2.12  | 20        |      |

The following samples were analyzed in this batch:

0410185-01B 0410185-02B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
Work Order: 0410185  
Project: Annual

## QC BATCH REPORT

Batch ID: R24025 InstrumentID: UV-2101PC

MBLK Sample ID: WBLKW1-102004 Test Code: E335.3 Units: mg/L Analysis Date: 10/22/04 0:00

Client ID: Run ID: UV-2101PC\_041022B SeqNo: 559479 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-102004 Test Code: E335.3 Units: mg/L Analysis Date: 10/22/04 0:00

Client ID: Run ID: UV-2101PC\_041022B SeqNo: 559480 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.19   | 0.020 | 0.2     | 0             | 95   | 80-120        | 0             |      |           |      |

MS Sample ID: 0410197-02BMS Test Code: E335.3 Units: mg/L Analysis Date: 10/22/04 0:00

Client ID: Run ID: UV-2101PC\_041022B SeqNo: 559491 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1912 | 0.020 | 0.2     | 0.002         | 94.6 | 75-125        | 0             |      |           |      |

MSD Sample ID: 0410197-02BMSD Test Code: E335.3 Units: mg/L Analysis Date: 10/22/04 0:00

Client ID: Run ID: UV-2101PC\_041022B SeqNo: 559492 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1978 | 0.020 | 0.2     | 0.002         | 97.9 | 75-125        | 0.1912        | 3.39 | 25        |      |

DUP Sample ID: 0410197-02BDUP Test Code: E335.3 Units: mg/L Analysis Date: 10/22/04 0:00

Client ID: Run ID: UV-2101PC\_041022B SeqNo: 559490 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 | 0       | 0             | 0    | 0-0           | 0.002         | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410185-01D | 0410185-02D | 0410185-03D |
| 0410185-04D | 0410185-05D |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410185  
 Project: Annual

## QC BATCH REPORT

Batch ID: R24091 InstrumentID: WetChem

MBLK Sample ID: WBLKW1-102604 Test Code: E310.1 Units: mg/L Analysis Date: 10/26/04 0:00

Client ID: Run ID: WETCHEM\_041026C SeqNo: 561251 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSSW1-10260 Test Code: E310.1 Units: mg/L Analysis Date: 10/26/04 0:00

Client ID: Run ID: WETCHEM\_041026C SeqNo: 561252 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 1000   | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    |           |      |
| Alkalinity, Total (As CaCO3)       | 1000   | 5.0 | 1000    | 0             | 100  | 80-120        | 0             | 0    |           |      |

DUP Sample ID: 0410192-04BDUP Test Code: E310.1 Units: mg/L Analysis Date: 10/26/04 0:00

Client ID: Run ID: WETCHEM\_041026C SeqNo: 561272 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 40.01  | 5.0 | 0       | 0             | 0    | 0-0           | 40.01         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | 300.1  | 5.0 | 0       | 0             | 0    | 0-0           | 300.1         | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 340.1  | 5.0 | 0       | 0             | 0    | 0-0           | 340.1         | 0    | 20        |      |

DUP Sample ID: 0410192-19BDUP Test Code: E310.1 Units: mg/L Analysis Date: 10/26/04 0:00

Client ID: Run ID: WETCHEM\_041026C SeqNo: 561273 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | 2401   | 5.0 | 0       | 0             | 0    | 0-0           | 2401          | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 2401   | 5.0 | 0       | 0             | 0    | 0-0           | 2401          | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410185-01B | 0410185-02B | 0410185-03B |
| 0410185-04B | 0410185-05B |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

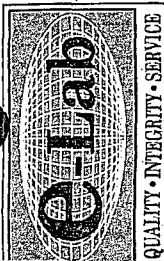
R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



e-Lab, Inc.  
10450 Stancil Rd. Suite 210  
Houston, Texas 77099  
Tel. 281.530.5656  
Fax. 281.530.5887

# Chain of Custody Form

Page 1 of 1

| CUSTOMER INFORMATION            |                    |          |      | PROJECT INFORMATION  |                |                           |   | PARAMETER/METHOD REQUEST FOR ANALYSIS |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
|---------------------------------|--------------------|----------|------|----------------------|----------------|---------------------------|---|---------------------------------------|---|---|---|--------------|---|---|---|------|--|---------------|--|-------------------|--|--|--|---------------------------------------------------|--|
| Purchase Order:                 |                    |          |      | Project Name: Annual |                |                           |   | A Annual                              |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| Work Order:                     |                    |          |      | Project Number:      |                |                           |   | B                                     |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| Company Name: Navajo            |                    |          |      | Bill To Company:     |                |                           |   | C                                     |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| Send Report To: Jeff Byrd       |                    |          |      | Invoice Attn: Some   |                |                           |   | D                                     |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| Address:                        |                    |          |      | Address:             |                |                           |   | E                                     |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| City/State/Zip: Artesia, NM     |                    |          |      | City/State/Zip:      |                |                           |   | F                                     |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| Phone:                          |                    |          |      | Phone:               |                |                           |   | G                                     |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| Fax:                            |                    |          |      | Fax:                 |                |                           |   | H                                     |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| E-mail:                         |                    |          |      | E-mail:              |                |                           |   | I                                     |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
|                                 |                    |          |      |                      |                |                           |   | J                                     |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| No.                             | Sample Description | Date     | Time | Matrix               | No. of Bottles | A                         | B | C                                     | D | E | F | G            | H | I | J | HOLD |  |               |  |                   |  |  |  |                                                   |  |
| 1                               | KWB-1A             | 10/15/04 | 0910 | L                    | 8              | X                         |   |                                       |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| 2                               | KWB-1C             | 10/15/04 | 1000 | "                    | "              | X                         |   |                                       |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| 3                               | KWB-10             | 10/15/04 | 1015 | "                    | "              | X                         |   |                                       |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| 4                               | MW-58              | 10/15/04 | 1030 | "                    | "              | X                         |   |                                       |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| 5                               | MW-57              | 10/15/04 | 1430 | "                    | "              | X                         |   |                                       |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| 6                               |                    |          |      |                      |                |                           |   |                                       |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| 7                               |                    |          |      |                      |                |                           |   |                                       |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| 8                               |                    |          |      |                      |                |                           |   |                                       |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| 9                               |                    |          |      |                      |                |                           |   |                                       |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| 10                              |                    |          |      |                      |                |                           |   |                                       |   |   |   |              |   |   |   |      |  |               |  |                   |  |  |  |                                                   |  |
| Sampler(s): Please Print & Sign |                    |          |      |                      |                | Shipment Method:          |   |                                       |   |   |   | Airbill No.: |   |   |   |      |  | Required TAT: |  | Results Due Date: |  |  |  |                                                   |  |
| Relinquished By: J Byrd         |                    |          |      |                      |                | Received By:              |   |                                       |   |   |   | Date:        |   |   |   |      |  | Time:         |  |                   |  |  |  | Notes: 2 Coolers                                  |  |
| Relinquished By:                |                    |          |      |                      |                | Received By:              |   |                                       |   |   |   | Date:        |   |   |   |      |  | Time:         |  |                   |  |  |  |                                                   |  |
| Relinquished By:                |                    |          |      |                      |                | Received By (Laboratory): |   |                                       |   |   |   | Date:        |   |   |   |      |  | Time:         |  |                   |  |  |  | QC Package: (Check Box Below)                     |  |
|                                 |                    |          |      |                      |                | 10/15                     |   |                                       |   |   |   | 1615         |   |   |   |      |  |               |  |                   |  |  |  | <input type="checkbox"/> Level IV - SW846 Methods |  |
|                                 |                    |          |      |                      |                | Date:                     |   |                                       |   |   |   | Time:        |   |   |   |      |  |               |  |                   |  |  |  | <input type="checkbox"/> Standard QC              |  |
|                                 |                    |          |      |                      |                | Date:                     |   |                                       |   |   |   | Time:        |   |   |   |      |  |               |  |                   |  |  |  | <input type="checkbox"/> Standard QC + Raw Data   |  |
|                                 |                    |          |      |                      |                | Date:                     |   |                                       |   |   |   | Time:        |   |   |   |      |  |               |  |                   |  |  |  | <input type="checkbox"/> Level IV - CLP SOW       |  |

e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 10/16/2004 8:40:00 AM

Work Order Number 0410185

Received by: RPM

Checklist completed by

RICHARD SANCHEZ 10-16-04  
Signature Date

Reviewed by

JP 10/18/04  
Initials Date

Matrix:

Water

Carrier name FedEx

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

Temperature(s)/Thermometer(s):

3.8c, 4.2c

002

Water - VOA vials have zero headspace?

Yes ☒

No ☐

No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

N/A ☐

Adjusted? NO

Checked by PS

Login Notes: One trip blank not on COC; logged in without analysis.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_

Date contacted: \_\_\_\_\_

Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_

Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_



**e-Lab Analytical, Inc.**

10450 Standcliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

October 22, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: Annual Sampling

Work Order : **0410086**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 5 samples on 10/8/2004 9:30:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 37.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

*Jeffrey L Croston*

Electronically approved by: John Robert Paddison

Jeffrey L Croston

**e-Lab Analytical, Inc.**

**Date:** October 22, 2004

**CLIENT:** Navajo Refining Company

**Project:** Annual Sampling

**Work Order:** 0410086

## Work Order Sample Summary

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0410086-01           | MW-18                   | Water         |                   | 10/6/2004 10:00        | 10/8/2004 09:30      | <input type="checkbox"/> |
| 0410086-02           | MW-45                   | Water         |                   | 10/6/2004 10:30        | 10/8/2004 09:30      | <input type="checkbox"/> |
| 0410086-03           | MW-29                   | Water         |                   | 10/6/2004 09:20        | 10/8/2004 09:30      | <input type="checkbox"/> |
| 0410086-04           | RW-13                   | Water         |                   | 10/7/2004 09:50        | 10/8/2004 09:30      | <input type="checkbox"/> |
| 0410086-05           | Trip Blank              | Water         |                   | 10/6/2004              | 10/8/2004 09:30      | <input type="checkbox"/> |

**e-Lab Analytical, Inc.**

**Date:** *October 22, 2004*

**CLIENT:** Navajo Refining Company

**Project:** Annual Sampling

**Work Order:** 0410086

**Case Narrative**

Batch 10656 Metals MS/MSD was an unrelated sample.

Batch R23752 Volatiles (sample MW-18) MS/MSD recoveries were outside of control limits for 2-Chloroethyl vinyl ether (0 % and 0%). 2-Chloroethyl vinyl ether decomposes rapidly once introduced into a acidic matrix.

Batch R23712 Anions (sample MW-18) MS/MSD recoveries were outside of control limits for Chloride (77.7% and 72.7% was O flagged) and Sulfate (- and - was O and E flagged).

**e-Lab Analytical, Inc.**

Date: October 22, 2004

**CLIENT:** Navajo Refining Company

**Client Sample ID:** MW-18

**Work Order:** 0410086

**Collection Date:** 10/6/2004 10:00:00 AM

**Project:** Annual Sampling

**Lab ID:** 0410086-01

**Matrix:** WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|---------------------------------------|---------|--------------|------|-------|-----------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                        |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 10/19/2004 2:24:40 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                        |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Barium                                | 0.0120  | 0.00500      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Boron                                 | 0.498   | 0.200        |      | mg/L  | 10              | 10/13/2004 10:57:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Calcium                               | 349     | 25.0         |      | mg/L  | 50              | 10/13/2004 10:39:00 PM |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Copper                                | 0.00370 | 0.00200      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Iron                                  | 1.34    | 0.200        |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 10/15/2004 8:48:00 PM  |
| Magnesium                             | 191     | 10.0         |      | mg/L  | 50              | 10/13/2004 10:39:00 PM |
| Manganese                             | 0.113   | 0.0500       |      | mg/L  | 10              | 10/13/2004 10:57:00 PM |
| Molybdenum                            | 0.0131  | 0.00500      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Nickel                                | 0.00957 | 0.00500      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Potassium                             | 1.16    | 0.200        |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Selenium                              | 0.00616 | 0.00500      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Sodium                                | 74.9    | 2.00         |      | mg/L  | 10              | 10/13/2004 10:57:00 PM |
| Vanadium                              | 0.0169  | 0.00500      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| Zinc                                  | 0.00971 | 0.00500      |      | mg/L  | 1               | 10/14/2004 12:09:00 AM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                        |
| 1,2,4-Trichlorobenzene                | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |
| 2-Methylnaphthalene                   | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |
| 2-Methylphenol                        | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |
| 2-Nitroaniline                        | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |
| 2-Nitrophenol                         | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |
| 3-Nitroaniline                        | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |
| 4-Methylphenol                        | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |
| 4-Nitroaniline                        | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |
| 4-Nitrophenol                         | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |
| Acenaphthene                          | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |
| Acenaphthylene                        | ND      | 11           |      | µg/L  | 1               | 10/18/2004 1:50:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

\* - Value exceeds Maximum Contaminant Level

H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: October 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410086  
**Project:** Annual Sampling  
**Lab ID:** 0410086-01

**Client Sample ID:** MW-18  
**Collection Date:** 10/6/2004 10:00:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units         | Dilution Factor | Date Analyzed          |
|----------------------------|--------|--------------|------|---------------|-----------------|------------------------|
| Aniline                    | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Anthracene                 | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Benz(a)anthracene          | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Benzidine                  | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Hexachloroethane           | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Indeno(1,2,3-cd)pyrene     | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Isophorone                 | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| N-Nitrosodi-n-propylamine  | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| N-Nitrosodimethylamine     | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| N-Nitrosodiphenylamine     | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Naphthalene                | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Nitrobenzene               | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Pentachlorophenol          | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Phenanthrene               | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Phenol                     | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Pyrene                     | ND     | 11           |      | µg/L          | 1               | 10/18/2004 1:50:00 PM  |
| Surr: 2,4,6-Tribromophenol | 94.1   | 39-153       |      | %REC          | 1               | 10/18/2004 1:50:00 PM  |
| Surr: 2-Fluorobiphenyl     | 86.5   | 40-147       |      | %REC          | 1               | 10/18/2004 1:50:00 PM  |
| Surr: 2-Fluorophenol       | 42.8   | 21-110       |      | %REC          | 1               | 10/18/2004 1:50:00 PM  |
| Surr: 4-Terphenyl-d14      | 88.6   | 39-141       |      | %REC          | 1               | 10/18/2004 1:50:00 PM  |
| Surr: Nitrobenzene-d5      | 91.4   | 37-140       |      | %REC          | 1               | 10/18/2004 1:50:00 PM  |
| Surr: Phenol-d6            | 27.8   | 11-100       |      | %REC          | 1               | 10/18/2004 1:50:00 PM  |
| <b>VOLATILES BY GC/MS</b>  |        |              |      | <b>SW8260</b> |                 | <b>Analyst: PC</b>     |
| 1,1,1-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0          |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0          |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| 2-Butanone                 | ND     | 10           |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10           |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| 2-Hexanone                 | ND     | 10           |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10           |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| Acetone                    | ND     | 10           |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| Benzene                    | ND     | 5.0          |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| Bromodichloromethane       | ND     | 5.0          |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| Bromoform                  | ND     | 5.0          |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| Bromomethane               | ND     | 5.0          |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| Carbon disulfide           | ND     | 10           |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |
| Carbontetrachloride        | ND     | 5.0          |      | µg/L          | 1               | 10/11/2004 12:53:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: October 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410086  
**Project:** Annual Sampling  
**Lab ID:** 0410086-01

**Client Sample ID:** MW-18  
**Collection Date:** 10/6/2004 10:00:00 AM  
**Matrix:** WATER

| Analyses                                        | Result | Report Limit | Qual | Units         | Dilution Factor     | Date Analyzed          |
|-------------------------------------------------|--------|--------------|------|---------------|---------------------|------------------------|
| Chlorobenzene                                   | ND     | 5.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Chloroethane                                    | ND     | 5.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Chloroform                                      | ND     | 5.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Chloromethane                                   | ND     | 5.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| cis-1,3-Dichloropropene                         | ND     | 5.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Dibromochloromethane                            | ND     | 5.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Ethylbenzene                                    | ND     | 5.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| m,p-Xylene                                      | ND     | 10           |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Methylene chloride                              | ND     | 10           |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Styrene                                         | ND     | 5.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Tetrachloroethene                               | ND     | 5.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Toluene                                         | ND     | 5.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| trans-1,3-Dichloropropene                       | ND     | 5.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Trichloroethene                                 | ND     | 5.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Vinylacetate                                    | ND     | 10           |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Vinyl chloride                                  | ND     | 2.0          |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Xylenes, Total                                  | ND     | 15           |      | µg/L          | 1                   | 10/11/2004 12:53:00 PM |
| Surr: 1,2-Dichloroethane-d4                     | 88.3   | 71-126       |      | %REC          | 1                   | 10/11/2004 12:53:00 PM |
| Surr: 4-Bromofluorobenzene                      | 94.6   | 74-125       |      | %REC          | 1                   | 10/11/2004 12:53:00 PM |
| Surr: Dibromofluoromethane                      | 90.7   | 73-126       |      | %REC          | 1                   | 10/11/2004 12:53:00 PM |
| Surr: Toluene-d8                                | 90.3   | 75-125       |      | %REC          | 1                   | 10/11/2004 12:53:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b>             |        |              |      | <b>E300</b>   | Analyst: <b>MG</b>  |                        |
| Chloride                                        | 203    | 2.50         |      | mg/L          | 5                   | 10/8/2004 3:36:00 PM   |
| Fluoride                                        | 1.17   | 0.100        |      | mg/L          | 1                   | 10/8/2004 11:48:00 AM  |
| Nitrogen, Nitrate (As N)                        | 5.41   | 0.100        |      | mg/L          | 1                   | 10/8/2004 11:48:00 AM  |
| Nitrogen, Nitrite (As N)                        | ND     | 0.100        |      | mg/L          | 1                   | 10/8/2004 11:48:00 AM  |
| Sulfate                                         | 1,120  | 50.0         |      | mg/L          | 50                  | 10/11/2004 9:05:00 PM  |
| Surr: Dichloroacetic acid (surr)                | 112    | 80-120       |      | %REC          | 5                   | 10/8/2004 3:36:00 PM   |
| Surr: Dichloroacetic acid (surr)                | 108    | 80-120       |      | %REC          | 50                  | 10/11/2004 9:05:00 PM  |
| Surr: Dichloroacetic acid (surr)                | 118    | 80-120       |      | %REC          | 1                   | 10/8/2004 11:48:00 AM  |
| <b>ALKALINITY</b>                               |        |              |      | <b>E310.1</b> | Analyst: <b>HDO</b> |                        |
| Alkalinity, Bicarbonate (As CaCO <sub>3</sub> ) | 410    | 5.00         |      | mg/L          | 1                   | 10/13/2004             |
| Alkalinity, Carbonate (As CaCO <sub>3</sub> )   | ND     | 5.00         |      | mg/L          | 1                   | 10/13/2004             |
| Alkalinity, Hydroxide (As CaCO <sub>3</sub> )   | ND     | 5.00         |      | mg/L          | 1                   | 10/13/2004             |
| Alkalinity, Total (As CaCO <sub>3</sub> )       | 410    | 5.00         |      | mg/L          | 1                   | 10/13/2004             |
| <b>CYANIDE, TOTAL</b>                           |        |              |      | <b>E335.3</b> | Analyst: <b>LMD</b> |                        |
| Cyanide                                         | ND     | 0.0200       |      | mg/L          | 1                   | 10/10/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: October 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410086  
**Project:** Annual Sampling  
**Lab ID:** 0410086-02

**Client Sample ID:** MW-45  
**Collection Date:** 10/6/2004 10:30:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual Units | Dilution Factor      | Date Analyzed          |
|---------------------------------------|---------|---------------|------------|----------------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |            |                      |                        |
|                                       |         | <b>SW7470</b> |            | PrepDate: 10/18/2004 | Analyst: JCJ           |
| Mercury                               | ND      | 0.000200      | mg/L       | 1                    | 10/19/2004 2:33:53 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |            |                      |                        |
|                                       |         | <b>SW6020</b> |            | PrepDate: 10/12/2004 | Analyst: ALR           |
| Aluminum                              | ND      | 0.0100        | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Arsenic                               | 0.0126  | 0.00500       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Barium                                | 0.0121  | 0.00500       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Beryllium                             | ND      | 0.00200       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Boron                                 | 0.570   | 0.200         | mg/L       | 10                   | 10/13/2004 11:02:00 PM |
| Cadmium                               | ND      | 0.00100       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Calcium                               | 408     | 25.0          | mg/L       | 50                   | 10/13/2004 10:43:00 PM |
| Chromium                              | ND      | 0.00200       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Cobalt                                | 0.00399 | 0.00200       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Copper                                | 0.00670 | 0.00200       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Iron                                  | 1.48    | 0.200         | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Lead                                  | ND      | 0.00500       | mg/L       | 1                    | 10/15/2004 8:53:00 PM  |
| Magnesium                             | 244     | 10.0          | mg/L       | 50                   | 10/13/2004 10:43:00 PM |
| Manganese                             | 0.305   | 0.0500        | mg/L       | 10                   | 10/13/2004 11:02:00 PM |
| Molybdenum                            | 0.0154  | 0.00500       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Nickel                                | 0.0196  | 0.00500       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Potassium                             | 2.06    | 0.200         | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Selenium                              | 0.00696 | 0.00500       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Silver                                | ND      | 0.00500       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Sodium                                | 292     | 10.0          | mg/L       | 50                   | 10/13/2004 10:43:00 PM |
| Vanadium                              | 0.0318  | 0.00500       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| Zinc                                  | 0.0127  | 0.00500       | mg/L       | 1                    | 10/14/2004 12:14:00 AM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |            |                      |                        |
|                                       |         | <b>SW8270</b> |            | PrepDate: 10/11/2004 | Analyst: HV            |
| 1,2,4-Trichlorobenzene                | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |
| 2-Methylnaphthalene                   | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |
| 2-Methylphenol                        | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |
| 2-Nitroaniline                        | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |
| 2-Nitrophenol                         | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |
| 3-Nitroaniline                        | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |
| 4-Methylphenol                        | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |
| 4-Nitroaniline                        | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |
| 4-Nitrophenol                         | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |
| Acenaphthene                          | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |
| Acenaphthylene                        | ND      | 12            | µg/L       | 1                    | 10/18/2004 2:14:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: October 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410086  
**Project:** Annual Sampling  
**Lab ID:** 0410086-02

**Client Sample ID:** MW-45  
**Collection Date:** 10/6/2004 10:30:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units         | Dilution Factor    | Date Analyzed         |
|----------------------------|--------|--------------|------|---------------|--------------------|-----------------------|
| Aniline                    | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Anthracene                 | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Benz(a)anthracene          | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Benzidine                  | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Hexachloroethane           | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Isophorone                 | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| N-Nitrosodimethylamine     | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| N-Nitrosodiphenylamine     | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Naphthalene                | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Nitrobenzene               | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Pentachlorophenol          | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Phenanthrene               | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Phenol                     | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Pyrene                     | ND     | 12           |      | µg/L          | 1                  | 10/18/2004 2:14:00 PM |
| Surr: 2,4,6-Tribromophenol | 87.1   | 39-153       |      | %REC          | 1                  | 10/18/2004 2:14:00 PM |
| Surr: 2-Fluorobiphenyl     | 80.4   | 40-147       |      | %REC          | 1                  | 10/18/2004 2:14:00 PM |
| Surr: 2-Fluorophenol       | 42.7   | 21-110       |      | %REC          | 1                  | 10/18/2004 2:14:00 PM |
| Surr: 4-Terphenyl-d14      | 81.8   | 39-141       |      | %REC          | 1                  | 10/18/2004 2:14:00 PM |
| Surr: Nitrobenzene-d5      | 82.7   | 37-140       |      | %REC          | 1                  | 10/18/2004 2:14:00 PM |
| Surr: Phenol-d6            | 27.0   | 11-100       |      | %REC          | 1                  | 10/18/2004 2:14:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        |              |      | <b>SW8260</b> | <b>Analyst: PC</b> |                       |
| 1,1,1-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| 2-Butanone                 | ND     | 10           |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10           |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| 2-Hexanone                 | ND     | 10           |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10           |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| Acetone                    | ND     | 10           |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| Benzene                    | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| Bromodichloromethane       | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| Bromoform                  | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| Bromomethane               | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| Carbon disulfide           | ND     | 10           |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |
| Carbontetrachloride        | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 1:21:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
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 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: October 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410086  
**Project:** Annual Sampling  
**Lab ID:** 0410086-02

**Client Sample ID:** MW-45  
**Collection Date:** 10/6/2004 10:30:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed          |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Vinylacetate                        | ND     | 10            |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 10/11/2004 1:21:00 PM  |
| Surr:1,2-Dichloroethane-d4          | 90.1   | 71-126        |      | %REC                | 1               | 10/11/2004 1:21:00 PM  |
| Surr:4-Bromofluorobenzene           | 97.1   | 74-125        |      | %REC                | 1               | 10/11/2004 1:21:00 PM  |
| Surr: Dibromofluoromethane          | 88.3   | 73-126        |      | %REC                | 1               | 10/11/2004 1:21:00 PM  |
| Surr: Toluene-d8                    | 90.8   | 75-125        |      | %REC                | 1               | 10/11/2004 1:21:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                        |
| Chloride                            | 375    | 5.00          |      | mg/L                | 10              | 10/11/2004 10:59:00 PM |
| Fluoride                            | 1.24   | 0.100         |      | mg/L                | 1               | 10/8/2004 12:16:00 PM  |
| Nitrogen, Nitrate (As N)            | 0.730  | 0.100         |      | mg/L                | 1               | 10/8/2004 12:16:00 PM  |
| Nitrogen, Nitrite (As N)            | ND     | 0.100         |      | mg/L                | 1               | 10/8/2004 12:16:00 PM  |
| Sulfate                             | 1,710  | 100           |      | mg/L                | 100             | 10/11/2004 11:28:00 PM |
| Surr: Dichloroacetic acid (surr)    | 111    | 80-120        |      | %REC                | 10              | 10/11/2004 10:59:00 PM |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC                | 100             | 10/11/2004 11:28:00 PM |
| Surr: Dichloroacetic acid (surr)    | 112    | 80-120        |      | %REC                | 1               | 10/8/2004 12:16:00 PM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>HDO</b> |                 |                        |
| Alkalinity, Bicarbonate (As CaCO3)  | 500    | 5.00          |      | mg/L                | 1               | 10/13/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/13/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/13/2004             |
| Alkalinity, Total (As CaCO3)        | 500    | 5.00          |      | mg/L                | 1               | 10/13/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                        |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 10/10/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: October 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410086  
**Project:** Annual Sampling  
**Lab ID:** 0410086-03

**Client Sample ID:** MW-29  
**Collection Date:** 10/6/2004 9:20:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor       | Date Analyzed          |
|---------------------------------------|---------|---------------|------|-------|-----------------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                       |                        |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: 10/18/2004 | Analyst: JCJ           |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                     | 10/19/2004 2:35:23 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                       |                        |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: 10/12/2004 | Analyst: ALR           |
| Aluminum                              | ND      | 0.0100        |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Arsenic                               | ND      | 0.00500       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Barium                                | 0.0172  | 0.00500       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Boron                                 | 0.725   | 0.200         |      | mg/L  | 10                    | 10/13/2004 11:07:00 PM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Calcium                               | 297     | 25.0          |      | mg/L  | 50                    | 10/13/2004 10:48:00 PM |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Cobalt                                | ND      | 0.00200       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Copper                                | 0.0625  | 0.00200       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Iron                                  | 1.32    | 0.200         |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                     | 10/15/2004 8:57:00 PM  |
| Magnesium                             | 245     | 10.0          |      | mg/L  | 50                    | 10/13/2004 10:48:00 PM |
| Manganese                             | 0.313   | 0.0500        |      | mg/L  | 10                    | 10/13/2004 11:07:00 PM |
| Molybdenum                            | ND      | 0.00500       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Nickel                                | 0.00814 | 0.00500       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Potassium                             | 4.88    | 0.200         |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Sodium                                | 251     | 10.0          |      | mg/L  | 50                    | 10/13/2004 10:48:00 PM |
| Vanadium                              | ND      | 0.00500       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| Zinc                                  | 0.0410  | 0.00500       |      | mg/L  | 1                     | 10/14/2004 12:19:00 AM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                       |                        |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: 10/11/2004 | Analyst: HV            |
| 1,2,4-Trichlorobenzene                | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |
| 2-Methylnaphthalene                   | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |
| 2-Methylphenol                        | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |
| 2-Nitroaniline                        | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |
| 2-Nitrophenol                         | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |
| 3-Nitroaniline                        | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |
| 4-Methylphenol                        | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |
| 4-Nitroaniline                        | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |
| 4-Nitrophenol                         | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |
| Acenaphthene                          | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |
| Acenaphthylene                        | ND      | 12            |      | µg/L  | 1                     | 10/18/2004 2:38:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: October 22, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling  
 Lab ID: 0410086-03

Client Sample ID: MW-29  
 Collection Date: 10/6/2004 9:20:00 AM  
 Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed         |
|----------------------------|--------|---------------|------|-------|--------------------|-----------------------|
| Aniline                    | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Anthracene                 | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Benz(a)anthracene          | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Benzidine                  | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Hexachloroethane           | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Isophorone                 | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| N-Nitrosodimethylamine     | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| N-Nitrosodiphenylamine     | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Naphthalene                | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Nitrobenzene               | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Pentachlorophenol          | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Phenanthrene               | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Phenol                     | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Pyrene                     | ND     | 12            |      | µg/L  | 1                  | 10/18/2004 2:38:00 PM |
| Surr: 2,4,6-Tribromophenol | 91.1   | 39-153        |      | %REC  | 1                  | 10/18/2004 2:38:00 PM |
| Surr: 2-Fluorobiphenyl     | 86.7   | 40-147        |      | %REC  | 1                  | 10/18/2004 2:38:00 PM |
| Surr: 2-Fluorophenol       | 44.1   | 21-110        |      | %REC  | 1                  | 10/18/2004 2:38:00 PM |
| Surr: 4-Terphenyl-d14      | 87.5   | 39-141        |      | %REC  | 1                  | 10/18/2004 2:38:00 PM |
| Surr: Nitrobenzene-d5      | 87.5   | 37-140        |      | %REC  | 1                  | 10/18/2004 2:38:00 PM |
| Surr: Phenol-d6            | 27.4   | 11-100        |      | %REC  | 1                  | 10/18/2004 2:38:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | <b>Analyst: PC</b> |                       |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| Acetone                    | ND     | 10            |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| Benzene                    | ND     | 5.0           |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |
| Carbontetrachloride        | ND     | 5.0           |      | µg/L  | 1                  | 10/11/2004 1:48:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: October 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410086  
**Project:** Annual Sampling  
**Lab ID:** 0410086-03

**Client Sample ID:** MW-29  
**Collection Date:** 10/6/2004 9:20:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report<br>Limit | Qual | Units               | Dilution<br>Factor | Date Analyzed          |
|-------------------------------------|--------|-----------------|------|---------------------|--------------------|------------------------|
| Chlorobenzene                       | ND     | 5.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Chloroethane                        | ND     | 5.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Chloroform                          | ND     | 5.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Chloromethane                       | ND     | 5.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Dibromochloromethane                | ND     | 5.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Ethylbenzene                        | ND     | 5.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| m,p-Xylene                          | ND     | 10              |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Methylene chloride                  | ND     | 10              |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Styrene                             | ND     | 5.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Tetrachloroethene                   | ND     | 5.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Toluene                             | ND     | 5.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Trichloroethene                     | ND     | 5.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Vinylacetate                        | ND     | 10              |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Vinyl chloride                      | ND     | 2.0             |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Xylenes, Total                      | ND     | 15              |      | µg/L                | 1                  | 10/11/2004 1:48:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 92.1   | 71-126          |      | %REC                | 1                  | 10/11/2004 1:48:00 PM  |
| Surr: 4-Bromofluorobenzene          | 106    | 74-125          |      | %REC                | 1                  | 10/11/2004 1:48:00 PM  |
| Surr: Dibromofluoromethane          | 94.5   | 73-126          |      | %REC                | 1                  | 10/11/2004 1:48:00 PM  |
| Surr: Toluene-d8                    | 106    | 75-125          |      | %REC                | 1                  | 10/11/2004 1:48:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>     |      | Analyst: <b>MG</b>  |                    |                        |
| Chloride                            | 395    | 5.00            |      | mg/L                | 10                 | 10/12/2004 12:53:00 AM |
| Fluoride                            | 1.68   | 0.100           |      | mg/L                | 1                  | 10/8/2004 5:58:00 PM   |
| Nitrogen, Nitrate (As N)            | ND     | 0.100           |      | mg/L                | 1                  | 10/8/2004 5:58:00 PM   |
| Nitrogen, Nitrite (As N)            | ND     | 0.100           |      | mg/L                | 1                  | 10/8/2004 5:58:00 PM   |
| Sulfate                             | 1,160  | 50.0            |      | mg/L                | 50                 | 10/12/2004 1:22:00 AM  |
| Surr: Dichloroacetic acid (surr)    | 107    | 80-120          |      | %REC                | 10                 | 10/12/2004 12:53:00 AM |
| Surr: Dichloroacetic acid (surr)    | 108    | 80-120          |      | %REC                | 50                 | 10/12/2004 1:22:00 AM  |
| Surr: Dichloroacetic acid (surr)    | 111    | 80-120          |      | %REC                | 1                  | 10/8/2004 5:58:00 PM   |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b>   |      | Analyst: <b>HDO</b> |                    |                        |
| Alkalinity, Bicarbonate (As CaCO3)  | 750    | 5.00            |      | mg/L                | 1                  | 10/13/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00            |      | mg/L                | 1                  | 10/13/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00            |      | mg/L                | 1                  | 10/13/2004             |
| Alkalinity, Total (As CaCO3)        | 750    | 5.00            |      | mg/L                | 1                  | 10/13/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b>   |      | Analyst: <b>LMD</b> |                    |                        |
| Cyanide                             | ND     | 0.0200          |      | mg/L                | 1                  | 10/10/2004             |

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P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: October 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410086  
**Project:** Annual Sampling  
**Lab ID:** 0410086-04

**Client Sample ID:** RW-13  
**Collection Date:** 10/7/2004 9:50:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                                               |
|---------------------------------------|---------|---------------|------|-------|-----------------|-------------------------------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                                             |
|                                       |         | <b>SW7470</b> |      |       |                 |                                                             |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | PrepDate: 10/18/2004 Analyst: JCJ<br>10/19/2004 2:36:54 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                                             |
|                                       |         | <b>SW6020</b> |      |       |                 |                                                             |
| Aluminum                              | 0.182   | 0.0100        |      | mg/L  | 1               | PrepDate: 10/12/2004 Analyst: ALR<br>10/14/2004 12:24:00 AM |
| Arsenic                               | 0.0101  | 0.00500       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Barium                                | 0.0214  | 0.00500       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Boron                                 | 1.11    | 0.200         |      | mg/L  | 10              | 10/13/2004 11:11:00 PM                                      |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Calcium                               | 539     | 25.0          |      | mg/L  | 50              | 10/13/2004 10:53:00 PM                                      |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Cobalt                                | 0.00248 | 0.00200       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Copper                                | 0.0896  | 0.00200       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Iron                                  | 2.21    | 0.200         |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1               | 10/15/2004 9:02:00 PM                                       |
| Magnesium                             | 345     | 10.0          |      | mg/L  | 50              | 10/13/2004 10:53:00 PM                                      |
| Manganese                             | 0.292   | 0.0500        |      | mg/L  | 10              | 10/13/2004 11:11:00 PM                                      |
| Molybdenum                            | 0.0137  | 0.00500       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Nickel                                | 0.0179  | 0.00500       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Potassium                             | 1.87    | 0.200         |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Selenium                              | 0.00877 | 0.00500       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Sodium                                | 291     | 10.0          |      | mg/L  | 50              | 10/13/2004 10:53:00 PM                                      |
| Vanadium                              | 0.0397  | 0.00500       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| Zinc                                  | 0.0305  | 0.00500       |      | mg/L  | 1               | 10/14/2004 12:24:00 AM                                      |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                                             |
|                                       |         | <b>SW8270</b> |      |       |                 |                                                             |
| 1,2,4-Trichlorobenzene                | ND      | 11            |      | µg/L  | 1               | PrepDate: 10/11/2004 Analyst: HV<br>10/18/2004 3:02:00 PM   |
| 2,4,5-Trichlorophenol                 | ND      | 11            |      | µg/L  | 1               | 10/18/2004 3:02:00 PM                                       |
| 2,4,6-Trichlorophenol                 | ND      | 11            |      | µg/L  | 1               | 10/18/2004 3:02:00 PM                                       |
| 2-Methylnaphthalene                   | ND      | 11            |      | µg/L  | 1               | 10/18/2004 3:02:00 PM                                       |
| 2-Methylphenol                        | ND      | 11            |      | µg/L  | 1               | 10/18/2004 3:02:00 PM                                       |
| 2-Nitroaniline                        | ND      | 11            |      | µg/L  | 1               | 10/18/2004 3:02:00 PM                                       |
| 2-Nitrophenol                         | ND      | 11            |      | µg/L  | 1               | 10/18/2004 3:02:00 PM                                       |
| 3-Nitroaniline                        | ND      | 11            |      | µg/L  | 1               | 10/18/2004 3:02:00 PM                                       |
| 4-Methylphenol                        | ND      | 11            |      | µg/L  | 1               | 10/18/2004 3:02:00 PM                                       |
| 4-Nitroaniline                        | ND      | 11            |      | µg/L  | 1               | 10/18/2004 3:02:00 PM                                       |
| 4-Nitrophenol                         | ND      | 11            |      | µg/L  | 1               | 10/18/2004 3:02:00 PM                                       |
| Acenaphthene                          | ND      | 11            |      | µg/L  | 1               | 10/18/2004 3:02:00 PM                                       |
| Acenaphthylene                        | ND      | 11            |      | µg/L  | 1               | 10/18/2004 3:02:00 PM                                       |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

# e-Lab Analytical, Inc.

Date: October 22, 2004

CLIENT: Navajo Refining Company  
Work Order: 0410086  
Project: Annual Sampling  
Lab ID: 0410086-04

Client Sample ID: RW-13  
Collection Date: 10/7/2004 9:50:00 AM  
Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units         | Dilution Factor    | Date Analyzed         |
|----------------------------|--------|--------------|------|---------------|--------------------|-----------------------|
| Aniline                    | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Anthracene                 | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Benz(a)anthracene          | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Benzidine                  | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Hexachloroethane           | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Isophorone                 | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| N-Nitrosodimethylamine     | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| N-Nitrosodiphenylamine     | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Naphthalene                | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Nitrobenzene               | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Pentachlorophenol          | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Phenanthrene               | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Phenol                     | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Pyrene                     | ND     | 11           |      | µg/L          | 1                  | 10/18/2004 3:02:00 PM |
| Surr: 2,4,6-Tribromophenol | 98.9   | 39-153       |      | %REC          | 1                  | 10/18/2004 3:02:00 PM |
| Surr: 2-Fluorobiphenyl     | 88.4   | 40-147       |      | %REC          | 1                  | 10/18/2004 3:02:00 PM |
| Surr: 2-Fluorophenol       | 42.2   | 21-110       |      | %REC          | 1                  | 10/18/2004 3:02:00 PM |
| Surr: 4-Terphenyl-d14      | 92.7   | 39-141       |      | %REC          | 1                  | 10/18/2004 3:02:00 PM |
| Surr: Nitrobenzene-d5      | 90.8   | 37-140       |      | %REC          | 1                  | 10/18/2004 3:02:00 PM |
| Surr: Phenol-d6            | 27.7   | 11-100       |      | %REC          | 1                  | 10/18/2004 3:02:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        |              |      | <b>SW8260</b> | <b>Analyst: PC</b> |                       |
| 1,1,1-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| 2-Butanone                 | ND     | 10           |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10           |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| 2-Hexanone                 | ND     | 10           |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10           |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| Acetone                    | ND     | 10           |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| Benzene                    | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| Bromodichloromethane       | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| Bromoform                  | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| Bromomethane               | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| Carbon disulfide           | ND     | 10           |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |
| Carbon tetrachloride       | ND     | 5.0          |      | µg/L          | 1                  | 10/11/2004 2:15:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: October 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0410086  
**Project:** Annual Sampling  
**Lab ID:** 0410086-04

**Client Sample ID:** RW-13  
**Collection Date:** 10/7/2004 9:50:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Vinylacetate                        | ND     | 10            |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 10/11/2004 2:15:00 PM |
| Surr:1,2-Dichloroethane-d4          | 90.8   | 71-126        |      | %REC                | 1               | 10/11/2004 2:15:00 PM |
| Surr:4-Bromofluorobenzene           | 93.0   | 74-125        |      | %REC                | 1               | 10/11/2004 2:15:00 PM |
| Surr: Dibromofluoromethane          | 91.2   | 73-126        |      | %REC                | 1               | 10/11/2004 2:15:00 PM |
| Surr: Toluene-d8                    | 90.5   | 75-125        |      | %REC                | 1               | 10/11/2004 2:15:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                       |
| Chloride                            | 450    | 10.0          |      | mg/L                | 20              | 10/12/2004 1:50:00 AM |
| Fluoride                            | 2.33   | 0.100         |      | mg/L                | 1               | 10/8/2004 6:55:00 PM  |
| Nitrogen, Nitrate (As N)            | 0.390  | 0.100         |      | mg/L                | 1               | 10/8/2004 6:55:00 PM  |
| Nitrogen, Nitrite (As N)            | ND     | 0.100         |      | mg/L                | 1               | 10/8/2004 6:55:00 PM  |
| Sulfate                             | 2,280  | 100           |      | mg/L                | 100             | 10/12/2004 2:19:00 AM |
| Surr: Dichloroacetic acid (surr)    | 104    | 80-120        |      | %REC                | 20              | 10/12/2004 1:50:00 AM |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC                | 100             | 10/12/2004 2:19:00 AM |
| Surr: Dichloroacetic acid (surr)    | 102    | 80-120        |      | %REC                | 1               | 10/8/2004 6:55:00 PM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>HDO</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 550    | 5.00          |      | mg/L                | 1               | 10/13/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/13/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 10/13/2004            |
| Alkalinity, Total (As CaCO3)        | 550    | 5.00          |      | mg/L                | 1               | 10/13/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 10/10/2004            |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: Oct 22 2004

CLIENT: Navajo Refining Company

Work Order: 0410086

Project: Annual Sampling

## QC BATCH REPORT

Batch ID: 10686 InstrumentID: ICP4500

MBLK Sample ID: MBLKW1-101204 Test Code: SW6020 Units: mg/L Analysis Date: 10/13/04 14:18

Client ID: Run ID: ICP4500\_041013A SeqNo: 554077 Prep Date: 10/12/2004 DF: 1

| Analyte    | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|-----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | ND        | 0.010  |         |               |      |               |               |      |           |      |
| Arsenic    | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Barium     | 0.0008214 | 0.0050 |         |               |      |               |               |      |           | J    |
| Beryllium  | ND        | 0.0020 |         |               |      |               |               |      |           |      |
| Boron      | ND        | 0.020  |         |               |      |               |               |      |           |      |
| Cadmium    | ND        | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium    | ND        | 0.50   |         |               |      |               |               |      |           |      |
| Chromium   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt     | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Copper     | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Iron       | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Lead       | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium  | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Manganese  | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Molybdenum | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel     | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium  | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Selenium   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium     | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc       | ND        | 0.0050 |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW1-101204 Test Code: SW6020 Units: mg/L Analysis Date: 10/14/04 13:59

Client ID: Run ID: ICP7500\_041014A SeqNo: 554773 Prep Date: 10/12/2004 DF: 1

| Analyte | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Silver  | ND     | 0.0050 |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is &gt; 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: 10686 InstrumentID: ICP4500

LCS Sample ID: MLCSW1-101204 Test Code: SW6020 Units: mg/L Analysis Date: 10/13/04 14:22

Client ID: Run ID: ICP4500\_041013A SeqNo: 554078 Prep Date: 10/12/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.04582 | 0.010  | 0.05    | 0             | 91.6 | 79-126        | 0             |      |           |      |
| Arsenic    | 0.04754 | 0.0050 | 0.05    | 0             | 95.1 | 80-121        | 0             |      |           |      |
| Barium     | 0.04312 | 0.0050 | 0.05    | 0             | 86.2 | 79.8-119      | 0             |      |           |      |
| Beryllium  | 0.049   | 0.0020 | 0.05    | 0             | 98   | 78.9-120      | 0             |      |           |      |
| Boron      | 0.5031  | 0.020  | 0.5     | 0             | 101  | 80-120        | 0             |      |           |      |
| Cadmium    | 0.04957 | 0.0020 | 0.05    | 0             | 99.1 | 79.1-119      | 0             |      |           |      |
| Calcium    | 4.578   | 0.50   | 5       | 0             | 91.6 | 80-121        | 0             |      |           |      |
| Chromium   | 0.04377 | 0.0050 | 0.05    | 0             | 87.5 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04456 | 0.0050 | 0.05    | 0             | 89.1 | 82-121        | 0             |      |           |      |
| Copper     | 0.04377 | 0.0050 | 0.05    | 0             | 87.5 | 83-121        | 0             |      |           |      |
| Iron       | 4.704   | 0.20   | 5       | 0             | 94.1 | 80-120        | 0             |      |           |      |
| Lead       | 0.0435  | 0.0050 | 0.05    | 0             | 87   | 80-118        | 0             |      |           |      |
| Magnesium  | 4.767   | 0.20   | 5       | 0             | 95.3 | 80-120        | 0             |      |           |      |
| Manganese  | 0.04439 | 0.0050 | 0.05    | 0             | 88.8 | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04266 | 0.0050 | 0.05    | 0             | 85.3 | 84.6-115      | 0             |      |           |      |
| Nickel     | 0.04529 | 0.0050 | 0.05    | 0             | 90.6 | 85-120        | 0             |      |           |      |
| Potassium  | 4.763   | 0.20   | 5       | 0             | 95.3 | 80-120        | 0             |      |           |      |
| Selenium   | 0.04585 | 0.0050 | 0.05    | 0             | 91.7 | 79.2-118      | 0             |      |           |      |
| Sodium     | 4.585   | 0.20   | 5       | 0             | 91.7 | 82.4-120      | 0             |      |           |      |
| Vanadium   | 0.0441  | 0.0050 | 0.05    | 0             | 88.2 | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.04784 | 0.0050 | 0.05    | 0             | 95.7 | 83-118        | 0             |      |           |      |

LCS Sample ID: MLCSW1-101204 Test Code: SW6020 Units: mg/L Analysis Date: 10/14/04 14:57

Client ID: Run ID: ICP7500\_041014A SeqNo: 554776 Prep Date: 10/12/2004 DF: 1

| Analyte | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Silver  | 0.05153 | 0.0050 | 0.05    | 0             | 103  | 83-117        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: 10686 InstrumentID: ICP4500

MS Sample ID: 0410105-10CMS Test Code: SW6020 Units: mg/L Analysis Date: 10/13/04 14:45

Client ID: Run ID: ICP4500\_041013A SeqNo: 554095 Prep Date: 10/12/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.04904 | 0.010  | 0.05    | 0.0066        | 84.9 | 79-126        | 0             |      |           |      |
| Arsenic    | 0.04576 | 0.0050 | 0.05    | 0.0007392     | 90   | 80-121        | 0             |      |           |      |
| Barium     | 0.04238 | 0.0050 | 0.05    | -0.0001451    | 85.1 | 79.8-119      | 0             |      |           |      |
| Beryllium  | 0.04702 | 0.0020 | 0.05    | 0.00005635    | 93.9 | 78.9-120      | 0             |      |           |      |
| Boron      | 0.4799  | 0.020  | 0       | 0.01247       | 0    | 80-120        | 0             |      |           |      |
| Cadmium    | 0.04812 | 0.0020 | 0.05    | 0.00006253    | 96.1 | 79.1-119      | 0             |      |           |      |
| Calcium    | 4.605   | 0.50   | 5       | 0.08243       | 90.5 | 80-121        | 0             |      |           |      |
| Chromium   | 0.04355 | 0.0050 | 0.05    | 0.00007409    | 87   | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04408 | 0.0050 | 0.05    | 0.00006007    | 88   | 82-121        | 0             |      |           |      |
| Copper     | 0.04387 | 0.0050 | 0.05    | 0.0006292     | 86.5 | 83-121        | 0             |      |           |      |
| Iron       | 4.638   | 0.20   | 5       | 0.02406       | 92.3 | 80-120        | 0             |      |           |      |
| Lead       | 0.04299 | 0.0050 | 0.05    | 0.0001134     | 85.8 | 80-118        | 0             |      |           |      |
| Magnesium  | 4.641   | 0.20   | 5       | 0.02996       | 92.2 | 80-120        | 0             |      |           |      |
| Manganese  | 0.04377 | 0.0050 | 0.05    | 0.000444      | 86.7 | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04221 | 0.0050 | 0.05    | 0.0006974     | 83   | 84.6-115      | 0             |      |           | S    |
| Nickel     | 0.04396 | 0.0050 | 0.05    | 0.00008181    | 87.8 | 85-120        | 0             |      |           |      |
| Potassium  | 4.776   | 0.20   | 5       | 0.1092        | 93.3 | 80-120        | 0             |      |           |      |
| Selenium   | 0.04619 | 0.0050 | 0.05    | -0.0001519    | 92.7 | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04081 | 0.0050 | 0.05    | 0.00005271    | 81.5 | 83-117        | 0             |      |           | S    |
| Sodium     | 4.827   | 0.20   | 5       | 0.3191        | 90.2 | 82.4-120      | 0             |      |           |      |
| Vanadium   | 0.04357 | 0.0050 | 0.05    | 0.0003446     | 86.5 | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.04708 | 0.0050 | 0.05    | 0.002897      | 88.4 | 83-118        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: 10686 InstrumentID: ICP4500

MSD Sample ID: 0410105-10CMSD Test Code: SW6020 Units: mg/L Analysis Date: 10/13/04 14:50

Client ID: Run ID: ICP4500\_041013A SeqNo: 554096 Prep Date: 10/12/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Aluminum   | 0.05121 | 0.010  | 0.05    | 0.0066        | 89.2 | 79-126        | 0.04904       | 4.33  | 15        |      |
| Arsenic    | 0.04884 | 0.0050 | 0.05    | 0.0007392     | 96.2 | 80-121        | 0.04576       | 6.51  | 15        |      |
| Barium     | 0.04364 | 0.0050 | 0.05    | -0.0001451    | 87.6 | 79.8-119      | 0.04238       | 2.93  | 15        |      |
| Beryllium  | 0.04664 | 0.0020 | 0.05    | 0.00005635    | 93.2 | 78.9-120      | 0.04702       | 0.811 | 15        |      |
| Boron      | 0.4876  | 0.020  | 0       | 0.01247       | 0    | 80-120        | 0.4799        | 1.59  | 15        |      |
| Cadmium    | 0.04955 | 0.0020 | 0.05    | 0.00006253    | 99   | 79.1-119      | 0.04812       | 2.93  | 15        |      |
| Calcium    | 4.71    | 0.50   | 5       | 0.08243       | 92.6 | 80-121        | 4.605         | 2.25  | 15        |      |
| Chromium   | 0.04512 | 0.0050 | 0.05    | 0.00007409    | 90.1 | 79.3-121      | 0.04355       | 3.54  | 15        |      |
| Cobalt     | 0.04521 | 0.0050 | 0.05    | 0.00006007    | 90.3 | 82-121        | 0.04408       | 2.53  | 15        |      |
| Copper     | 0.04507 | 0.0050 | 0.05    | 0.0006292     | 88.9 | 83-121        | 0.04387       | 2.7   | 15        |      |
| Iron       | 4.802   | 0.20   | 5       | 0.02406       | 95.6 | 80-120        | 4.638         | 3.47  | 15        |      |
| Lead       | 0.04436 | 0.0050 | 0.05    | 0.0001134     | 88.5 | 80-118        | 0.04299       | 3.14  | 15        |      |
| Magnesium  | 4.98    | 0.20   | 5       | 0.02996       | 99   | 80-120        | 4.641         | 7.05  | 15        |      |
| Manganese  | 0.04484 | 0.0050 | 0.05    | 0.000444      | 88.8 | 82-119        | 0.04377       | 2.42  | 15        |      |
| Molybdenum | 0.04398 | 0.0050 | 0.05    | 0.0006974     | 86.6 | 84.6-115      | 0.04221       | 4.11  | 15        |      |
| Nickel     | 0.04608 | 0.0050 | 0.05    | 0.00008181    | 92   | 85-120        | 0.04396       | 4.71  | 15        |      |
| Potassium  | 4.945   | 0.20   | 5       | 0.1092        | 96.7 | 80-120        | 4.776         | 3.48  | 15        |      |
| Selenium   | 0.04854 | 0.0050 | 0.05    | -0.0001519    | 97.4 | 79.2-118      | 0.04619       | 4.96  | 15        |      |
| Silver     | 0.042   | 0.0050 | 0.05    | 0.00005271    | 83.9 | 83-117        | 0.04081       | 2.87  | 15        |      |
| Sodium     | 5.103   | 0.20   | 5       | 0.3191        | 95.7 | 82.4-120      | 4.827         | 5.56  | 15        |      |
| Vanadium   | 0.04505 | 0.0050 | 0.05    | 0.0003446     | 89.4 | 82.1-119      | 0.04357       | 3.34  | 15        |      |
| Zinc       | 0.04776 | 0.0050 | 0.05    | 0.002897      | 89.7 | 83-118        | 0.04708       | 1.43  | 15        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: 10686 InstrumentID: ICP4500

DUP Sample ID: 0410105-10CDUP Test Code: SW6020 Units: mg/L Analysis Date: 10/13/04 14:40

Client ID: Run ID: ICP4500\_041013A SeqNo: 554094 Prep Date: 10/12/2004 DF: 1

| Analyte    | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|-----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.006833  | 0.010  | 0       | 0             | 0    | 0-0           | 0.0066        | 0    | 25        | J    |
| Arsenic    | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0007392     | 0    | 25        |      |
| Barium     | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0001451    | 0    | 25        |      |
| Beryllium  | ND        | 0.0020 | 0       | 0             | 0    | 0-0           | 0.00005635    | 0    | 25        |      |
| Boron      | ND        | 0.020  | 0       | 0             | 0    | 0-0           | 0.01247       | 0    | 25        |      |
| Cadmium    | ND        | 0.0020 | 0       | 0             | 0    | 0-0           | 0.00006253    | 0    | 25        |      |
| Calcium    | 0.08102   | 0.50   | 0       | 0             | 0    | 0-0           | 0.08243       | 0    | 25        | J    |
| Chromium   | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00007409    | 0    | 25        |      |
| Cobalt     | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00006007    | 0    | 25        |      |
| Copper     | 0.0005989 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0006292     | 0    | 25        | J    |
| Iron       | ND        | 0.20   | 0       | 0             | 0    | 0-0           | 0.02406       | 0    | 25        |      |
| Lead       | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0001134     | 0    | 25        |      |
| Magnesium  | 0.02817   | 0.20   | 0       | 0             | 0    | 0-0           | 0.02996       | 0    | 25        | J    |
| Manganese  | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.000444      | 0    | 25        |      |
| Molybdenum | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0006974     | 0    | 25        |      |
| Nickel     | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00008181    | 0    | 25        |      |
| Potassium  | 0.1019    | 0.20   | 0       | 0             | 0    | 0-0           | 0.1092        | 0    | 25        | J    |
| Selenium   | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0001519    | 0    | 25        |      |
| Silver     | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00005271    | 0    | 25        |      |
| Sodium     | 0.2694    | 0.20   | 0       | 0             | 0    | 0-0           | 0.3191        | 16.9 | 25        |      |
| Vanadium   | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0003446     | 0    | 25        |      |
| Zinc       | 0.002087  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.002897      | 0    | 25        | J    |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410086-01C | 0410086-02C | 0410086-03C |
| 0410086-04C |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: 10761 InstrumentID: Mercury

MBLK Sample ID: GBLKW2-101904 Test Code: SW7470 Units: mg/L Analysis Date: 10/19/04 14:17

Client ID: Run ID: MERCURY\_041019C SeqNo: 557162 Prep Date: 10/18/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |

LCS Sample ID: GLCSW2-101904 Test Code: SW7470 Units: mg/L Analysis Date: 10/19/04 14:19

Client ID: Run ID: MERCURY\_041019C SeqNo: 557163 Prep Date: 10/18/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00511 | 0.00020 | 0.005   | 0             | 102  | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW2-101904 Test Code: SW7470 Units: mg/L Analysis Date: 10/19/04 14:20

Client ID: Run ID: MERCURY\_041019C SeqNo: 557164 Prep Date: 10/18/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00519 | 0.00020 | 0.005   | 0             | 104  | 83-115        | 0.00511       | 1.55 | 20        |      |

MS Sample ID: 0410086-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 10/19/04 14:27

Client ID: MW-18 Run ID: MERCURY\_041019C SeqNo: 557167 Prep Date: 10/18/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00489 | 0.00020 | 0.005   | -0.000056     | 98.9 | 83-115        | 0             |      |           |      |

MSD Sample ID: 0410086-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 10/19/04 14:29

Client ID: MW-18 Run ID: MERCURY\_041019C SeqNo: 557168 Prep Date: 10/18/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00489 | 0.00020 | 0.005   | -0.000056     | 98.9 | 83-115        | 0.00489       | 0    | 20        |      |

DUP Sample ID: 0410086-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 10/19/04 14:26

Client ID: MW-18 Run ID: MERCURY\_041019C SeqNo: 557166 Prep Date: 10/18/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | -0.000056     | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410086-01C | 0410086-02C | 0410086-03C |
| 0410086-04C |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: 10671 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-041011 Test Code: SW8270 Units: µg/L Analysis Date: 10/12/04 18:20

Client ID: Run ID: SV-3\_041012B SeqNo: 554777 Prep Date: 10/11/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 94.37  | 10  | 100     | 0             | 94.4 | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 87.31  | 10  | 100     | 0             | 87.3 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 41.39  | 10  | 100     | 0             | 41.4 | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 93.15  | 10  | 100     | 0             | 93.2 | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 91.53  | 10  | 100     | 0             | 91.5 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 25.96  | 10  | 100     | 0             | 26   | 11-100        |               | 0    |           |      |

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J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: 10671 InstrumentID: SV-3

LCS Sample ID: SLCSW1-041011 Test Code: SW8270 Units: µg/L Analysis Date: 10/12/04 18:43

Client ID: Run ID: SV-3\_041012B SeqNo: 554778 Prep Date: 10/11/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 42.15  | 10  | 50      | 0             | 84.3 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 86.62  | 10  | 100     | 0             | 86.6 | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 82.08  | 10  | 100     | 0             | 82.1 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 45.83  | 10  | 50      | 0             | 91.7 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 65.15  | 10  | 100     | 0             | 65.1 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 40.24  | 10  | 50      | 0             | 80.5 | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 81.95  | 10  | 100     | 0             | 82   | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 40.16  | 10  | 50      | 0             | 80.3 | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 88.44  | 10  | 150     | 0             | 59   | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 38.49  | 10  | 50      | 0             | 77   | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 33.3   | 10  | 100     | 0             | 33.3 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 42.98  | 10  | 50      | 0             | 86   | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 43.25  | 10  | 50      | 0             | 86.5 | 67-116        | 0             |      |           |      |
| Aniline                    | 35.48  | 10  | 50      | 0             | 71   | 40-130        | 0             |      |           |      |
| Anthracene                 | 47.26  | 10  | 50      | 0             | 94.5 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 43.09  | 10  | 50      | 0             | 86.2 | 55-131        | 0             |      |           |      |
| Benzidine                  | 20.04  | 10  | 50      | 0             | 40.1 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 34.84  | 10  | 50      | 0             | 69.7 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 35.38  | 10  | 50      | 0             | 70.8 | 42-123        | 0             |      |           |      |
| Isophorone                 | 45.98  | 10  | 50      | 0             | 92   | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 39.98  | 10  | 50      | 0             | 80   | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 20.24  | 10  | 50      | 0             | 40.5 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 49.55  | 10  | 50      | 0             | 99.1 | 72-144        | 0             |      |           |      |
| Naphthalene                | 42.16  | 10  | 50      | 0             | 84.3 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 43.19  | 10  | 50      | 0             | 86.4 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 94     | 10  | 100     | 0             | 94   | 65-123        | 0             |      |           |      |
| Phenanthrene               | 45.19  | 10  | 50      | 0             | 90.4 | 69-119        | 0             |      |           |      |
| Phenol                     | 29.45  | 10  | 100     | 0             | 29.4 | 16-115        | 0             |      |           |      |
| Pyrene                     | 43.22  | 10  | 50      | 0             | 86.4 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 99.8   | 10  | 100     | 0             | 99.8 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 87.31  | 10  | 100     | 0             | 87.3 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 45.77  | 10  | 100     | 0             | 45.8 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 89.91  | 10  | 100     | 0             | 89.9 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 88.92  | 10  | 100     | 0             | 88.9 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 29.5   | 10  | 100     | 0             | 29.5 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: 10671 InstrumentID: SV-3

LCSD Sample ID: SLCSDW1-041011 Test Code: SW8270 Units: µg/L Analysis Date: 10/12/04 19:08

Client ID: Run ID: SV-3\_041012B SeqNo: 554779 Prep Date: 10/11/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 47.43  | 10  | 50      | 0             | 94.9 | 50-115        | 0             | 0    | 30        |      |
| 2,4,5-Trichlorophenol      | 90.8   | 10  | 100     | 0             | 90.8 | 68-128        | 0             | 0    | 30        |      |
| 2,4,6-Trichlorophenol      | 87.6   | 10  | 100     | 0             | 87.6 | 66-125        | 0             | 0    | 30        |      |
| 2-Methylnaphthalene        | 48.19  | 10  | 50      | 0             | 96.4 | 47-122        | 0             | 0    | 30        |      |
| 2-Methylphenol             | 75.16  | 10  | 100     | 0             | 75.2 | 51-115        | 0             | 0    | 30        |      |
| 2-Nitroaniline             | 43.41  | 10  | 50      | 0             | 86.8 | 64-128        | 0             | 0    | 30        |      |
| 2-Nitrophenol              | 90.79  | 10  | 100     | 0             | 90.8 | 60-119        | 0             | 0    | 30        |      |
| 3-Nitroaniline             | 41.41  | 10  | 50      | 0             | 82.8 | 61-118        | 0             | 0    | 30        |      |
| 4-Methylphenol             | 102    | 10  | 150     | 0             | 68   | 44-115        | 0             | 0    | 30        |      |
| 4-Nitroaniline             | 41.13  | 10  | 50      | 0             | 82.3 | 61-123        | 0             | 0    | 30        |      |
| 4-Nitrophenol              | 37.07  | 10  | 100     | 0             | 37.1 | 17-100        | 0             | 0    | 30        |      |
| Acenaphthene               | 46.12  | 10  | 50      | 0             | 92.2 | 68-115        | 0             | 0    | 30        |      |
| Acenaphthylene             | 46.19  | 10  | 50      | 0             | 92.4 | 67-116        | 0             | 0    | 30        |      |
| Aniline                    | 34.11  | 10  | 50      | 0             | 68.2 | 40-130        | 0             | 0    | 30        |      |
| Anthracene                 | 49.49  | 10  | 50      | 0             | 99   | 70-129        | 0             | 0    | 30        |      |
| Benz(a)anthracene          | 47.22  | 10  | 50      | 0             | 94.4 | 55-131        | 0             | 0    | 30        |      |
| Benzidine                  | 18.1   | 10  | 50      | 0             | 36.2 | 10-115        | 0             | 0    | 30        |      |
| Hexachloroethane           | 44.87  | 10  | 50      | 0             | 89.7 | 46-115        | 0             | 0    | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 38.7   | 10  | 50      | 0             | 77.4 | 42-123        | 0             | 0    | 30        |      |
| Isophorone                 | 48.79  | 10  | 50      | 0             | 97.6 | 63-117        | 0             | 0    | 30        |      |
| N-Nitrosodi-n-propylamine  | 45.72  | 10  | 50      | 0             | 91.4 | 67-115        | 0             | 0    | 30        |      |
| N-Nitrosodimethylamine     | 18.27  | 10  | 50      | 0             | 36.5 | 28-115        | 0             | 0    | 30        |      |
| N-Nitrosodiphenylamine     | 51.34  | 10  | 50      | 0             | 103  | 72-144        | 0             | 0    | 30        |      |
| Naphthalene                | 47.07  | 10  | 50      | 0             | 94.1 | 52-115        | 0             | 0    | 30        |      |
| Nitrobenzene               | 47.37  | 10  | 50      | 0             | 94.7 | 65-115        | 0             | 0    | 30        |      |
| Pentachlorophenol          | 99.1   | 10  | 100     | 0             | 99.1 | 65-123        | 0             | 0    | 30        |      |
| Phenanthrene               | 46.64  | 10  | 50      | 0             | 93.3 | 69-119        | 0             | 0    | 30        |      |
| Phenol                     | 28.99  | 10  | 100     | 0             | 29   | 16-115        | 0             | 0    | 30        |      |
| Pyrene                     | 45.61  | 10  | 50      | 0             | 91.2 | 51-130        | 0             | 0    | 30        |      |
| Surr: 2,4,6-Tribromophenol | 98.29  | 10  | 100     | 0             | 98.3 | 39-153        | 0             | 0    | 30        |      |
| Surr: 2-Fluorobiphenyl     | 87.5   | 10  | 100     | 0             | 87.5 | 40-147        | 0             | 0    | 30        |      |
| Surr: 2-Fluorophenol       | 41.69  | 10  | 100     | 0             | 41.7 | 21-110        | 0             | 0    | 30        |      |
| Surr: 4-Terphenyl-d14      | 92.67  | 10  | 100     | 0             | 92.7 | 39-141        | 0             | 0    | 30        |      |
| Surr: Nitrobenzene-d5      | 90.93  | 10  | 100     | 0             | 90.9 | 37-140        | 0             | 0    | 30        |      |
| Surr: Phenol-d6            | 27.84  | 10  | 100     | 0             | 27.8 | 11-100        | 0             | 0    | 30        |      |

The following samples were analyzed in this batch:

0410086-01B 0410086-02B 0410086-03B  
 0410086-04B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: R23752 InstrumentID: VOA1

MBLK Sample ID: VBLKW-1011 Test Code: SW8260 Units: µg/L Analysis Date: 10/11/04 11:59

Client ID: Run ID: VOA1\_041011A SeqNo: 552872 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44.57  | 5.0 | 50      | 0             | 89.1 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 46.38  | 5.0 | 50      | 0             | 92.8 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 44.72  | 5.0 | 50      | 0             | 89.4 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 44.16  | 5.0 | 50      | 0             | 88.3 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: R23752 InstrumentID: VOA1

LCS Sample ID: VLCSW-1011 Test Code: SW8260 Units: µg/L Analysis Date: 10/11/04 11:04

Client ID: Run ID: VOA1\_041011A SeqNo: 552871 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 53.63  | 5.0 | 50      | 0             | 107  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 49.81  | 5.0 | 50      | 0             | 99.6 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 49.06  | 5.0 | 50      | 0             | 98.1 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 48.77  | 5.0 | 50      | 0             | 97.5 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 49.92  | 5.0 | 50      | 0             | 99.8 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 51.1   | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 94.81  | 10  | 100     | 0             | 94.8 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 100.6  | 10  | 100     | 0             | 101  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 103    | 10  | 100     | 0             | 103  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 103    | 10  | 100     | 0             | 103  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 93.36  | 10  | 100     | 0             | 93.4 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 48.84  | 5.0 | 50      | 0             | 97.7 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 52.77  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Bromoform                   | 50.71  | 5.0 | 50      | 0             | 101  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 45.63  | 5.0 | 50      | 0             | 91.3 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 104.4  | 10  | 100     | 0             | 104  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 56.4   | 5.0 | 50      | 0             | 113  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 47.93  | 5.0 | 50      | 0             | 95.9 | 80-120        | 0             |      |           |      |
| Chloroethane                | 48.73  | 5.0 | 50      | 0             | 97.5 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 50.31  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Chloromethane               | 47.93  | 5.0 | 50      | 0             | 95.9 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 52.36  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 53.4   | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 49.41  | 5.0 | 50      | 0             | 98.8 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 98.46  | 10  | 100     | 0             | 98.5 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 46.95  | 10  | 50      | 0             | 93.9 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.3   | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 50.76  | 5.0 | 50      | 0             | 102  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 48.29  | 5.0 | 50      | 0             | 96.6 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 55.38  | 5.0 | 50      | 0             | 111  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 49.72  | 5.0 | 50      | 0             | 99.4 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 114.7  | 10  | 100     | 0             | 115  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 49.31  | 2.0 | 50      | 0             | 98.6 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 148.5  | 15  | 150     | 0             | 99   | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44.99  | 5.0 | 50      | 0             | 90   | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 46.54  | 5.0 | 50      | 0             | 93.1 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.07  | 5.0 | 50      | 0             | 92.1 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 46.78  | 5.0 | 50      | 0             | 93.6 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: R23752 InstrumentID: VOA1

MS Sample ID: 0410086-01AMS Test Code: SW8260 Units: µg/L Analysis Date: 10/11/04 14:43

Client ID: MW-18 Run ID: VOA1\_041011A SeqNo: 552877 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 57.71  | 5.0 | 50      | 0             | 115  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 49.98  | 5.0 | 50      | 0             | 100  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 48.81  | 5.0 | 50      | 0             | 97.6 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 48.25  | 5.0 | 50      | 0             | 96.5 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 50.51  | 5.0 | 50      | 0             | 101  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 50.72  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 88.35  | 10  | 100     | 0             | 88.3 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 60-135        | 0             |      |           | S    |
| 2-Hexanone                  | 113.2  | 10  | 100     | 0             | 113  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 111.5  | 10  | 100     | 0             | 112  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 75.53  | 10  | 100     | 0             | 75.5 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 49.39  | 5.0 | 50      | 0             | 98.8 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 52.77  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Bromoform                   | 51.73  | 5.0 | 50      | 0             | 103  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 34.49  | 5.0 | 50      | 0             | 69   | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 104.8  | 10  | 100     | 0             | 105  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 55.75  | 5.0 | 50      | 0             | 111  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 48.64  | 5.0 | 50      | 0             | 97.3 | 80-120        | 0             |      |           |      |
| Chloroethane                | 51.97  | 5.0 | 50      | 0             | 104  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 49.16  | 5.0 | 50      | 0             | 98.3 | 80-120        | 0             |      |           |      |
| Chloromethane               | 47.1   | 5.0 | 50      | 0             | 94.2 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 53.46  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 53.35  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 49.42  | 5.0 | 50      | 0             | 98.8 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 99.41  | 10  | 100     | 0             | 99.4 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 46.2   | 10  | 50      | 0             | 92.4 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.83  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 50.78  | 5.0 | 50      | 0             | 102  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 49.67  | 5.0 | 50      | 0             | 99.3 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 56.32  | 5.0 | 50      | 0             | 113  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 50.09  | 5.0 | 50      | 0             | 100  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 116.9  | 10  | 100     | 0             | 117  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 50.18  | 2.0 | 50      | 0             | 100  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 150    | 15  | 150     | 0             | 100  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44.9   | 5.0 | 50      | 0             | 89.8 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.34  | 5.0 | 50      | 0             | 96.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 44.83  | 5.0 | 50      | 0             | 89.7 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 45.87  | 5.0 | 50      | 0             | 91.7 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: R23711 InstrumentID: UV-2101PC

MBLK Sample ID: WBLKW1-100804 Test Code: E335.3 Units: mg/L Analysis Date: 10/10/04 0:00

Client ID: Run ID: UV-2101PC\_041010A SeqNo: 551995 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-100804 Test Code: E335.3 Units: mg/L Analysis Date: 10/10/04 0:00

Client ID: Run ID: UV-2101PC\_041010A SeqNo: 551996 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1961 | 0.020 | 0.2     | 0             | 98   | 80-120        | 0             |      |           |      |

MS Sample ID: 0410042-01DMS Test Code: E335.3 Units: mg/L Analysis Date: 10/10/04 0:00

Client ID: Run ID: UV-2101PC\_041010A SeqNo: 552016 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1886 | 0.020 | 0.2     | 0.002         | 93.3 | 75-125        | 0             |      |           |      |

MSD Sample ID: 0410042-01DMSD Test Code: E335.3 Units: mg/L Analysis Date: 10/10/04 0:00

Client ID: Run ID: UV-2101PC\_041010A SeqNo: 552017 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.193  | 0.020 | 0.2     | 0.002         | 95.5 | 75-125        | 0.1886        | 2.31 | 25        |      |

DUP Sample ID: 0410042-01DDUP Test Code: E335.3 Units: mg/L Analysis Date: 10/10/04 0:00

Client ID: Run ID: UV-2101PC\_041010A SeqNo: 552015 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 | 0       | 0             | 0    | 0-0           | 0.002         | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410086-01D | 0410086-02D | 0410086-03D |
| 0410086-04D |             |             |

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CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: R23712 InstrumentID: IC201

MBLK Sample ID: WBLKW1-100804 Test Code: E300 Units: mg/L Analysis Date: 10/08/04 12:45

Client ID: Run ID: IC201\_041008A SeqNo: 552117 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Nitrogen, Nitrate (As N)         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Nitrogen, Nitrite (As N)         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.21   | 0.10 | 5       | 0             | 104  | 80-120        | 0             |      |           |      |

LCS Sample ID: WLCSW1-100804 Test Code: E300 Units: mg/L Analysis Date: 10/08/04 13:13

Client ID: Run ID: IC201\_041008A SeqNo: 552118 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.4    | 0.50 | 10      | 0             | 94   | 80-120        | 0             |      |           |      |
| Fluoride                         | 2.03   | 0.10 | 2       | 0             | 101  | 80-120        | 0             |      |           |      |
| Nitrogen, Nitrate (As N)         | 2.05   | 0.10 | 2       | 0             | 102  | 80-120        | 0             |      |           |      |
| Nitrogen, Nitrite (As N)         | 2.05   | 0.10 | 2       | 0             | 102  | 80-120        | 0             |      |           |      |
| Sulfate                          | 10.17  | 1.0  | 10      | 0             | 102  | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.22   | 0.10 | 5       | 0             | 104  | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-10080 Test Code: E300 Units: mg/L Analysis Date: 10/08/04 13:42

Client ID: Run ID: IC201\_041008A SeqNo: 552119 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 9.34   | 0.50 | 10      | 0             | 93.4 | 80-120        | 9.4           | 0.64  | 20        |      |
| Fluoride                         | 1.99   | 0.10 | 2       | 0             | 99.5 | 80-120        | 2.03          | 1.99  | 20        |      |
| Nitrogen, Nitrate (As N)         | 2.04   | 0.10 | 2       | 0             | 102  | 80-120        | 2.05          | 0.489 | 20        |      |
| Nitrogen, Nitrite (As N)         | 2.04   | 0.10 | 2       | 0             | 102  | 80-120        | 2.05          | 0.489 | 20        |      |
| Sulfate                          | 10.04  | 1.0  | 10      | 0             | 100  | 80-120        | 10.17         | 1.29  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.18   | 0.10 | 5       | 0             | 104  | 80-120        | 5.22          | 0.769 | 20        |      |

MS Sample ID: 0410086-01EMS Test Code: E300 Units: mg/L Analysis Date: 10/08/04 14:39

Client ID: MW-18 Run ID: IC201\_041008A SeqNo: 552121 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 250.2  | 0.50 | 10      | 242.4         | 77.7 | 75-125        | 0             |      |           | EO   |
| Fluoride                         | 3.38   | 0.10 | 2       | 1.17          | 110  | 75-125        | 0             |      |           |      |
| Nitrogen, Nitrate (As N)         | 7.73   | 0.10 | 2       | 5.41          | 116  | 75-125        | 0             |      |           |      |
| Nitrogen, Nitrite (As N)         | 2.07   | 0.10 | 2       | 0             | 103  | 75-125        | 0             |      |           |      |
| Sulfate                          | 1492   | 1.0  | 10      | 1514          | -215 | 75-125        | 0             |      |           | SEO  |
| Surr: Dichloroacetic acid (surr) | 5.34   | 0.10 | 5       | 0             | 107  | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: R23712 InstrumentID: IC201

MSD Sample ID: 0410086-01EMSD Test Code: E300 Units: mg/L Analysis Date: 10/08/04 15:07

Client ID: MW-18 Run ID: IC201\_041008A SeqNo: 552122 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 249.7  | 0.50 | 10      | 242.4         | 72.2 | 75-125        | 250.2         | 0.22   | 20        | SEO  |
| Fluoride                         | 3.27   | 0.10 | 2       | 1.17          | 105  | 75-125        | 3.38          | 3.31   | 20        |      |
| Nitrogen, Nitrate (As N)         | 7.61   | 0.10 | 2       | 5.41          | 110  | 75-125        | 7.73          | 1.56   | 20        |      |
| Nitrogen, Nitrite (As N)         | 1.97   | 0.10 | 2       | 0             | 98.5 | 75-125        | 2.07          | 4.95   | 20        |      |
| Sulfate                          | 1492   | 1.0  | 10      | 1514          | -221 | 75-125        | 1492          | 0.0355 | 20        | SEO  |
| Surr: Dichloroacetic acid (surr) | 5.59   | 0.10 | 5       | 0             | 112  | 80-120        | 5.34          | 4.57   | 20        |      |

DUP Sample ID: 0410086-01EDUP Test Code: E300 Units: mg/L Analysis Date: 10/08/04 14:10

Client ID: MW-18 Run ID: IC201\_041008A SeqNo: 552120 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 241.6  | 0.50 | 0       | 0             | 0    | 0-0           | 242.4         | 0.331 | 20        | E    |
| Fluoride                         | 1.2    | 0.10 | 0       | 0             | 0    | 0-0           | 1.17          | 2.53  | 20        |      |
| Nitrogen, Nitrate (As N)         | 5.33   | 0.10 | 0       | 0             | 0    | 0-0           | 5.41          | 1.49  | 20        |      |
| Nitrogen, Nitrite (As N)         | ND     | 0.10 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Sulfate                          | 1509   | 1.0  | 0       | 0             | 0    | 0-0           | 1514          | 0.3   | 20        | E    |
| Surr: Dichloroacetic acid (surr) | 5.75   | 0.10 | 5       | 0             | 115  | 80-120        | 5.92          | 2.91  | 20        |      |

DUP Sample ID: 0410086-01EDUP Test Code: E300 Units: mg/L Analysis Date: 10/08/04 16:04

Client ID: MW-18 Run ID: IC201\_041008A SeqNo: 552124 Prep Date: DF: 5

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 202.6  | 2.5  | 0       | 0             | 0    | 0-0           | 203.1         | 0.271 | 20        |      |
| Fluoride                         | 0.8    | 0.50 | 0       | 0             | 0    | 0-0           | 0.8           | 0     | 20        |      |
| Nitrogen, Nitrate (As N)         | 4.7    | 0.50 | 0       | 0             | 0    | 0-0           | 4.7           | 0     | 20        |      |
| Nitrogen, Nitrite (As N)         | ND     | 0.50 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Sulfate                          | 1367   | 5.0  | 0       | 0             | 0    | 0-0           | 1369          | 0.139 | 20        | E    |
| Surr: Dichloroacetic acid (surr) | 27.6   | 0.50 | 25      | 0             | 110  | 80-120        | 27.9          | 1.08  | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410086-01E | 0410086-02E | 0410086-03E |
| 0410086-04E |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: R23755 InstrumentID: IC201

**MBLK** Sample ID: WBLKW1-101104 Test Code: E300 Units: mg/L Analysis Date: 10/11/04 19:40

Client ID: Run ID: IC201\_041011A SeqNo: 552952 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Nitrogen, Nitrate (As N)         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Nitrogen, Nitrite (As N)         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.11   | 0.10 | 5       | 0             | 102  | 80-120        | 0             |      |           |      |

**LCS** Sample ID: WLCSW1-101104 Test Code: E300 Units: mg/L Analysis Date: 10/11/04 20:08

Client ID: Run ID: IC201\_041011A SeqNo: 552953 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 8.98   | 0.50 | 10      | 0             | 89.8 | 80-120        | 0             |      |           |      |
| Fluoride                         | 1.95   | 0.10 | 2       | 0             | 97.5 | 80-120        | 0             |      |           |      |
| Nitrogen, Nitrate (As N)         | 1.92   | 0.10 | 2       | 0             | 96   | 80-120        | 0             |      |           |      |
| Nitrogen, Nitrite (As N)         | 1.96   | 0.10 | 2       | 0             | 98   | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.79   | 1.0  | 10      | 0             | 97.9 | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.53   | 0.10 | 5       | 0             | 111  | 80-120        | 0             |      |           |      |

**LCSD** Sample ID: WLCSW1-101104 Test Code: E300 Units: mg/L Analysis Date: 10/11/04 20:37

Client ID: Run ID: IC201\_041011A SeqNo: 552954 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 9      | 0.50 | 10      | 0             | 90   | 80-120        | 8.98          | 0.222 | 20        |      |
| Fluoride                         | 1.92   | 0.10 | 2       | 0             | 96   | 80-120        | 1.95          | 1.55  | 20        |      |
| Nitrogen, Nitrate (As N)         | 1.93   | 0.10 | 2       | 0             | 96.5 | 80-120        | 1.92          | 0.519 | 20        |      |
| Nitrogen, Nitrite (As N)         | 2.04   | 0.10 | 2       | 0             | 102  | 80-120        | 1.96          | 4     | 20        |      |
| Sulfate                          | 9.79   | 1.0  | 10      | 0             | 97.9 | 80-120        | 9.79          | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.72   | 0.10 | 5       | 0             | 114  | 80-120        | 5.53          | 3.38  | 20        |      |

**MS** Sample ID: 0410086-01EMS Test Code: E300 Units: mg/L Analysis Date: 10/11/04 22:02

Client ID: MW-18 Run ID: IC201\_041011A SeqNo: 552957 Prep Date: DF: 50

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 648    | 25  | 500     | 166.5         | 96.3 | 75-125        | 0             |      |           |      |
| Fluoride                         | 95     | 5.0 | 100     | 0             | 95   | 75-125        | 0             |      |           |      |
| Nitrogen, Nitrate (As N)         | 101    | 5.0 | 100     | 5             | 96   | 75-125        | 0             |      |           |      |
| Nitrogen, Nitrite (As N)         | 98     | 5.0 | 100     | 0             | 98   | 75-125        | 0             |      |           |      |
| Sulfate                          | 1666   | 50  | 500     | 1116          | 110  | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 269.5  | 5.0 | 250     | 0             | 108  | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: R23755 InstrumentID: IC201

MSD Sample ID: 0410086-01EMSD Test Code: E300 Units: mg/L Analysis Date: 10/11/04 22:31

Client ID: MW-18 Run ID: IC201\_041011A SeqNo: 552958 Prep Date: DF: 50

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 635    | 25  | 500     | 166.5         | 93.7 | 75-125        | 648           | 2.03 | 20        |      |
| Fluoride                         | 92     | 5.0 | 100     | 0             | 92   | 75-125        | 95            | 3.21 | 20        |      |
| Nitrogen, Nitrate (As N)         | 98.5   | 5.0 | 100     | 5             | 93.5 | 75-125        | 101           | 2.51 | 20        |      |
| Nitrogen, Nitrite (As N)         | 95.5   | 5.0 | 100     | 0             | 95.5 | 75-125        | 98            | 2.58 | 20        |      |
| Sulfate                          | 1642   | 50  | 500     | 1116          | 105  | 75-125        | 1666          | 1.45 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 272.5  | 5.0 | 250     | 0             | 109  | 80-120        | 269.5         | 1.11 | 20        |      |

DUP Sample ID: 0410086-01EDUP Test Code: E300 Units: mg/L Analysis Date: 10/11/04 21:34

Client ID: MW-18 Run ID: IC201\_041011A SeqNo: 552956 Prep Date: DF: 50

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 164.5  | 25  | 0       | 0             | 0    | 0-0           | 166.5         | 1.21 | 20        |      |
| Fluoride                         | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Nitrogen, Nitrate (As N)         | 5      | 5.0 | 0       | 0             | 0    | 0-0           | 5             | 0    | 20        |      |
| Nitrogen, Nitrite (As N)         | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Sulfate                          | 1102   | 50  | 0       | 0             | 0    | 0-0           | 1116          | 1.26 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 269    | 5.0 | 250     | 0             | 108  | 80-120        | 269           | 0    | 20        |      |

DUP Sample ID: 0409351-02CDUP Test Code: E300 Units: mg/L Analysis Date: 10/12/04 3:45

Client ID: Run ID: IC201\_041011A SeqNo: 552969 Prep Date: DF: 200

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 2222   | 100 | 0       | 0             | 0    | 0-0           | 2230          | 0.359 | 20        |      |
| Fluoride                         | ND     | 20  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Nitrogen, Nitrate (As N)         | ND     | 20  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Nitrogen, Nitrite (As N)         | ND     | 20  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Sulfate                          | 6312   | 200 | 0       | 0             | 0    | 0-0           | 6282          | 0.476 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 1132   | 20  | 1000    | 0             | 113  | 80-120        | 1092          | 3.6   | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410086-01E | 0410086-02E | 0410086-03E |
| 0410086-04E |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0410086  
 Project: Annual Sampling

## QC BATCH REPORT

Batch ID: R23809 InstrumentID: WetChem

MBLK Sample ID: WBLKW1-101304 Test Code: E310.1 Units: mg/L Analysis Date: 10/13/04 0:00

Client ID: Run ID: WETCHEM\_041013C SeqNo: 554176 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-101304 Test Code: E310.1 Units: mg/L Analysis Date: 10/13/04 0:00

Client ID: Run ID: WETCHEM\_041013C SeqNo: 554177 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 1000   | 5.0 | 0       | 1             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Total (As CaCO3)       | 1000   | 5.0 | 1000    | 0             | 100  | 80-120        | 0             |      |           |      |

DUP Sample ID: 0410086-01EDUP Test Code: E310.1 Units: mg/L Analysis Date: 10/13/04 0:00

Client ID: MW-18 Run ID: WETCHEM\_041013C SeqNo: 554194 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 410.1  | 5.0 | 0       | 0             | 0    | 0-0           | 410.1         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 410.1  | 5.0 | 0       | 0             | 0    | 0-0           | 410.1         | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0410086-01E | 0410086-02E | 0410086-03E |
| 0410086-04E |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



☐ e-Lab, Inc.  
10450 Stancil Rd. #210  
Houston, Texas 77099  
(Tel) 281.530.5656  
(Fax) 281.530.5887

## Chain of Custody Form

Page 1 of 1

☐ e-Lab, Inc.  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

| Customer Information |                    |         |      | Project Information |                   |           |   | e-Lab Project Manager |   |   |   | e-Lab Work Order #                    |   |   |   |   |      |
|----------------------|--------------------|---------|------|---------------------|-------------------|-----------|---|-----------------------|---|---|---|---------------------------------------|---|---|---|---|------|
| Project Name         |                    |         |      | Annual Sampling     |                   |           |   | Annual                |   |   |   | Parameter/Method Request for Analysis |   |   |   |   |      |
| Project Number       |                    |         |      |                     |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| Bill To Company      |                    |         |      |                     |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| Invoice Attn:        |                    |         |      | Jeff Byrd           |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| Address              |                    |         |      |                     |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| City/State/Zip       |                    |         |      | Artesia NM 88210    |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| Phone                |                    |         |      | (505) 748-3311      |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| Fax                  |                    |         |      |                     |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| e-Mail Address       |                    |         |      |                     |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| No                   | Sample Description | Date    | Time | Matrix              | Pres. Key Numbers | # Bottles | A | B                     | C | D | E | F                                     | G | H | I | J | Hold |
| 1                    | MW 18              | 10/6/04 | 1000 |                     |                   | 8         | X |                       |   |   |   |                                       |   |   |   |   |      |
| 2                    | MW 45              | 10/6/04 | 1030 |                     |                   | 8         | X |                       |   |   |   |                                       |   |   |   |   |      |
| 3                    | MW 29              | 10/7/04 | 920  |                     |                   | 8         | X |                       |   |   |   |                                       |   |   |   |   |      |
| 4                    | RW 13              | 10/8/04 | 950  |                     |                   | 8         | X |                       |   |   |   |                                       |   |   |   |   |      |
| 5                    |                    |         |      |                     |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| 6                    |                    |         |      |                     |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| 7                    |                    |         |      |                     |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| 8                    |                    |         |      |                     |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| 9                    |                    |         |      |                     |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |
| 10                   |                    |         |      |                     |                   |           |   |                       |   |   |   |                                       |   |   |   |   |      |

| Sampler(s): Please Print & Sign |                | Shipment Method:                    |                                    | Required Turnaround Time: (Check Box) |                                    | Results Due Date:                |  |
|---------------------------------|----------------|-------------------------------------|------------------------------------|---------------------------------------|------------------------------------|----------------------------------|--|
| Charles P. ...                  | Fed Ex         | <input type="checkbox"/> 10 Wk Days | <input type="checkbox"/> 5 Wk Days | <input type="checkbox"/> 3 Wk Days    | <input type="checkbox"/> 2 Wk Days | <input type="checkbox"/> 24 Hour |  |
| Relinquished by:                | Date: 10/21/04 | Time: 1615                          | Received by:                       | Date:                                 | Time:                              | Notes:                           |  |
| Relinquished by:                | Date:          | Time:                               | Received by (Laboratory):          | Date: 10/13/04                        | Time: 09:30                        | Notes:                           |  |
| Logged by (Laboratory):         | Date:          | Time:                               | Checked by (Laboratory):           | Date:                                 | Time:                              | Notes:                           |  |

| QC Package: (Check Box Below)                             |                                   |                                              |                                        |
|-----------------------------------------------------------|-----------------------------------|----------------------------------------------|----------------------------------------|
| <input type="checkbox"/> Level II: Standard QC            | <input type="checkbox"/> TRRP LRC | <input type="checkbox"/> Level III: Raw Data | <input type="checkbox"/> TRRP Level IV |
| <input type="checkbox"/> Level IV: SW846 Methods/CLP like |                                   |                                              |                                        |
| <input type="checkbox"/> Other:                           |                                   |                                              |                                        |

**Preservative Key:** 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-Na<sub>2</sub>SO<sub>3</sub> 6-NaHSO<sub>4</sub> 7-Other 8-4°C

Note: Any changes must be made in writing once samples are received by the laboratory.

e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 10/8/2004 9:30:00 AM

Work Order Number 0410086

Received by: RNG

Checklist completed by

[Signature]  
Signature

10/8/04  
Date

Reviewed by

[Signature]  
Initials

10/11/04  
Date

Matrix:

Water

Carrier name FedEx

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

Temperature(s)/Thermometer(s):

2.3, 2.7c

003

Water - VOA vials have zero headspace?

Yes ☒

No ☐

No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

N/A ☐

Adjusted? \_\_\_\_\_

Checked by

[Signature]

Login Notes:

Trip Blank was received however analysis was not requested.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_

Date contacted: \_\_\_\_\_

Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_

Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

NAVAJO REFINING COMPANY

501 E. MAIN STREET  
ARTESIA NM 88210  
5057483311

SHIP DATE: 070CT2004  
ACCOUNT # 113684186  
ACTUAL WGT: 52.00 LBS

NAVAJO REFINING COMPANY

501 E. MAIN STREET  
ARTESIA NM 88210  
5057483311

SHIP DATE: 070CT2004  
ACCOUNT # 113684186  
ACTUAL WGT: 52.00 LBS

Part # 156148-434 NRT 5-04 ::

TO:

E-LAB  
SAMPLE RECEIVING  
10450 STANCLIFF ROAD STE 210  
HOUSTON TX 77099

2815305656  
BILL RECIPIENT

:: TO:

E-LAB  
SAMPLE RECEIVING  
10450 STANCLIFF ROAD STE 210  
HOUSTON TX 77099

2815305656  
BILL RECIPIENT



Deliv

FedEx STANDARD OVERNIGHT

System # 2223500 070CT2004  
TRK# 7907 9081 2423 Form 0201

IAH

FRI

DELIVER BY:  
080CT2004  
A2

77099-TX-US

A9 JGQA



Deliv

FedEx STANDARD OVERNIGHT

System # 2223500 070CT2004  
TRK# 7902 9816 3764 Form 0201

IAH

FRI

DELIVER BY:  
080CT2004  
A2

77099-TX-US

A9 JGQA



0505 v5 2 00 2223500 2844 04/02

0505 v5 2 00 2223500 2844 04/02





**e-Lab Analytical, Inc.**

10450 Standliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

July 13, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: Semi-Annual

Work Order : **0407007**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 13 samples on 7/1/2004 9:05:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 26.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

**e-Lab Analytical, Inc.**

Date: July 13, 2004

CLIENT: Navajo Refining Company  
Project: Semi-Annual  
Work Order: 0407007

**Work Order Sample Summary**

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0407007-01           | MW-52                   | Water         |                   | 6/29/2004 09:25        | 7/1/2004 09:05       | <input type="checkbox"/> |
| 0407007-02           | MW-18                   | Water         |                   | 6/29/2004 10:00        | 7/1/2004 09:05       | <input type="checkbox"/> |
| 0407007-03           | KWB-13                  | Water         |                   | 6/29/2004 10:40        | 7/1/2004 09:05       | <input type="checkbox"/> |
| 0407007-04           | KWB-9                   | Water         |                   | 6/29/2004 11:00        | 7/1/2004 09:05       | <input type="checkbox"/> |
| 0407007-05           | KWB-3R                  | Water         |                   | 6/29/2004 11:15        | 7/1/2004 09:05       | <input type="checkbox"/> |
| 0407007-06           | NP-2                    | Water         |                   | 6/29/2004 13:30        | 7/1/2004 09:05       | <input type="checkbox"/> |
| 0407007-07           | NP-1                    | Water         |                   | 6/29/2004 13:45        | 7/1/2004 09:05       | <input type="checkbox"/> |
| 0407007-08           | KWB-7                   | Water         |                   | 6/29/2004 14:00        | 7/1/2004 09:05       | <input type="checkbox"/> |
| 0407007-09           | KWB-11A                 | Water         |                   | 6/29/2004 14:20        | 7/1/2004 09:05       | <input type="checkbox"/> |
| 0407007-10           | NP-9                    | Water         |                   | 6/30/2004 08:30        | 7/1/2004 09:05       | <input type="checkbox"/> |
| 0407007-11           | NP-10                   | Water         |                   | 6/30/2004 08:45        | 7/1/2004 09:05       | <input type="checkbox"/> |
| 0407007-12           | KWB-2R                  | Water         |                   | 6/30/2004 09:30        | 7/1/2004 09:05       | <input type="checkbox"/> |
| 0407007-13           | MW-59                   | Water         |                   | 6/29/2004 15:30        | 7/1/2004 09:05       | <input type="checkbox"/> |

**e-Lab Analytical, Inc.**

Date: July 13, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407007  
**Project:** Semi-Annual  
**Lab ID:** 0407007-01

**Client Sample ID:** MW-52  
**Collection Date:** 6/29/2004 9:25:00 AM  
**Matrix:** WATER

| Analyses                    | Result | Report<br>Limit | Qual          | Units | Dilution<br>Factor | Date Analyzed       |
|-----------------------------|--------|-----------------|---------------|-------|--------------------|---------------------|
| <b>VOLATILES BY GC/MS</b>   |        |                 | <b>SW8260</b> |       | Analyst: <b>PC</b> |                     |
| Benzene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 4:14:00 PM |
| Ethylbenzene                | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 4:14:00 PM |
| Methyl tert-butyl ether     | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 4:14:00 PM |
| Toluene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 4:14:00 PM |
| Xylenes, Total              | ND     | 15              |               | µg/L  | 1                  | 7/7/2004 4:14:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 117    | 71-126          |               | %REC  | 1                  | 7/7/2004 4:14:00 PM |
| Surr: 4-Bromofluorobenzene  | 88.6   | 74-125          |               | %REC  | 1                  | 7/7/2004 4:14:00 PM |
| Surr: Dibromofluoromethane  | 123    | 73-126          |               | %REC  | 1                  | 7/7/2004 4:14:00 PM |
| Surr: Toluene-d8            | 90.1   | 75-125          |               | %REC  | 1                  | 7/7/2004 4:14:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 13, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407007  
**Project:** Semi-Annual  
**Lab ID:** 0407007-02

**Client Sample ID:** MW-18  
**Collection Date:** 6/29/2004 10:00:00 AM  
**Matrix:** WATER

| Analyses                    | Result | Report<br>Limit | Qual          | Units | Dilution<br>Factor | Date Analyzed       |
|-----------------------------|--------|-----------------|---------------|-------|--------------------|---------------------|
| <b>VOLATILES BY GC/MS</b>   |        |                 | <b>SW8260</b> |       | Analyst: PC        |                     |
| Benzene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 5:39:00 PM |
| Ethylbenzene                | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 5:39:00 PM |
| Methyl tert-butyl ether     | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 5:39:00 PM |
| Toluene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 5:39:00 PM |
| Xylenes, Total              | ND     | 15              |               | µg/L  | 1                  | 7/7/2004 5:39:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 108    | 71-126          |               | %REC  | 1                  | 7/7/2004 5:39:00 PM |
| Surr: 4-Bromofluorobenzene  | 89.9   | 74-125          |               | %REC  | 1                  | 7/7/2004 5:39:00 PM |
| Surr: Dibromofluoromethane  | 114    | 73-126          |               | %REC  | 1                  | 7/7/2004 5:39:00 PM |
| Surr: Toluene-d8            | 85.3   | 75-125          |               | %REC  | 1                  | 7/7/2004 5:39:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 13, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407007  
**Project:** Semi-Annual  
**Lab ID:** 0407007-03

**Client Sample ID:** KWB-13  
**Collection Date:** 6/29/2004 10:40:00 AM  
**Matrix:** WATER

| Analyses                    | Result | Report<br>Limit | Qual          | Units | Dilution<br>Factor | Date Analyzed       |
|-----------------------------|--------|-----------------|---------------|-------|--------------------|---------------------|
| <b>VOLATILES BY GC/MS</b>   |        |                 | <b>SW8260</b> |       | Analyst: <b>PC</b> |                     |
| Benzene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/8/2004 1:19:00 PM |
| Ethylbenzene                | ND     | 5.0             |               | µg/L  | 1                  | 7/8/2004 1:19:00 PM |
| Methyl tert-butyl ether     | ND     | 5.0             |               | µg/L  | 1                  | 7/8/2004 1:19:00 PM |
| Toluene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/8/2004 1:19:00 PM |
| Xylenes, Total              | ND     | 15              |               | µg/L  | 1                  | 7/8/2004 1:19:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 120    | 71-126          |               | %REC  | 1                  | 7/8/2004 1:19:00 PM |
| Surr: 4-Bromofluorobenzene  | 96.1   | 74-125          |               | %REC  | 1                  | 7/8/2004 1:19:00 PM |
| Surr: Dibromofluoromethane  | 123    | 73-126          |               | %REC  | 1                  | 7/8/2004 1:19:00 PM |
| Surr: Toluene-d8            | 88.6   | 75-125          |               | %REC  | 1                  | 7/8/2004 1:19:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 13, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407007  
Project: Semi-Annual  
Lab ID: 0407007-04

Client Sample ID: KWB-9  
Collection Date: 6/29/2004 11:00:00 AM  
Matrix: WATER

| Analyses                    | Result | Report<br>Limit | Qual          | Units | Dilution<br>Factor | Date Analyzed        |
|-----------------------------|--------|-----------------|---------------|-------|--------------------|----------------------|
| <b>VOLATILES BY GC/MS</b>   |        |                 | <b>SW8260</b> |       | Analyst: PC        |                      |
| Benzene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 10:21:00 PM |
| Ethylbenzene                | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 10:21:00 PM |
| Methyl tert-butyl ether     | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 10:21:00 PM |
| Toluene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 10:21:00 PM |
| Xylenes, Total              | ND     | 15              |               | µg/L  | 1                  | 7/7/2004 10:21:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 115    | 71-126          |               | %REC  | 1                  | 7/7/2004 10:21:00 PM |
| Surr: 4-Bromofluorobenzene  | 87.8   | 74-125          |               | %REC  | 1                  | 7/7/2004 10:21:00 PM |
| Surr: Dibromofluoromethane  | 124    | 73-126          |               | %REC  | 1                  | 7/7/2004 10:21:00 PM |
| Surr: Toluene-d8            | 89.1   | 75-125          |               | %REC  | 1                  | 7/7/2004 10:21:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 13, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407007  
**Project:** Semi-Annual  
**Lab ID:** 0407007-05

**Client Sample ID:** KWB-3R  
**Collection Date:** 6/29/2004 11:15:00 AM  
**Matrix:** WATER

| Analyses                    | Result | Report<br>Limit | Qual          | Units | Dilution<br>Factor | Date Analyzed       |
|-----------------------------|--------|-----------------|---------------|-------|--------------------|---------------------|
| <b>VOLATILES BY GC/MS</b>   |        |                 | <b>SW8260</b> |       | Analyst: PC        |                     |
| Benzene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 6:05:00 PM |
| Ethylbenzene                | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 6:05:00 PM |
| Methyl tert-butyl ether     | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 6:05:00 PM |
| Toluene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/7/2004 6:05:00 PM |
| Xylenes, Total              | ND     | 15              |               | µg/L  | 1                  | 7/7/2004 6:05:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 89.8   | 71-126          |               | %REC  | 1                  | 7/7/2004 6:05:00 PM |
| Surr: 4-Bromofluorobenzene  | 85.9   | 74-125          |               | %REC  | 1                  | 7/7/2004 6:05:00 PM |
| Surr: Dibromofluoromethane  | 91.5   | 73-126          |               | %REC  | 1                  | 7/7/2004 6:05:00 PM |
| Surr: Toluene-d8            | 90.0   | 75-125          |               | %REC  | 1                  | 7/7/2004 6:05:00 PM |

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B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 13, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407007  
Project: Semi-Annual  
Lab ID: 0407007-06

Client Sample ID: NP-2  
Collection Date: 6/29/2004 1:30:00 PM  
Matrix: WATER

| Analyses                    | Result | Report<br>Limit | Qual          | Units | Dilution<br>Factor | Date Analyzed       |
|-----------------------------|--------|-----------------|---------------|-------|--------------------|---------------------|
| <b>VOLATILES BY GC/MS</b>   |        |                 | <b>SW8260</b> |       | Analyst: <b>PC</b> |                     |
| Benzene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/8/2004 3:39:00 PM |
| Ethylbenzene                | ND     | 5.0             |               | µg/L  | 1                  | 7/8/2004 3:39:00 PM |
| Methyl tert-butyl ether     | ND     | 5.0             |               | µg/L  | 1                  | 7/8/2004 3:39:00 PM |
| Toluene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/8/2004 3:39:00 PM |
| Xylenes, Total              | ND     | 15              |               | µg/L  | 1                  | 7/8/2004 3:39:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 103    | 71-126          |               | %REC  | 1                  | 7/8/2004 3:39:00 PM |
| Surr: 4-Bromofluorobenzene  | 93.6   | 74-125          |               | %REC  | 1                  | 7/8/2004 3:39:00 PM |
| Surr: Dibromofluoromethane  | 111    | 73-126          |               | %REC  | 1                  | 7/8/2004 3:39:00 PM |
| Surr: Toluene-d8            | 91.9   | 75-125          |               | %REC  | 1                  | 7/8/2004 3:39:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: July 13, 2004

CLIENT: Navajo Refining Company

Client Sample ID: NP-1

Work Order: 0407007

Collection Date: 6/29/2004 1:45:00 PM

Project: Semi-Annual

Lab ID: 0407007-07

Matrix: WATER

| Analyses                    | Result | Report<br>Limit | Qual | Units | Dilution<br>Factor | Date Analyzed       |
|-----------------------------|--------|-----------------|------|-------|--------------------|---------------------|
| <b>VOLATILES BY GC/MS</b>   |        | <b>SW8260</b>   |      |       |                    | Analyst: PC         |
| Benzene                     | ND     | 5.0             |      | µg/L  | 1                  | 7/8/2004 4:36:00 PM |
| Ethylbenzene                | ND     | 5.0             |      | µg/L  | 1                  | 7/8/2004 4:36:00 PM |
| Methyl tert-butyl ether     | 100    | 5.0             |      | µg/L  | 1                  | 7/8/2004 4:36:00 PM |
| Toluene                     | ND     | 5.0             |      | µg/L  | 1                  | 7/8/2004 4:36:00 PM |
| Xylenes, Total              | ND     | 15              |      | µg/L  | 1                  | 7/8/2004 4:36:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 119    | 71-126          |      | %REC  | 1                  | 7/8/2004 4:36:00 PM |
| Surr: 4-Bromofluorobenzene  | 94.3   | 74-125          |      | %REC  | 1                  | 7/8/2004 4:36:00 PM |
| Surr: Dibromofluoromethane  | 126    | 73-126          |      | %REC  | 1                  | 7/8/2004 4:36:00 PM |
| Surr: Toluene-d8            | 86.7   | 75-125          |      | %REC  | 1                  | 7/8/2004 4:36:00 PM |

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\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 13, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407007  
**Project:** Semi-Annual  
**Lab ID:** 0407007-08

**Client Sample ID:** KWB-7  
**Collection Date:** 6/29/2004 2:00:00 PM  
**Matrix:** WATER

| Analyses                    | Result | Report<br>Limit | Qual          | Units | Dilution<br>Factor | Date Analyzed       |
|-----------------------------|--------|-----------------|---------------|-------|--------------------|---------------------|
| <b>VOLATILES BY GC/MS</b>   |        |                 | <b>SW8260</b> |       | Analyst: <b>PC</b> |                     |
| Benzene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/8/2004 5:32:00 PM |
| Ethylbenzene                | ND     | 5.0             |               | µg/L  | 1                  | 7/8/2004 5:32:00 PM |
| Methyl tert-butyl ether     | 35     | 5.0             |               | µg/L  | 1                  | 7/8/2004 5:32:00 PM |
| Toluene                     | ND     | 5.0             |               | µg/L  | 1                  | 7/8/2004 5:32:00 PM |
| Xylenes, Total              | ND     | 15              |               | µg/L  | 1                  | 7/8/2004 5:32:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 116    | 71-126          |               | %REC  | 1                  | 7/8/2004 5:32:00 PM |
| Surr: 4-Bromofluorobenzene  | 91.4   | 74-125          |               | %REC  | 1                  | 7/8/2004 5:32:00 PM |
| Surr: Dibromofluoromethane  | 121    | 73-126          |               | %REC  | 1                  | 7/8/2004 5:32:00 PM |
| Surr: Toluene-d8            | 89.3   | 75-125          |               | %REC  | 1                  | 7/8/2004 5:32:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 13, 2004

CLIENT: Navajo Refining Company

Client Sample ID: KWB-11A

Work Order: 0407007

Collection Date: 6/29/2004 2:20:00 PM

Project: Semi-Annual

Lab ID: 0407007-09

Matrix: WATER

| Analyses                    | Result | Report<br>Limit | Qual Units    | Dilution<br>Factor | Date Analyzed       |
|-----------------------------|--------|-----------------|---------------|--------------------|---------------------|
| <b>VOLATILES BY GC/MS</b>   |        |                 | <b>SW8260</b> |                    | Analyst: PC         |
| Benzene                     | ND     | 5.0             | µg/L          | 1                  | 7/8/2004 6:28:00 PM |
| Ethylbenzene                | ND     | 5.0             | µg/L          | 1                  | 7/8/2004 6:28:00 PM |
| Methyl tert-butyl ether     | 14     | 5.0             | µg/L          | 1                  | 7/8/2004 6:28:00 PM |
| Toluene                     | ND     | 5.0             | µg/L          | 1                  | 7/8/2004 6:28:00 PM |
| Xylenes, Total              | ND     | 15              | µg/L          | 1                  | 7/8/2004 6:28:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 114    | 71-126          | %REC          | 1                  | 7/8/2004 6:28:00 PM |
| Surr: 4-Bromofluorobenzene  | 94.5   | 74-125          | %REC          | 1                  | 7/8/2004 6:28:00 PM |
| Surr: Dibromofluoromethane  | 121    | 73-126          | %REC          | 1                  | 7/8/2004 6:28:00 PM |
| Surr: Toluene-d8            | 89.3   | 75-125          | %REC          | 1                  | 7/8/2004 6:28:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 13, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407007  
Project: Semi-Annual  
Lab ID: 0407007-10

Client Sample ID: NP-9  
Collection Date: 6/30/2004 8:30:00 AM  
Matrix: WATER

| Analyses                    | Result | Report<br>Limit | Qual | Units       | Dilution<br>Factor | Date Analyzed       |
|-----------------------------|--------|-----------------|------|-------------|--------------------|---------------------|
| <b>VOLATILES BY GC/MS</b>   |        | <b>SW8260</b>   |      | Analyst: PC |                    |                     |
| Benzene                     | ND     | 5.0             |      | µg/L        | 1                  | 7/8/2004 7:25:00 PM |
| Ethylbenzene                | ND     | 5.0             |      | µg/L        | 1                  | 7/8/2004 7:25:00 PM |
| Methyl tert-butyl ether     | ND     | 5.0             |      | µg/L        | 1                  | 7/8/2004 7:25:00 PM |
| Toluene                     | ND     | 5.0             |      | µg/L        | 1                  | 7/8/2004 7:25:00 PM |
| Xylenes, Total              | ND     | 15              |      | µg/L        | 1                  | 7/8/2004 7:25:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 109    | 71-126          |      | %REC        | 1                  | 7/8/2004 7:25:00 PM |
| Surr: 4-Bromofluorobenzene  | 88.9   | 74-125          |      | %REC        | 1                  | 7/8/2004 7:25:00 PM |
| Surr: Dibromofluoromethane  | 115    | 73-126          |      | %REC        | 1                  | 7/8/2004 7:25:00 PM |
| Surr: Toluene-d8            | 82.3   | 75-125          |      | %REC        | 1                  | 7/8/2004 7:25:00 PM |

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B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 13, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407007  
Project: Semi-Annual  
Lab ID: 0407007-11

Client Sample ID: NP-10  
Collection Date: 6/30/2004 8:45:00 AM  
Matrix: WATER

| Analyses                    | Result | Report<br>Limit | Qual | Units | Dilution<br>Factor | Date Analyzed       |
|-----------------------------|--------|-----------------|------|-------|--------------------|---------------------|
| <b>VOLATILES BY GC/MS</b>   |        | <b>SW8260</b>   |      |       | Analyst: <b>PC</b> |                     |
| Benzene                     | ND     | 5.0             |      | µg/L  | 1                  | 7/8/2004 8:21:00 PM |
| Ethylbenzene                | ND     | 5.0             |      | µg/L  | 1                  | 7/8/2004 8:21:00 PM |
| Methyl tert-butyl ether     | ND     | 5.0             |      | µg/L  | 1                  | 7/8/2004 8:21:00 PM |
| Toluene                     | ND     | 5.0             |      | µg/L  | 1                  | 7/8/2004 8:21:00 PM |
| Xylenes, Total              | ND     | 15              |      | µg/L  | 1                  | 7/8/2004 8:21:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 115    | 71-126          |      | %REC  | 1                  | 7/8/2004 8:21:00 PM |
| Surr: 4-Bromofluorobenzene  | 91.8   | 74-125          |      | %REC  | 1                  | 7/8/2004 8:21:00 PM |
| Surr: Dibromofluoromethane  | 123    | 73-126          |      | %REC  | 1                  | 7/8/2004 8:21:00 PM |
| Surr: Toluene-d8            | 88.1   | 75-125          |      | %REC  | 1                  | 7/8/2004 8:21:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 13, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407007  
**Project:** Semi-Annual  
**Lab ID:** 0407007-12

**Client Sample ID:** KWB-2R  
**Collection Date:** 6/30/2004 9:30:00 AM  
**Matrix:** WATER

| Analyses                    | Result | Report<br>Limit | Qual | Units              | Dilution<br>Factor | Date Analyzed       |
|-----------------------------|--------|-----------------|------|--------------------|--------------------|---------------------|
| <b>VOLATILES BY GC/MS</b>   |        | <b>SW8260</b>   |      | Analyst: <b>PC</b> |                    |                     |
| Benzene                     | 1,500  | 120             |      | µg/L               | 25                 | 7/9/2004 2:04:00 PM |
| Ethylbenzene                | 2,400  | 120             |      | µg/L               | 25                 | 7/9/2004 2:04:00 PM |
| Methyl tert-butyl ether     | 410    | 120             |      | µg/L               | 25                 | 7/9/2004 2:04:00 PM |
| Toluene                     | 48     | 5.0             |      | µg/L               | 1                  | 7/8/2004 9:17:00 PM |
| Xylenes, Total              | ND     | 380             |      | µg/L               | 25                 | 7/9/2004 2:04:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 77.4   | 71-126          |      | %REC               | 25                 | 7/9/2004 2:04:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 123    | 71-126          |      | %REC               | 1                  | 7/8/2004 9:17:00 PM |
| Surr: 4-Bromofluorobenzene  | 89.7   | 74-125          |      | %REC               | 25                 | 7/9/2004 2:04:00 PM |
| Surr: 4-Bromofluorobenzene  | 101    | 74-125          |      | %REC               | 1                  | 7/8/2004 9:17:00 PM |
| Surr: Dibromofluoromethane  | 81.8   | 73-126          |      | %REC               | 25                 | 7/9/2004 2:04:00 PM |
| Surr: Dibromofluoromethane  | 123    | 73-126          |      | %REC               | 1                  | 7/8/2004 9:17:00 PM |
| Surr: Toluene-d8            | 87.9   | 75-125          |      | %REC               | 25                 | 7/9/2004 2:04:00 PM |
| Surr: Toluene-d8            | 96.7   | 75-125          |      | %REC               | 1                  | 7/8/2004 9:17:00 PM |

**Qualifiers:**

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

E - Value above quantitation range

H - Analyzed outside of Hold Time

AR Page 12 of 12

## e-Lab Analytical, Inc.

Date: Jul 13 2004

CLIENT: Navajo Refining Company

## QC BATCH REPORT

Work Order: 0407007

Project: Semi-Annual

Batch ID: R21572 InstrumentID: VOA2

MBLK Sample ID: VBLKW-0707 Test Code: SW8260 Units: µg/L Analysis Date: 07/07/04 11:16

Client ID: Run ID: VOA2\_040707A SeqNo: 503886 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Methyl tert-butyl ether     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 48.05  | 5.0 | 50      | 0             | 96.1 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 43     | 5.0 | 50      | 0             | 86   | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 50.44  | 5.0 | 50      | 0             | 101  | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 44.86  | 5.0 | 50      | 0             | 89.7 | 75-125        | 0             |      |           |      |

LCS Sample ID: VLCSW-0707 Test Code: SW8260 Units: µg/L Analysis Date: 07/07/04 10:26

Client ID: Run ID: VOA2\_040707A SeqNo: 503885 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 50.68  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 51.92  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Methyl tert-butyl ether     | 50.23  | 5.0 | 50      | 0             | 100  | 73.7-122      | 0             |      |           |      |
| Toluene                     | 49.95  | 5.0 | 50      | 0             | 99.9 | 80-120        | 0             |      |           |      |
| Xylenes, Total              | 157    | 15  | 150     | 0             | 105  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44     | 5.0 | 50      | 0             | 88   | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 45.94  | 5.0 | 50      | 0             | 91.9 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 45.26  | 5.0 | 50      | 0             | 90.5 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 46.99  | 5.0 | 50      | 0             | 94   | 75-125        | 0             |      |           |      |

MS Sample ID: 0406330-01AMS Test Code: SW8260 Units: µg/L Analysis Date: 07/07/04 14:15

Client ID: Run ID: VOA2\_040707A SeqNo: 504050 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 50.84  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 50.59  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Methyl tert-butyl ether     | 55.06  | 5.0 | 50      | 5.185         | 99.8 | 73.7-122      | 0             |      |           |      |
| Toluene                     | 49.95  | 5.0 | 50      | 0             | 99.9 | 80-120        | 0             |      |           |      |
| Xylenes, Total              | 153.2  | 15  | 150     | 0             | 102  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 43.58  | 5.0 | 50      | 0             | 87.2 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 45.1   | 5.0 | 50      | 0             | 90.2 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.83  | 5.0 | 50      | 0             | 93.7 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 45.68  | 5.0 | 50      | 0             | 91.4 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in assoc. Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

U - Analyzed for but not detected

O - Referenced analyte value is &gt; 4 times amount spiked

P - Dual Column results percent difference &gt; 40%

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407007  
Project: Semi-Annual

## QC BATCH REPORT

Batch ID: R21572 InstrumentID: VOA2

|                             |                           |     |         |               |                   |               |               |       |                               |      |
|-----------------------------|---------------------------|-----|---------|---------------|-------------------|---------------|---------------|-------|-------------------------------|------|
| MSD                         | Sample ID: 0406330-01AMSD |     |         |               | Test Code: SW8260 |               | Units: µg/L   |       | Analysis Date: 07/07/04 15:32 |      |
| Client ID:                  | Run ID: VOA2_040707A      |     |         | SeqNo: 504051 |                   | Prep Date:    |               | DF: 1 |                               |      |
| Analyte                     | Result                    | PQL | SPK Val | SPK Ref Value | %REC              | Control Limit | RPD Ref Value | %RPD  | RPD Limit                     | Qual |
| Benzene                     | 49.6                      | 5.0 | 50      | 0             | 99.2              | 80-120        | 50.84         | 2.46  | 20                            |      |
| Ethylbenzene                | 45.88                     | 5.0 | 50      | 0             | 91.8              | 80-120        | 50.59         | 9.78  | 20                            |      |
| Methyl tert-butyl ether     | 56.28                     | 5.0 | 50      | 5.185         | 102               | 73.7-122      | 55.06         | 2.2   | 20                            |      |
| Toluene                     | 47.59                     | 5.0 | 50      | 0             | 95.2              | 80-120        | 49.95         | 4.85  | 20                            |      |
| Xylenes, Total              | 140                       | 15  | 150     | 0             | 93.3              | 80-120        | 153.2         | 9     | 20                            |      |
| Surr: 1,2-Dichloroethane-d4 | 42.71                     | 5.0 | 50      | 0             | 85.4              | 71-126        | 43.58         | 2.02  | 20                            |      |
| Surr: 4-Bromofluorobenzene  | 45.43                     | 5.0 | 50      | 0             | 90.9              | 74-125        | 45.1          | 0.743 | 20                            |      |
| Surr: Dibromofluoromethane  | 44.13                     | 5.0 | 50      | 0             | 88.3              | 73-126        | 46.83         | 5.93  | 20                            |      |
| Surr: Toluene-d8            | 45.73                     | 5.0 | 50      | 0             | 91.5              | 75-125        | 45.68         | 0.121 | 20                            |      |

The following samples were analyzed in this batch:

0407007-05A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0407007  
 Project: Semi-Annual

## QC BATCH REPORT

Batch ID: R21581 InstrumentID: VOA1

MBLK Sample ID: VBLKW-0707 Test Code: SW8260 Units: µg/L Analysis Date: 07/07/04 12:28

Client ID: Run ID: VOA1\_040707A SeqNo: 504030 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Methyl tert-butyl ether     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 48.87  | 5.0 | 50      | 0             | 97.7 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 45.26  | 5.0 | 50      | 0             | 90.5 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 51.39  | 5.0 | 50      | 0             | 103  | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 41.92  | 5.0 | 50      | 0             | 83.8 | 75-125        | 0             |      |           |      |

LCS Sample ID: VLCSW-0707 Test Code: SW8260 Units: µg/L Analysis Date: 07/07/04 12:00

Client ID: Run ID: VOA1\_040707A SeqNo: 504029 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 47.67  | 5.0 | 50      | 0             | 95.3 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 50.63  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Methyl tert-butyl ether     | 46.41  | 5.0 | 50      | 0             | 92.8 | 73.7-122      | 0             |      |           |      |
| Toluene                     | 49.72  | 5.0 | 50      | 0             | 99.4 | 80-120        | 0             |      |           |      |
| Xylenes, Total              | 164.4  | 15  | 150     | 0             | 110  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 48.41  | 5.0 | 50      | 0             | 96.8 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 52.33  | 5.0 | 50      | 0             | 105  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.31  | 5.0 | 50      | 0             | 96.6 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.7   | 5.0 | 50      | 0             | 99.4 | 75-125        | 0             |      |           |      |

MS Sample ID: 0406328-03AMS Test Code: SW8260 Units: µg/L Analysis Date: 07/07/04 14:21

Client ID: Run ID: VOA1\_040707A SeqNo: 504032 Prep Date: DF: 500

| Analyte                     | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 26910  | 2,500 | 25000   | 0             | 108  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 26830  | 2,500 | 25000   | 0             | 107  | 80-120        | 0             |      |           |      |
| Methyl tert-butyl ether     | 24590  | 2,500 | 25000   | 0             | 98.4 | 73.7-122      | 0             |      |           |      |
| Toluene                     | 25980  | 2,500 | 25000   | 0             | 104  | 80-120        | 0             |      |           |      |
| Xylenes, Total              | 86160  | 7,500 | 75000   | 0             | 115  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 26170  | 2,500 | 25000   | 0             | 105  | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 27190  | 2,500 | 25000   | 0             | 109  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 26100  | 2,500 | 25000   | 0             | 104  | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 24630  | 2,500 | 25000   | 0             | 98.5 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407007  
Project: Semi-Annual

## QC BATCH REPORT

Batch ID: R21581 InstrumentID: VOA1

|                             |                           |       |         |                   |      |               |               |                               |           |      |
|-----------------------------|---------------------------|-------|---------|-------------------|------|---------------|---------------|-------------------------------|-----------|------|
| MSD                         | Sample ID: 0406328-03AMSD |       |         | Test Code: SW8260 |      | Units: µg/L   |               | Analysis Date: 07/07/04 14:49 |           |      |
| Client ID:                  | Run ID: VOA1_040707A      |       |         | SeqNo: 504033     |      | Prep Date:    |               | DF: 500                       |           |      |
| Analyte                     | Result                    | PQL   | SPK Val | SPK Ref Value     | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Benzene                     | 26180                     | 2,500 | 25000   | 0                 | 105  | 80-120        | 26910         | 2.74                          | 20        |      |
| Ethylbenzene                | 25970                     | 2,500 | 25000   | 0                 | 104  | 80-120        | 26830         | 3.27                          | 20        |      |
| Methyl tert-butyl ether     | 27150                     | 2,500 | 25000   | 0                 | 109  | 73.7-122      | 24590         | 9.92                          | 20        |      |
| Toluene                     | 25570                     | 2,500 | 25000   | 0                 | 102  | 80-120        | 25980         | 1.6                           | 20        |      |
| Xylenes, Total              | 83120                     | 7,500 | 75000   | 0                 | 111  | 80-120        | 86160         | 3.59                          | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 24590                     | 2,500 | 25000   | 0                 | 98.4 | 71-126        | 26170         | 6.23                          | 20        |      |
| Surr: 4-Bromofluorobenzene  | 25880                     | 2,500 | 25000   | 0                 | 104  | 74-125        | 27190         | 4.94                          | 20        |      |
| Surr: Dibromofluoromethane  | 24490                     | 2,500 | 25000   | 0                 | 98   | 73-126        | 26100         | 6.34                          | 20        |      |
| Surr: Toluene-d8            | 24270                     | 2,500 | 25000   | 0                 | 97.1 | 75-125        | 24630         | 1.48                          | 20        |      |

The following samples were analyzed in this batch:

0407007-01A 0407007-02A 0407007-04A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407007  
 Project: Semi-Annual

## QC BATCH REPORT

Batch ID: R21601 InstrumentID: VOA1

MBLK Sample ID: VBLKW-0708 Test Code: SW8260 Units: µg/L Analysis Date: 07/08/04 12:23

Client ID: Run ID: VOA1\_040708A SeqNo: 504777 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Methyl tert-butyl ether     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 54.57  | 5.0 | 50      | 0             | 109  | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 47.22  | 5.0 | 50      | 0             | 94.4 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 56.6   | 5.0 | 50      | 0             | 113  | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 43.29  | 5.0 | 50      | 0             | 86.6 | 75-125        | 0             |      |           |      |

LCS Sample ID: VLCSW-0708 Test Code: SW8260 Units: µg/L Analysis Date: 07/08/04 11:27

Client ID: Run ID: VOA1\_040708A SeqNo: 504776 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 46.37  | 5.0 | 50      | 0             | 92.7 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 50.93  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Methyl tert-butyl ether     | 47.74  | 5.0 | 50      | 0             | 95.5 | 73.7-122      | 0             |      |           |      |
| Toluene                     | 49.59  | 5.0 | 50      | 0             | 99.2 | 80-120        | 0             |      |           |      |
| Xylenes, Total              | 166.4  | 15  | 150     | 0             | 111  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.92  | 5.0 | 50      | 0             | 91.8 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 51.92  | 5.0 | 50      | 0             | 104  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 45.87  | 5.0 | 50      | 0             | 91.7 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 48.35  | 5.0 | 50      | 0             | 96.7 | 75-125        | 0             |      |           |      |

MS Sample ID: 0407007-06AMS Test Code: SW8260 Units: µg/L Analysis Date: 07/08/04 14:43

Client ID: NP-2 Run ID: VOA1\_040708A SeqNo: 504901 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 53.49  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 53.14  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Methyl tert-butyl ether     | 59.34  | 5.0 | 50      | 0             | 119  | 73.7-122      | 0             |      |           |      |
| Toluene                     | 52.43  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Xylenes, Total              | 167.8  | 15  | 150     | 0             | 112  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 51.67  | 5.0 | 50      | 0             | 103  | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 51.46  | 5.0 | 50      | 0             | 103  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 51.89  | 5.0 | 50      | 0             | 104  | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 48.69  | 5.0 | 50      | 0             | 97.4 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407007  
Project: Semi-Annual

## QC BATCH REPORT

Batch ID: R21601 InstrumentID: VOA1

MSD Sample ID: 0407007-06AMSD Test Code: SW8260 Units: µg/L Analysis Date: 07/08/04 15:11

Client ID: NP-2 Run ID: VOA1\_040708A SeqNo: 504902 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 50.81  | 5.0 | 50      | 0             | 102  | 80-120        | 53.49         | 5.14 | 20        |      |
| Ethylbenzene                | 50.31  | 5.0 | 50      | 0             | 101  | 80-120        | 53.14         | 5.46 | 20        |      |
| Methyl tert-butyl ether     | 54.19  | 5.0 | 50      | 0             | 108  | 73.7-122      | 59.34         | 9.09 | 20        |      |
| Toluene                     | 50.02  | 5.0 | 50      | 0             | 100  | 80-120        | 52.43         | 4.71 | 20        |      |
| Xylenes, Total              | 158.1  | 15  | 150     | 0             | 105  | 80-120        | 167.8         | 5.95 | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 49.64  | 5.0 | 50      | 0             | 99.3 | 71-126        | 51.67         | 4.01 | 20        |      |
| Surr: 4-Bromofluorobenzene  | 52.44  | 5.0 | 50      | 0             | 105  | 74-125        | 51.46         | 1.89 | 20        |      |
| Surr: Dibromofluoromethane  | 51.72  | 5.0 | 50      | 0             | 103  | 73-126        | 51.89         | 0.33 | 20        |      |
| Surr: Toluene-d8            | 50.13  | 5.0 | 50      | 0             | 100  | 75-125        | 48.69         | 2.91 | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0407007-03A | 0407007-06A | 0407007-07A |
| 0407007-08A | 0407007-09A | 0407007-10A |
| 0407007-11A | 0407007-12A |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407007  
 Project: Semi-Annual

## QC BATCH REPORT

Batch ID: R21634 InstrumentID: VOA2

MBLK Sample ID: VBLKW-0708 Test Code: SW8260 Units: µg/L Analysis Date: 07/09/04 11:56

Client ID: Run ID: VOA2\_040709A SeqNo: 505544 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Methyl tert-butyl ether     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44.26  | 5.0 | 50      | 0             | 88.5 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 46.11  | 5.0 | 50      | 0             | 92.2 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 45.59  | 5.0 | 50      | 0             | 91.2 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 46.31  | 5.0 | 50      | 0             | 92.6 | 75-125        | 0             |      |           |      |

LCS Sample ID: VLCSW-0709 Test Code: SW8260 Units: µg/L Analysis Date: 07/09/04 11:29

Client ID: Run ID: VOA2\_040709A SeqNo: 505543 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 47.07  | 5.0 | 50      | 0             | 94.1 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 48.74  | 5.0 | 50      | 0             | 97.5 | 80-120        | 0             |      |           |      |
| Methyl tert-butyl ether     | 45.73  | 5.0 | 50      | 0             | 91.5 | 73.7-122      | 0             |      |           |      |
| Toluene                     | 47.84  | 5.0 | 50      | 0             | 95.7 | 80-120        | 0             |      |           |      |
| Xylenes, Total              | 148.6  | 15  | 150     | 0             | 99.1 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 41.42  | 5.0 | 50      | 0             | 82.8 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 45.63  | 5.0 | 50      | 0             | 91.3 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 43.54  | 5.0 | 50      | 0             | 87.1 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 45.2   | 5.0 | 50      | 0             | 90.4 | 75-125        | 0             |      |           |      |

MS Sample ID: 0407076-06AMS Test Code: SW8260 Units: µg/L Analysis Date: 07/09/04 15:45

Client ID: Run ID: VOA2\_040709A SeqNo: 505553 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Benzene                     | 43.35  | 5.0 | 50      | 0             | 86.7 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 45.1   | 5.0 | 50      | 0             | 90.2 | 80-120        | 0             |      |           |      |
| Methyl tert-butyl ether     | 47.96  | 5.0 | 50      | 0             | 95.9 | 73.7-122      | 0             |      |           |      |
| Toluene                     | 43.8   | 5.0 | 50      | 0             | 87.6 | 80-120        | 0             |      |           |      |
| Xylenes, Total              | 136.4  | 15  | 150     | 0             | 90.9 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 40.8   | 5.0 | 50      | 0             | 81.6 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 46.29  | 5.0 | 50      | 0             | 92.6 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 41.89  | 5.0 | 50      | 0             | 83.8 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 44.3   | 5.0 | 50      | 0             | 88.6 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407007  
Project: Semi-Annual

## QC BATCH REPORT

Batch ID: R21634 InstrumentID: VOA2

|                             |                           |     |         |                   |      |               |               |                               |           |      |
|-----------------------------|---------------------------|-----|---------|-------------------|------|---------------|---------------|-------------------------------|-----------|------|
| MSD                         | Sample ID: 0407076-06AMSD |     |         | Test Code: SW8260 |      | Units: µg/L   |               | Analysis Date: 07/09/04 16:10 |           |      |
| Client ID:                  | Run ID: VOA2_040709A      |     |         | SeqNo: 505554     |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                     | Result                    | PQL | SPK Val | SPK Ref Value     | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Benzene                     | 44.79                     | 5.0 | 50      | 0                 | 89.6 | 80-120        | 43.35         | 3.27                          | 20        |      |
| Ethylbenzene                | 46.84                     | 5.0 | 50      | 0                 | 93.7 | 80-120        | 45.1          | 3.79                          | 20        |      |
| Methyl tert-butyl ether     | 48.88                     | 5.0 | 50      | 0                 | 97.8 | 73.7-122      | 47.96         | 1.88                          | 20        |      |
| Toluene                     | 45.26                     | 5.0 | 50      | 0                 | 90.5 | 80-120        | 43.8          | 3.29                          | 20        |      |
| Xylenes, Total              | 139.1                     | 15  | 150     | 0                 | 92.7 | 80-120        | 136.4         | 1.95                          | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 40.76                     | 5.0 | 50      | 0                 | 81.5 | 71-126        | 40.8          | 0.0965                        | 20        |      |
| Surr: 4-Bromofluorobenzene  | 46.2                      | 5.0 | 50      | 0                 | 92.4 | 74-125        | 46.29         | 0.192                         | 20        |      |
| Surr: Dibromofluoromethane  | 41.82                     | 5.0 | 50      | 0                 | 83.6 | 73-126        | 41.89         | 0.16                          | 20        |      |
| Surr: Toluene-d8            | 44.58                     | 5.0 | 50      | 0                 | 89.2 | 75-125        | 44.3          | 0.62                          | 20        |      |

The following samples were analyzed in this batch:

0407007-12A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

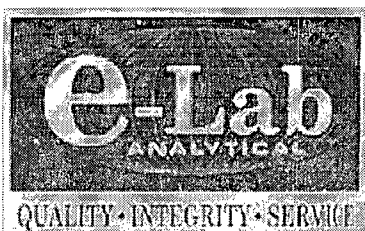
B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

**ATTACHMENT C**

**2004 NCL/TEL LABORATORY ANALYTICAL REPORTS**



**e-Lab Analytical, Inc.**

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

November 22, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: NCL/TEL

Work Order : **0411050**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 9 samples on 11/5/2004 8:30:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 62.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston



**e-Lab Analytical, Inc.**

**Date:** November 22, 2004

**CLIENT:** Navajo Refining Company  
**Project:** NCL/TEL  
**Work Order:** 0411050

**Work Order Sample Summary**

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0411050-01           | NCL-49                  | Water         |                   | 11/4/2004 08:15        | 11/5/2004 08:30      | <input type="checkbox"/> |
| 0411050-02           | NCL-32                  | Water         |                   | 11/4/2004 08:45        | 11/5/2004 08:30      | <input type="checkbox"/> |
| 0411050-03           | NCL-44                  | Water         |                   | 11/4/2004 09:10        | 11/5/2004 08:30      | <input type="checkbox"/> |
| 0411050-04           | NCL-33                  | Water         |                   | 11/4/2004 10:00        | 11/5/2004 08:30      | <input type="checkbox"/> |
| 0411050-05           | NCL-34                  | Water         |                   | 11/4/2004 10:15        | 11/5/2004 08:30      | <input type="checkbox"/> |
| 0411050-06           | MW-60                   | Water         |                   | 11/4/2004 10:45        | 11/5/2004 08:30      | <input type="checkbox"/> |
| 0411050-07           | MW-59                   | Water         |                   | 11/4/2004 13:30        | 11/5/2004 08:30      | <input type="checkbox"/> |
| 0411050-08           | TEL-4                   | Water         |                   | 11/4/2004 14:00        | 11/5/2004 08:30      | <input type="checkbox"/> |
| 0411050-09           | Trip Blank #187         | Water         |                   | 11/4/2004              | 11/5/2004 08:30      | <input type="checkbox"/> |

**e-Lab Analytical, Inc.****Date:** November 22, 2004

**CLIENT:** Navajo Refining Company  
**Project:** NCL/TEL  
**Work Order:** 0411050

**Case Narrative**

Batch 11045 Metals MS/MSD was an unrelated sample.

Batch R24456 Volatiles MS/MSD was an unrelated sample.

Batch R24521 Volatiles MS/MSD was an unrelated sample.

Batch R24587 Volatiles (sample TEL-4) MS/MSD recoveries were outside of control limits for several compounds. Recoveries were confirmed by the MS/MSD. Recoveries met the method criteria in the LCS.

**e-Lab Analytical, Inc.**

Date: November 22, 2004

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL  
Lab ID: 0411050-01

Client Sample ID: NCL-49  
Collection Date: 11/4/2004 8:15:00 AM  
Matrix: WATER

| Analyses                              | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|---------------------------------------|--------|--------------|------|-------|-----------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |        |              |      |       |                 |                        |
| Mercury                               | ND     | 0.000200     |      | mg/L  | 1               | 11/11/2004 3:41:20 PM  |
| <b>ICP METALS, TOTAL</b>              |        |              |      |       |                 |                        |
| Aluminum                              | ND     | 0.0200       |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Arsenic                               | ND     | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Barium                                | 0.0105 | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Beryllium                             | ND     | 0.00400      |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Boron                                 | 0.528  | 0.200        |      | mg/L  | 10              | 11/16/2004 12:49:00 AM |
| Cadmium                               | ND     | 0.00200      |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Calcium                               | 462    | 25.0         |      | mg/L  | 50              | 11/15/2004 11:27:00 PM |
| Chromium                              | ND     | 0.00400      |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Cobalt                                | ND     | 0.00400      |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Copper                                | ND     | 0.00400      |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Iron                                  | 1.61   | 0.400        |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Lead                                  | ND     | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Magnesium                             | 268    | 10.0         |      | mg/L  | 50              | 11/15/2004 11:27:00 PM |
| Manganese                             | 0.480  | 0.0500       |      | mg/L  | 10              | 11/16/2004 12:49:00 AM |
| Molybdenum                            | 0.0282 | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Nickel                                | 0.0124 | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Potassium                             | 0.757  | 0.400        |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Selenium                              | ND     | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Silver                                | ND     | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Sodium                                | 200    | 2.00         |      | mg/L  | 10              | 11/16/2004 12:49:00 AM |
| Vanadium                              | 0.0140 | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| Zinc                                  | ND     | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:14:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |              |      |       |                 |                        |
| 1,2,4-Trichlorobenzene                | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |
| 2,4,5-Trichlorophenol                 | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |
| 2,4,6-Trichlorophenol                 | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |
| 2-Methylnaphthalene                   | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |
| 2-Methylphenol                        | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |
| 2-Nitroaniline                        | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |
| 2-Nitrophenol                         | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |
| 3&4-Methylphenol                      | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |
| 3-Nitroaniline                        | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |
| 4-Nitroaniline                        | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |
| 4-Nitrophenol                         | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |
| Acenaphthene                          | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |
| Acenaphthylene                        | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM  |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-01

**Client Sample ID:** NCL-49  
**Collection Date:** 11/4/2004 8:15:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 11/12/2004 5:54:00 PM |
| Surr: 2,4,6-Tribromophenol | 87.4   | 39-153       |      | %REC  | 1               | 11/12/2004 5:54:00 PM |
| Surr: 2-Fluorobiphenyl     | 78.2   | 40-147       |      | %REC  | 1               | 11/12/2004 5:54:00 PM |
| Surr: 2-Fluorophenol       | 35.2   | 21-110       |      | %REC  | 1               | 11/12/2004 5:54:00 PM |
| Surr: 4-Terphenyl-d14      | 88.3   | 39-141       |      | %REC  | 1               | 11/12/2004 5:54:00 PM |
| Surr: Nitrobenzene-d5      | 73.7   | 37-140       |      | %REC  | 1               | 11/12/2004 5:54:00 PM |
| Surr: Phenol-d6            | 19.6   | 11-100       |      | %REC  | 1               | 11/12/2004 5:54:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 11/9/2004 8:37:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 11/9/2004 8:37:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL  
Lab ID: 0411050-01

Client Sample ID: NCL-49  
Collection Date: 11/4/2004 8:15:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed         |
|-------------------------------------|--------|---------------|------|-------|---------------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L  | 1                   | 11/9/2004 8:37:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 100    | 71-126        |      | %REC  | 1                   | 11/9/2004 8:37:00 PM  |
| Surr: 4-Bromofluorobenzene          | 97.1   | 74-125        |      | %REC  | 1                   | 11/9/2004 8:37:00 PM  |
| Surr: Dibromofluoromethane          | 99.9   | 73-126        |      | %REC  | 1                   | 11/9/2004 8:37:00 PM  |
| Surr: Toluene-d8                    | 102    | 75-125        |      | %REC  | 1                   | 11/9/2004 8:37:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>MG</b>  |                       |
| Chloride                            | 270    | 5.00          |      | mg/L  | 10                  | 11/17/2004 8:53:00 PM |
| Fluoride                            | 0.980  | 0.100         |      | mg/L  | 1                   | 11/17/2004 8:24:00 PM |
| Sulfate                             | 1,940  | 100           |      | mg/L  | 100                 | 11/17/2004 9:21:00 PM |
| Surr: Dichloroacetic acid (surr)    | 97.4   | 80-120        |      | %REC  | 1                   | 11/17/2004 8:24:00 PM |
| Surr: Dichloroacetic acid (surr)    | 107    | 80-120        |      | %REC  | 10                  | 11/17/2004 8:53:00 PM |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC  | 100                 | 11/17/2004 9:21:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>LMD</b> |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 358    | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| Alkalinity, Total (As CaCO3)        | 358    | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: <b>LMD</b> |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1                   | 11/12/2004            |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL  
Lab ID: 0411050-02

Client Sample ID: NCL-32  
Collection Date: 11/4/2004 8:45:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|---------------------------------------|---------|--------------|------|-------|-----------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                        |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 11/11/2004 3:42:53 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                        |
| Aluminum                              | 0.209   | 0.100        |      | mg/L  | 10              | 11/16/2004 12:55:00 AM |
| Arsenic                               | ND      | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Barium                                | 0.0305  | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Beryllium                             | ND      | 0.00400      |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Boron                                 | 0.222   | 0.200        |      | mg/L  | 10              | 11/16/2004 12:55:00 AM |
| Cadmium                               | ND      | 0.00200      |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Calcium                               | 433     | 25.0         |      | mg/L  | 50              | 11/15/2004 11:33:00 PM |
| Chromium                              | ND      | 0.00400      |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Cobalt                                | 0.00475 | 0.00400      |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Copper                                | ND      | 0.00400      |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Iron                                  | 1.86    | 0.400        |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Lead                                  | ND      | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Magnesium                             | 131     | 2.00         |      | mg/L  | 10              | 11/16/2004 12:55:00 AM |
| Manganese                             | 0.645   | 0.0500       |      | mg/L  | 10              | 11/16/2004 12:55:00 AM |
| Molybdenum                            | ND      | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Nickel                                | ND      | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Potassium                             | 3.12    | 0.400        |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Selenium                              | ND      | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Silver                                | ND      | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Sodium                                | 58.4    | 2.00         |      | mg/L  | 10              | 11/16/2004 12:55:00 AM |
| Vanadium                              | ND      | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| Zinc                                  | 0.0243  | 0.0100       |      | mg/L  | 2               | 11/17/2004 5:19:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                        |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |
| 3&4-Methylphenol                      | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM  |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

AR Page 4 of 25

**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-02

**Client Sample ID:** NCL-32  
**Collection Date:** 11/4/2004 8:45:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 11/12/2004 6:18:00 PM |
| Surr: 2,4,6-Tribromophenol | 86.7   | 39-153       |      | %REC  | 1               | 11/12/2004 6:18:00 PM |
| Surr: 2-Fluorobiphenyl     | 80.4   | 40-147       |      | %REC  | 1               | 11/12/2004 6:18:00 PM |
| Surr: 2-Fluorophenol       | 33.1   | 21-110       |      | %REC  | 1               | 11/12/2004 6:18:00 PM |
| Surr: 4-Terphenyl-d14      | 87.5   | 39-141       |      | %REC  | 1               | 11/12/2004 6:18:00 PM |
| Surr: Nitrobenzene-d5      | 74.5   | 37-140       |      | %REC  | 1               | 11/12/2004 6:18:00 PM |
| Surr: Phenol-d6            | 18.4   | 11-100       |      | %REC  | 1               | 11/12/2004 6:18:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 11/9/2004 9:04:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:04:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-02

**Client Sample ID:** NCL-32  
**Collection Date:** 11/4/2004 8:45:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed         |
|-------------------------------------|--------|---------------|------|-------|---------------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L  | 1                   | 11/9/2004 9:04:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 97.0   | 71-126        |      | %REC  | 1                   | 11/9/2004 9:04:00 PM  |
| Surr: 4-Bromofluorobenzene          | 97.1   | 74-125        |      | %REC  | 1                   | 11/9/2004 9:04:00 PM  |
| Surr: Dibromofluoromethane          | 99.6   | 73-126        |      | %REC  | 1                   | 11/9/2004 9:04:00 PM  |
| Surr: Toluene-d8                    | 96.8   | 75-125        |      | %REC  | 1                   | 11/9/2004 9:04:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>MG</b>  |                       |
| Chloride                            | 166    | 5.00          |      | mg/L  | 10                  | 11/18/2004 8:38:00 PM |
| Fluoride                            | 1.66   | 0.100         |      | mg/L  | 1                   | 11/18/2004 8:10:00 PM |
| Sulfate                             | 1,180  | 100           |      | mg/L  | 100                 | 11/18/2004 9:07:00 PM |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC  | 1                   | 11/18/2004 8:10:00 PM |
| Surr: Dichloroacetic acid (surr)    | 108    | 80-120        |      | %REC  | 10                  | 11/18/2004 8:38:00 PM |
| Surr: Dichloroacetic acid (surr)    | 114    | 80-120        |      | %REC  | 100                 | 11/18/2004 9:07:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>LMD</b> |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 304    | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| Alkalinity, Total (As CaCO3)        | 304    | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: <b>LMD</b> |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1                   | 11/12/2004            |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-03

**Client Sample ID:** NCL-44  
**Collection Date:** 11/4/2004 9:10:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor       | Date Analyzed          |
|---------------------------------------|---------|---------------|------|-------|-----------------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                       |                        |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: 11/10/2004 | Analyst: JCJ           |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                     | 11/11/2004 3:44:26 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                       |                        |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: 11/9/2004  | Analyst: ALR           |
| Aluminum                              | ND      | 0.0200        |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Arsenic                               | 0.0242  | 0.0100        |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Barium                                | 0.0290  | 0.0100        |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Beryllium                             | ND      | 0.00400       |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Boron                                 | 0.288   | 0.200         |      | mg/L  | 10                    | 11/16/2004 1:01:00 AM  |
| Cadmium                               | ND      | 0.00200       |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Calcium                               | 310     | 25.0          |      | mg/L  | 50                    | 11/15/2004 11:39:00 PM |
| Chromium                              | ND      | 0.00400       |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Cobalt                                | 0.00402 | 0.00400       |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Copper                                | ND      | 0.00400       |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Iron                                  | 1.97    | 0.400         |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Lead                                  | ND      | 0.0100        |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Magnesium                             | 130     | 2.00          |      | mg/L  | 10                    | 11/16/2004 1:01:00 AM  |
| Manganese                             | 0.743   | 0.0500        |      | mg/L  | 10                    | 11/16/2004 1:01:00 AM  |
| Molybdenum                            | 0.0126  | 0.0100        |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Nickel                                | ND      | 0.0100        |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Potassium                             | 2.12    | 0.400         |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Selenium                              | ND      | 0.0100        |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Silver                                | ND      | 0.0100        |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Sodium                                | 76.4    | 2.00          |      | mg/L  | 10                    | 11/16/2004 1:01:00 AM  |
| Vanadium                              | ND      | 0.0100        |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| Zinc                                  | ND      | 0.0100        |      | mg/L  | 2                     | 11/17/2004 5:24:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                       |                        |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: 11/11/2004 | Analyst: HV            |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |
| 3&4-Methylphenol                      | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                     | 11/17/2004 3:19:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**
**Date:** November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-03

**Client Sample ID:** NCL-44  
**Collection Date:** 11/4/2004 9:10:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 3:19:00 PM |
| Surr: 2,4,6-Tribromophenol | 94.1   | 39-153       |      | %REC  | 1               | 11/17/2004 3:19:00 PM |
| Surr: 2-Fluorobiphenyl     | 89.1   | 40-147       |      | %REC  | 1               | 11/17/2004 3:19:00 PM |
| Surr: 2-Fluorophenol       | 41.3   | 21-110       |      | %REC  | 1               | 11/17/2004 3:19:00 PM |
| Surr: 4-Terphenyl-d14      | 90.9   | 39-141       |      | %REC  | 1               | 11/17/2004 3:19:00 PM |
| Surr: Nitrobenzene-d5      | 90.7   | 37-140       |      | %REC  | 1               | 11/17/2004 3:19:00 PM |
| Surr: Phenol-d6            | 25.1   | 11-100       |      | %REC  | 1               | 11/17/2004 3:19:00 PM |

**VOLATILES BY GC/MS**
**SW8260**
**Analyst: PC**

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 11/9/2004 9:31:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:31:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-03

**Client Sample ID:** NCL-44  
**Collection Date:** 11/4/2004 9:10:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed          |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 11/9/2004 9:31:00 PM   |
| Surr: 1,2-Dichloroethane-d4         | 102    | 71-126        |      | %REC                | 1               | 11/9/2004 9:31:00 PM   |
| Surr: 4-Bromofluorobenzene          | 95.6   | 74-125        |      | %REC                | 1               | 11/9/2004 9:31:00 PM   |
| Surr: Dibromofluoromethane          | 101    | 73-126        |      | %REC                | 1               | 11/9/2004 9:31:00 PM   |
| Surr: Toluene-d8                    | 100    | 75-125        |      | %REC                | 1               | 11/9/2004 9:31:00 PM   |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                        |
| Chloride                            | 296    | 5.00          |      | mg/L                | 10              | 11/18/2004 10:04:00 PM |
| Fluoride                            | 1.34   | 0.100         |      | mg/L                | 1               | 11/18/2004 9:35:00 PM  |
| Sulfate                             | 495    | 20.0          |      | mg/L                | 20              | 11/19/2004 2:13:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 99.0   | 80-120        |      | %REC                | 1               | 11/18/2004 9:35:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 108    | 80-120        |      | %REC                | 10              | 11/18/2004 10:04:00 PM |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC                | 20              | 11/19/2004 2:13:00 PM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                        |
| Alkalinity, Bicarbonate (As CaCO3)  | 539    | 5.00          |      | mg/L                | 1               | 11/14/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 11/14/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 11/14/2004             |
| Alkalinity, Total (As CaCO3)        | 539    | 5.00          |      | mg/L                | 1               | 11/14/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                        |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 11/12/2004             |

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S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-04

**Client Sample ID:** NCL-33  
**Collection Date:** 11/4/2004 10:00:00 AM  
**Matrix:** WATER

| Analyses                              | Result | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                                               |
|---------------------------------------|--------|---------------|------|-------|-----------------|-------------------------------------------------------------|
| <b>MERCURY, TOTAL</b>                 |        |               |      |       |                 |                                                             |
|                                       |        | <b>SW7470</b> |      |       |                 |                                                             |
| Mercury                               | ND     | 0.000200      |      | mg/L  | 1               | Prep Date: 11/10/2004 Analyst: JCJ<br>11/11/2004 3:46:00 PM |
| <b>ICP METALS, TOTAL</b>              |        |               |      |       |                 |                                                             |
|                                       |        | <b>SW6020</b> |      |       |                 |                                                             |
| Aluminum                              | ND     | 0.0200        |      | mg/L  | 2               | Prep Date: 11/9/2004 Analyst: ALR<br>11/17/2004 5:29:00 PM  |
| Arsenic                               | ND     | 0.0100        |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Barium                                | 0.0363 | 0.0100        |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Beryllium                             | ND     | 0.00400       |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Boron                                 | 0.555  | 0.200         |      | mg/L  | 10              | 11/16/2004 1:06:00 AM                                       |
| Cadmium                               | ND     | 0.00200       |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Calcium                               | 346    | 25.0          |      | mg/L  | 50              | 11/15/2004 11:45:00 PM                                      |
| Chromium                              | ND     | 0.00400       |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Cobalt                                | ND     | 0.00400       |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Copper                                | ND     | 0.00400       |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Iron                                  | 2.15   | 0.400         |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Lead                                  | ND     | 0.0100        |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Magnesium                             | 113    | 2.00          |      | mg/L  | 10              | 11/16/2004 1:06:00 AM                                       |
| Manganese                             | 0.0719 | 0.0100        |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Molybdenum                            | ND     | 0.0100        |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Nickel                                | ND     | 0.0100        |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Potassium                             | 3.00   | 0.400         |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Selenium                              | ND     | 0.0100        |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Silver                                | ND     | 0.0100        |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Sodium                                | 91.5   | 2.00          |      | mg/L  | 10              | 11/16/2004 1:06:00 AM                                       |
| Vanadium                              | ND     | 0.0100        |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| Zinc                                  | ND     | 0.0100        |      | mg/L  | 2               | 11/17/2004 5:29:00 PM                                       |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |               |      |       |                 |                                                             |
|                                       |        | <b>SW8270</b> |      |       |                 |                                                             |
| 1,2,4-Trichlorobenzene                | ND     | 11            |      | µg/L  | 1               | Prep Date: 11/11/2004 Analyst: HV<br>11/17/2004 3:46:00 PM  |
| 2,4,5-Trichlorophenol                 | ND     | 11            |      | µg/L  | 1               | 11/17/2004 3:46:00 PM                                       |
| 2,4,6-Trichlorophenol                 | ND     | 11            |      | µg/L  | 1               | 11/17/2004 3:46:00 PM                                       |
| 2-Methylnaphthalene                   | ND     | 11            |      | µg/L  | 1               | 11/17/2004 3:46:00 PM                                       |
| 2-Methylphenol                        | ND     | 11            |      | µg/L  | 1               | 11/17/2004 3:46:00 PM                                       |
| 2-Nitroaniline                        | ND     | 11            |      | µg/L  | 1               | 11/17/2004 3:46:00 PM                                       |
| 2-Nitrophenol                         | ND     | 11            |      | µg/L  | 1               | 11/17/2004 3:46:00 PM                                       |
| 3&4-Methylphenol                      | ND     | 11            |      | µg/L  | 1               | 11/17/2004 3:46:00 PM                                       |
| 3-Nitroaniline                        | ND     | 11            |      | µg/L  | 1               | 11/17/2004 3:46:00 PM                                       |
| 4-Nitroaniline                        | ND     | 11            |      | µg/L  | 1               | 11/17/2004 3:46:00 PM                                       |
| 4-Nitrophenol                         | ND     | 11            |      | µg/L  | 1               | 11/17/2004 3:46:00 PM                                       |
| Acenaphthene                          | ND     | 11            |      | µg/L  | 1               | 11/17/2004 3:46:00 PM                                       |
| Acenaphthylene                        | ND     | 11            |      | µg/L  | 1               | 11/17/2004 3:46:00 PM                                       |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-04

**Client Sample ID:** NCL-33  
**Collection Date:** 11/4/2004 10:00:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Aniline                    | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Anthracene                 | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Benz(a)anthracene          | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Benzidine                  | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Hexachloroethane           | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Isophorone                 | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| N-Nitrosodimethylamine     | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| N-Nitrosodiphenylamine     | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Naphthalene                | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Nitrobenzene               | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Pentachlorophenol          | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Phenanthrene               | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Phenol                     | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Pyrene                     | ND     | 11           |      | µg/L  | 1               | 11/17/2004 3:46:00 PM |
| Surr: 2,4,6-Tribromophenol | 90.9   | 39-153       |      | %REC  | 1               | 11/17/2004 3:46:00 PM |
| Surr: 2-Fluorobiphenyl     | 81.3   | 40-147       |      | %REC  | 1               | 11/17/2004 3:46:00 PM |
| Surr: 2-Fluorophenol       | 38.9   | 21-110       |      | %REC  | 1               | 11/17/2004 3:46:00 PM |
| Surr: 4-Terphenyl-d14      | 84.5   | 39-141       |      | %REC  | 1               | 11/17/2004 3:46:00 PM |
| Surr: Nitrobenzene-d5      | 82.8   | 37-140       |      | %REC  | 1               | 11/17/2004 3:46:00 PM |
| Surr: Phenol-d6            | 24.3   | 11-100       |      | %REC  | 1               | 11/17/2004 3:46:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 11/9/2004 9:59:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 11/9/2004 9:59:00 PM |

**Qualifiers:**

ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-04

**Client Sample ID:** NCL-33  
**Collection Date:** 11/4/2004 10:00:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed          |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 11/9/2004 9:59:00 PM   |
| Surr: 1,2-Dichloroethane-d4         | 95.4   | 71-126        |      | %REC                | 1               | 11/9/2004 9:59:00 PM   |
| Surr: 4-Bromofluorobenzene          | 100    | 74-125        |      | %REC                | 1               | 11/9/2004 9:59:00 PM   |
| Surr: Dibromofluoromethane          | 97.0   | 73-126        |      | %REC                | 1               | 11/9/2004 9:59:00 PM   |
| Surr: Toluene-d8                    | 97.3   | 75-125        |      | %REC                | 1               | 11/9/2004 9:59:00 PM   |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                        |
| Chloride                            | 302    | 5.00          |      | mg/L                | 10              | 11/18/2004 11:01:00 PM |
| Fluoride                            | 1.97   | 0.100         |      | mg/L                | 1               | 11/18/2004 10:32:00 PM |
| Sulfate                             | 462    | 20.0          |      | mg/L                | 20              | 11/19/2004 2:42:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC                | 1               | 11/18/2004 10:32:00 PM |
| Surr: Dichloroacetic acid (surr)    | 101    | 80-120        |      | %REC                | 10              | 11/18/2004 11:01:00 PM |
| Surr: Dichloroacetic acid (surr)    | 99.6   | 80-120        |      | %REC                | 20              | 11/19/2004 2:42:00 PM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                        |
| Alkalinity, Bicarbonate (As CaCO3)  | 623    | 5.00          |      | mg/L                | 1               | 11/14/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 11/14/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 11/14/2004             |
| Alkalinity, Total (As CaCO3)        | 623    | 5.00          |      | mg/L                | 1               | 11/14/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                        |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 11/12/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL  
Lab ID: 0411050-05

Client Sample ID: NCL-34  
Collection Date: 11/4/2004 10:15:00 AM  
Matrix: WATER

| Analyses                              | Result | Report Limit  | Qual | Units | Dilution Factor       | Date Analyzed          |
|---------------------------------------|--------|---------------|------|-------|-----------------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |        |               |      |       |                       |                        |
|                                       |        | <b>SW7470</b> |      |       | Prep Date: 11/10/2004 | Analyst: JCJ           |
| Mercury                               | ND     | 0.000200      |      | mg/L  | 1                     | 11/11/2004 3:47:34 PM  |
| <b>ICP METALS, TOTAL</b>              |        |               |      |       |                       |                        |
|                                       |        | <b>SW6020</b> |      |       | Prep Date: 11/9/2004  | Analyst: ALR           |
| Aluminum                              | ND     | 0.0200        |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Arsenic                               | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Barium                                | 0.737  | 0.0500        |      | mg/L  | 10                    | 11/16/2004 1:12:00 AM  |
| Beryllium                             | ND     | 0.00400       |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Boron                                 | 0.293  | 0.200         |      | mg/L  | 10                    | 11/16/2004 1:12:00 AM  |
| Cadmium                               | ND     | 0.00200       |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Calcium                               | 263    | 25.0          |      | mg/L  | 50                    | 11/15/2004 11:51:00 PM |
| Chromium                              | ND     | 0.00400       |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Cobalt                                | ND     | 0.00400       |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Copper                                | ND     | 0.00400       |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Iron                                  | 1.32   | 0.400         |      | mg/L  | 2                     | 11/18/2004 5:48:00 PM  |
| Lead                                  | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Magnesium                             | 97.6   | 2.00          |      | mg/L  | 10                    | 11/16/2004 1:12:00 AM  |
| Manganese                             | 0.107  | 0.0500        |      | mg/L  | 10                    | 11/16/2004 1:12:00 AM  |
| Molybdenum                            | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Nickel                                | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Potassium                             | 1.23   | 0.400         |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Selenium                              | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Silver                                | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Sodium                                | 149    | 2.00          |      | mg/L  | 10                    | 11/16/2004 1:12:00 AM  |
| Vanadium                              | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| Zinc                                  | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:23:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |               |      |       |                       |                        |
|                                       |        | <b>SW8270</b> |      |       | Prep Date: 11/11/2004 | Analyst: HV            |
| 1,2,4-Trichlorobenzene                | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |
| 2,4,5-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |
| 2,4,6-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |
| 2-Methylnaphthalene                   | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |
| 2-Methylphenol                        | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |
| 2-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |
| 2-Nitrophenol                         | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |
| 3&4-Methylphenol                      | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |
| 3-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |
| 4-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |
| 4-Nitrophenol                         | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |
| Acenaphthene                          | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |
| Acenaphthylene                        | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 4:13:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL  
Lab ID: 0411050-05

Client Sample ID: NCL-34  
Collection Date: 11/4/2004 10:15:00 AM  
Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed         |
|----------------------------|--------|---------------|------|-------|--------------------|-----------------------|
| Aniline                    | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Anthracene                 | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Benz(a)anthracene          | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Benzidine                  | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Hexachloroethane           | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Isophorone                 | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Naphthalene                | 15     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Nitrobenzene               | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Pentachlorophenol          | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Phenanthrene               | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Phenol                     | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Pyrene                     | ND     | 10            |      | µg/L  | 1                  | 11/17/2004 4:13:00 PM |
| Surr: 2,4,6-Tribromophenol | 99.9   | 39-153        |      | %REC  | 1                  | 11/17/2004 4:13:00 PM |
| Surr: 2-Fluorobiphenyl     | 80.9   | 40-147        |      | %REC  | 1                  | 11/17/2004 4:13:00 PM |
| Surr: 2-Fluorophenol       | 38.3   | 21-110        |      | %REC  | 1                  | 11/17/2004 4:13:00 PM |
| Surr: 4-Terphenyl-d14      | 83.0   | 39-141        |      | %REC  | 1                  | 11/17/2004 4:13:00 PM |
| Surr: Nitrobenzene-d5      | 84.8   | 37-140        |      | %REC  | 1                  | 11/17/2004 4:13:00 PM |
| Surr: Phenol-d6            | 23.9   | 11-100        |      | %REC  | 1                  | 11/17/2004 4:13:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | <b>Analyst: PC</b> |                       |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| Acetone                    | ND     | 10            |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| Benzene                    | 2,300  | 120           |      | µg/L  | 25                 | 11/11/2004 7:03:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 1:35:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
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B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-05

**Client Sample ID:** NCL-34  
**Collection Date:** 11/4/2004 10:15:00 AM  
**Matrix:** WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|-----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Ethylbenzene                | 200    | 50           |      | µg/L  | 10              | 11/11/2004 5:14:00 PM |
| m,p-Xylene                  | 180    | 10           |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Xylenes, Total              | 180    | 15           |      | µg/L  | 1               | 11/11/2004 1:35:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 90.9   | 71-126       |      | %REC  | 1               | 11/11/2004 1:35:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 91.3   | 71-126       |      | %REC  | 10              | 11/11/2004 5:14:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 86.8   | 71-126       |      | %REC  | 25              | 11/11/2004 7:03:00 PM |
| Surr: 4-Bromofluorobenzene  | 98.9   | 74-125       |      | %REC  | 1               | 11/11/2004 1:35:00 PM |
| Surr: 4-Bromofluorobenzene  | 100    | 74-125       |      | %REC  | 10              | 11/11/2004 5:14:00 PM |
| Surr: 4-Bromofluorobenzene  | 96.8   | 74-125       |      | %REC  | 25              | 11/11/2004 7:03:00 PM |
| Surr: Dibromofluoromethane  | 96.4   | 73-126       |      | %REC  | 10              | 11/11/2004 5:14:00 PM |
| Surr: Dibromofluoromethane  | 92.8   | 73-126       |      | %REC  | 25              | 11/11/2004 7:03:00 PM |
| Surr: Dibromofluoromethane  | 94.5   | 73-126       |      | %REC  | 1               | 11/11/2004 1:35:00 PM |
| Surr: Toluene-d8            | 101    | 75-125       |      | %REC  | 10              | 11/11/2004 5:14:00 PM |
| Surr: Toluene-d8            | 98.4   | 75-125       |      | %REC  | 25              | 11/11/2004 7:03:00 PM |
| Surr: Toluene-d8            | 101    | 75-125       |      | %REC  | 1               | 11/11/2004 1:35:00 PM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |      |        |      |    |                        |
|----------------------------------|------|--------|------|----|------------------------|
| Chloride                         | 377  | 5.00   | mg/L | 10 | 11/19/2004 3:10:00 PM  |
| Fluoride                         | 1.03 | 0.100  | mg/L | 1  | 11/18/2004 11:29:00 PM |
| Sulfate                          | 139  | 10.0   | mg/L | 10 | 11/19/2004 3:10:00 PM  |
| Surr: Dichloroacetic acid (surr) | 100  | 80-120 | %REC | 1  | 11/18/2004 11:29:00 PM |
| Surr: Dichloroacetic acid (surr) | 101  | 80-120 | %REC | 10 | 11/19/2004 3:10:00 PM  |

**ALKALINITY****E310.1**Analyst: **LMD**

|                                    |     |      |      |   |            |
|------------------------------------|-----|------|------|---|------------|
| Alkalinity, Bicarbonate (As CaCO3) | 633 | 5.00 | mg/L | 1 | 11/14/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 | mg/L | 1 | 11/14/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 | mg/L | 1 | 11/14/2004 |
| Alkalinity, Total (As CaCO3)       | 633 | 5.00 | mg/L | 1 | 11/14/2004 |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

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P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL  
Lab ID: 0411050-05

Client Sample ID: NCL-34  
Collection Date: 11/4/2004 10:15:00 AM  
Matrix: WATER

| Analyses       | Result | Report<br>Limit | Qual   | Units | Dilution<br>Factor | Date Analyzed |
|----------------|--------|-----------------|--------|-------|--------------------|---------------|
| CYANIDE, TOTAL |        |                 | E335.3 |       |                    | Analyst: LMD  |
| Cyanide        | ND     | 0.0200          |        | mg/L  | 1                  | 11/12/2004    |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL  
Lab ID: 0411050-06

Client Sample ID: MW-60  
Collection Date: 11/4/2004 10:45:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed          |
|---------------------------------------|---------|--------------|------|-------|-----------------|------------------------|
| <hr/>                                 |         |              |      |       |                 |                        |
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                        |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 11/11/2004 3:49:06 PM  |
|                                       |         |              |      |       |                 |                        |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                        |
| Aluminum                              | 0.0510  | 0.0200       |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Arsenic                               | 0.0359  | 0.0100       |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Barium                                | 0.0105  | 0.0100       |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Beryllium                             | ND      | 0.00400      |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Boron                                 | 0.418   | 0.200        |      | mg/L  | 10              | 11/16/2004 1:18:00 AM  |
| Cadmium                               | ND      | 0.00200      |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Calcium                               | 368     | 25.0         |      | mg/L  | 50              | 11/15/2004 11:56:00 PM |
| Chromium                              | ND      | 0.00400      |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Cobalt                                | 0.00739 | 0.00400      |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Copper                                | ND      | 0.00400      |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Iron                                  | 3.46    | 0.400        |      | mg/L  | 2               | 11/18/2004 5:53:00 PM  |
| Lead                                  | ND      | 0.0100       |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Magnesium                             | 293     | 10.0         |      | mg/L  | 50              | 11/15/2004 11:56:00 PM |
| Manganese                             | 0.694   | 0.0500       |      | mg/L  | 10              | 11/16/2004 1:18:00 AM  |
| Molybdenum                            | ND      | 0.0100       |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Nickel                                | 0.0115  | 0.0100       |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Potassium                             | 0.475   | 0.400        |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Selenium                              | ND      | 0.0100       |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Silver                                | ND      | 0.0100       |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Sodium                                | 178     | 10.0         |      | mg/L  | 50              | 11/15/2004 11:56:00 PM |
| Vanadium                              | ND      | 0.0100       |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
| Zinc                                  | ND      | 0.0100       |      | mg/L  | 2               | 11/18/2004 2:27:00 PM  |
|                                       |         |              |      |       |                 |                        |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                        |
| 1,2,4-Trichlorobenzene                | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |
| 2-Methylnaphthalene                   | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |
| 2-Methylphenol                        | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |
| 2-Nitroaniline                        | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |
| 2-Nitrophenol                         | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |
| 3&4-Methylphenol                      | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |
| 3-Nitroaniline                        | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |
| 4-Nitroaniline                        | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |
| 4-Nitrophenol                         | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |
| Acenaphthene                          | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |
| Acenaphthylene                        | ND      | 11           |      | µg/L  | 1               | 11/17/2004 4:41:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-06

**Client Sample ID:** MW-60  
**Collection Date:** 11/4/2004 10:45:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed         |
|----------------------------|--------|---------------|------|-------|--------------------|-----------------------|
| Aniline                    | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Anthracene                 | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Benz(a)anthracene          | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Benzidine                  | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Hexachloroethane           | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Isophorone                 | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| N-Nitrosodimethylamine     | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| N-Nitrosodiphenylamine     | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Naphthalene                | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Nitrobenzene               | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Pentachlorophenol          | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Phenanthrene               | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Phenol                     | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Pyrene                     | ND     | 11            |      | µg/L  | 1                  | 11/17/2004 4:41:00 PM |
| Surr: 2,4,6-Tribromophenol | 94.7   | 39-153        |      | %REC  | 1                  | 11/17/2004 4:41:00 PM |
| Surr: 2-Fluorobiphenyl     | 85.6   | 40-147        |      | %REC  | 1                  | 11/17/2004 4:41:00 PM |
| Surr: 2-Fluorophenol       | 44.9   | 21-110        |      | %REC  | 1                  | 11/17/2004 4:41:00 PM |
| Surr: 4-Terphenyl-d14      | 92.0   | 39-141        |      | %REC  | 1                  | 11/17/2004 4:41:00 PM |
| Surr: Nitrobenzene-d5      | 88.0   | 37-140        |      | %REC  | 1                  | 11/17/2004 4:41:00 PM |
| Surr: Phenol-d6            | 26.3   | 11-100        |      | %REC  | 1                  | 11/17/2004 4:41:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | <b>Analyst: PC</b> |                       |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| Acetone                    | ND     | 10            |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| Benzene                    | 9.0    | 5.0           |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L  | 1                  | 11/11/2004 4:47:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL  
Lab ID: 0411050-06

Client Sample ID: MW-60  
Collection Date: 11/4/2004 10:45:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed         |
|-------------------------------------|--------|---------------|------|-------|---------------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Ethylbenzene                        | 7.2    | 5.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| m,p-Xylene                          | ND     | 10            |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Toluene                             | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Xylenes, Total                      | ND     | 15            |      | µg/L  | 1                   | 11/11/2004 4:47:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 92.8   | 71-126        |      | %REC  | 1                   | 11/11/2004 4:47:00 PM |
| Surr: 4-Bromofluorobenzene          | 102    | 74-125        |      | %REC  | 1                   | 11/11/2004 4:47:00 PM |
| Surr: Dibromofluoromethane          | 93.6   | 73-126        |      | %REC  | 1                   | 11/11/2004 4:47:00 PM |
| Surr: Toluene-d8                    | 99.1   | 75-125        |      | %REC  | 1                   | 11/11/2004 4:47:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>MG</b>  |                       |
| Chloride                            | 171    | 5.00          |      | mg/L  | 10                  | 11/19/2004 1:52:00 AM |
| Fluoride                            | 1.04   | 0.100         |      | mg/L  | 1                   | 11/19/2004 1:23:00 AM |
| Sulfate                             | 1,830  | 100           |      | mg/L  | 100                 | 11/19/2004 2:20:00 AM |
| Surr: Dichloroacetic acid (surr)    | 102    | 80-120        |      | %REC  | 1                   | 11/19/2004 1:23:00 AM |
| Surr: Dichloroacetic acid (surr)    | 108    | 80-120        |      | %REC  | 10                  | 11/19/2004 1:52:00 AM |
| Surr: Dichloroacetic acid (surr)    | 112    | 80-120        |      | %REC  | 100                 | 11/19/2004 2:20:00 AM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>LMD</b> |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 515    | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| Alkalinity, Total (As CaCO3)        | 515    | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: <b>LMD</b> |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1                   | 11/12/2004            |

Qualifiers: ND - Not Detected at the Reporting Limit  
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\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-07

**Client Sample ID:** MW-59  
**Collection Date:** 11/4/2004 1:30:00 PM  
**Matrix:** WATER

| Analyses                              | Result | Report Limit  | Qual | Units | Dilution Factor       | Date Analyzed          |
|---------------------------------------|--------|---------------|------|-------|-----------------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |        |               |      |       |                       |                        |
|                                       |        | <b>SW7470</b> |      |       | Prep Date: 11/10/2004 | Analyst: JCJ           |
| Mercury                               | ND     | 0.000200      |      | mg/L  | 1                     | 11/11/2004 3:50:37 PM  |
| <b>ICP METALS, TOTAL</b>              |        |               |      |       |                       |                        |
|                                       |        | <b>SW6020</b> |      |       | Prep Date: 11/9/2004  | Analyst: ALR           |
| Aluminum                              | ND     | 0.0200        |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Arsenic                               | 0.0318 | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Barium                                | 0.0184 | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Beryllium                             | ND     | 0.00400       |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Boron                                 | 0.321  | 0.200         |      | mg/L  | 10                    | 11/16/2004 1:41:00 AM  |
| Cadmium                               | ND     | 0.00200       |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Calcium                               | 451    | 25.0          |      | mg/L  | 50                    | 11/16/2004 12:02:00 AM |
| Chromium                              | ND     | 0.00400       |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Cobalt                                | ND     | 0.00400       |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Copper                                | ND     | 0.00400       |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Iron                                  | 1.68   | 0.400         |      | mg/L  | 2                     | 11/18/2004 5:58:00 PM  |
| Lead                                  | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Magnesium                             | 279    | 10.0          |      | mg/L  | 50                    | 11/16/2004 12:02:00 AM |
| Manganese                             | 0.370  | 0.0500        |      | mg/L  | 10                    | 11/16/2004 1:41:00 AM  |
| Molybdenum                            | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Nickel                                | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Potassium                             | 0.515  | 0.400         |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Selenium                              | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Silver                                | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Sodium                                | 147    | 2.00          |      | mg/L  | 10                    | 11/16/2004 1:41:00 AM  |
| Vanadium                              | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| Zinc                                  | 0.0124 | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:32:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |               |      |       |                       |                        |
|                                       |        | <b>SW8270</b> |      |       | Prep Date: 11/11/2004 | Analyst: HV            |
| 1,2,4-Trichlorobenzene                | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |
| 2,4,5-Trichlorophenol                 | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |
| 2,4,6-Trichlorophenol                 | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |
| 2-Methylnaphthalene                   | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |
| 2-Methylphenol                        | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |
| 2-Nitroaniline                        | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |
| 2-Nitrophenol                         | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |
| 3&4-Methylphenol                      | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |
| 3-Nitroaniline                        | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |
| 4-Nitroaniline                        | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |
| 4-Nitrophenol                         | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |
| Acenaphthene                          | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |
| Acenaphthylene                        | ND     | 11            |      | µg/L  | 1                     | 11/17/2004 5:08:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-07

**Client Sample ID:** MW-59  
**Collection Date:** 11/4/2004 1:30:00 PM  
**Matrix:** WATER

| Analyses                   | Result | Report<br>Limit | Qual | Units | Dilution<br>Factor | Date Analyzed         |
|----------------------------|--------|-----------------|------|-------|--------------------|-----------------------|
| Aniline                    | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Anthracene                 | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Benz(a)anthracene          | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Benzidine                  | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Hexachloroethane           | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Isophorone                 | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| N-Nitrosodimethylamine     | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| N-Nitrosodiphenylamine     | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Naphthalene                | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Nitrobenzene               | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Pentachlorophenol          | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Phenanthrene               | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Phenol                     | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Pyrene                     | ND     | 11              |      | µg/L  | 1                  | 11/17/2004 5:08:00 PM |
| Surr: 2,4,6-Tribromophenol | 75.0   | 39-153          |      | %REC  | 1                  | 11/17/2004 5:08:00 PM |
| Surr: 2-Fluorobiphenyl     | 80.6   | 40-147          |      | %REC  | 1                  | 11/17/2004 5:08:00 PM |
| Surr: 2-Fluorophenol       | 34.1   | 21-110          |      | %REC  | 1                  | 11/17/2004 5:08:00 PM |
| Surr: 4-Terphenyl-d14      | 91.0   | 39-141          |      | %REC  | 1                  | 11/17/2004 5:08:00 PM |
| Surr: Nitrobenzene-d5      | 83.5   | 37-140          |      | %REC  | 1                  | 11/17/2004 5:08:00 PM |
| Surr: Phenol-d6            | 24.8   | 11-100          |      | %REC  | 1                  | 11/17/2004 5:08:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |     |     |  |      |    |                       |
|---------------------------|-----|-----|--|------|----|-----------------------|
| 1,1,1-Trichloroethane     | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| 1,1,2,2-Tetrachloroethane | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| 1,1,2-Trichloroethane     | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| 1,1-Dichloroethane        | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| 1,1-Dichloroethene        | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| 1,2-Dichloroethane        | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| 2-Butanone                | ND  | 10  |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| 2-Chloroethyl vinyl ether | ND  | 10  |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| 2-Hexanone                | ND  | 10  |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| 4-Methyl-2-pentanone      | ND  | 10  |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| Acetone                   | ND  | 10  |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| Benzene                   | 830 | 50  |  | µg/L | 10 | 11/11/2004 9:20:00 PM |
| Bromodichloromethane      | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| Bromoform                 | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| Bromomethane              | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| Carbon disulfide          | ND  | 10  |  | µg/L | 1  | 11/11/2004 5:41:00 PM |
| Carbon tetrachloride      | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 5:41:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-07

**Client Sample ID:** MW-59  
**Collection Date:** 11/4/2004 1:30:00 PM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Ethylbenzene                        | 85     | 5.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 11/11/2004 5:41:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 91.7   | 71-126        |      | %REC                | 1               | 11/11/2004 5:41:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 91.1   | 71-126        |      | %REC                | 10              | 11/11/2004 9:20:00 PM |
| Surr: 4-Bromofluorobenzene          | 101    | 74-125        |      | %REC                | 1               | 11/11/2004 5:41:00 PM |
| Surr: 4-Bromofluorobenzene          | 95.2   | 74-125        |      | %REC                | 10              | 11/11/2004 9:20:00 PM |
| Surr: Dibromofluoromethane          | 94.0   | 73-126        |      | %REC                | 10              | 11/11/2004 9:20:00 PM |
| Surr: Dibromofluoromethane          | 94.7   | 73-126        |      | %REC                | 1               | 11/11/2004 5:41:00 PM |
| Surr: Toluene-d8                    | 97.4   | 75-125        |      | %REC                | 1               | 11/11/2004 5:41:00 PM |
| Surr: Toluene-d8                    | 98.9   | 75-125        |      | %REC                | 10              | 11/11/2004 9:20:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                       |
| Chloride                            | 158    | 5.00          |      | mg/L                | 10              | 11/19/2004 3:46:00 AM |
| Fluoride                            | 1.13   | 0.100         |      | mg/L                | 1               | 11/19/2004 3:17:00 AM |
| Sulfate                             | 1,720  | 100           |      | mg/L                | 100             | 11/19/2004 4:15:00 AM |
| Surr: Dichloroacetic acid (surr)    | 107    | 80-120        |      | %REC                | 1               | 11/19/2004 3:17:00 AM |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC                | 10              | 11/19/2004 3:46:00 AM |
| Surr: Dichloroacetic acid (surr)    | 108    | 80-120        |      | %REC                | 100             | 11/19/2004 4:15:00 AM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 471    | 5.00          |      | mg/L                | 1               | 11/14/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 11/14/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 11/14/2004            |
| Alkalinity, Total (As CaCO3)        | 471    | 5.00          |      | mg/L                | 1               | 11/14/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 11/12/2004            |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: November 22, 2004

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL  
Lab ID: 0411050-08

Client Sample ID: TEL-4  
Collection Date: 11/4/2004 2:00:00 PM  
Matrix: WATER

| Analyses                              | Result | Report Limit  | Qual | Units | Dilution Factor       | Date Analyzed          |
|---------------------------------------|--------|---------------|------|-------|-----------------------|------------------------|
| <b>MERCURY, TOTAL</b>                 |        |               |      |       |                       |                        |
|                                       |        | <b>SW7470</b> |      |       | Prep Date: 11/10/2004 | Analyst: JCJ           |
| Mercury                               | ND     | 0.000200      |      | mg/L  | 1                     | 11/11/2004 3:52:08 PM  |
| <b>ICP METALS, TOTAL</b>              |        |               |      |       |                       |                        |
|                                       |        | <b>SW6020</b> |      |       | Prep Date: 11/9/2004  | Analyst: ALR           |
| Aluminum                              | ND     | 0.0200        |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Arsenic                               | 0.0101 | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Barium                                | 0.0704 | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Beryllium                             | ND     | 0.00400       |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Boron                                 | 0.578  | 0.200         |      | mg/L  | 10                    | 11/16/2004 1:47:00 AM  |
| Cadmium                               | ND     | 0.00200       |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Calcium                               | 237    | 25.0          |      | mg/L  | 50                    | 11/16/2004 12:26:00 AM |
| Chromium                              | ND     | 0.00400       |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Cobalt                                | ND     | 0.00400       |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Copper                                | ND     | 0.00400       |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Iron                                  | 0.975  | 0.400         |      | mg/L  | 2                     | 11/18/2004 6:02:00 PM  |
| Lead                                  | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Magnesium                             | 198    | 10.0          |      | mg/L  | 50                    | 11/16/2004 12:26:00 AM |
| Manganese                             | 0.509  | 0.0500        |      | mg/L  | 10                    | 11/16/2004 1:47:00 AM  |
| Molybdenum                            | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Nickel                                | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Potassium                             | ND     | 0.400         |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Selenium                              | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Silver                                | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Sodium                                | 230    | 10.0          |      | mg/L  | 50                    | 11/16/2004 12:26:00 AM |
| Vanadium                              | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| Zinc                                  | ND     | 0.0100        |      | mg/L  | 2                     | 11/18/2004 2:37:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |               |      |       |                       |                        |
|                                       |        | <b>SW8270</b> |      |       | Prep Date: 11/11/2004 | Analyst: HV            |
| 1,2,4-Trichlorobenzene                | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |
| 2,4,5-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |
| 2,4,6-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |
| 2-Methylnaphthalene                   | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |
| 2-Methylphenol                        | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |
| 2-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |
| 2-Nitrophenol                         | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |
| 3&4-Methylphenol                      | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |
| 3-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |
| 4-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |
| 4-Nitrophenol                         | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |
| Acenaphthene                          | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |
| Acenaphthylene                        | ND     | 10            |      | µg/L  | 1                     | 11/17/2004 5:35:00 PM  |

Qualifiers: ND - Not Detected at the Reporting Limit  
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B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 22, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL  
**Lab ID:** 0411050-08

**Client Sample ID:** TEL-4  
**Collection Date:** 11/4/2004 2:00:00 PM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Naphthalene                | 11     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 5:35:00 PM |
| Surr: 2,4,6-Tribromophenol | 97.6   | 39-153       |      | %REC  | 1               | 11/17/2004 5:35:00 PM |
| Surr: 2-Fluorobiphenyl     | 87.5   | 40-147       |      | %REC  | 1               | 11/17/2004 5:35:00 PM |
| Surr: 2-Fluorophenol       | 45.0   | 21-110       |      | %REC  | 1               | 11/17/2004 5:35:00 PM |
| Surr: 4-Terphenyl-d14      | 87.2   | 39-141       |      | %REC  | 1               | 11/17/2004 5:35:00 PM |
| Surr: Nitrobenzene-d5      | 87.0   | 37-140       |      | %REC  | 1               | 11/17/2004 5:35:00 PM |
| Surr: Phenol-d6            | 27.9   | 11-100       |      | %REC  | 1               | 11/17/2004 5:35:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |     |     |  |      |    |                       |
|---------------------------|-----|-----|--|------|----|-----------------------|
| 1,1,1-Trichloroethane     | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| 1,1,2,2-Tetrachloroethane | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| 1,1,2-Trichloroethane     | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| 1,1-Dichloroethane        | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| 1,1-Dichloroethene        | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| 1,2-Dichloroethane        | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| 2-Butanone                | ND  | 10  |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| 2-Chloroethyl vinyl ether | ND  | 10  |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| 2-Hexanone                | ND  | 10  |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| 4-Methyl-2-pentanone      | ND  | 10  |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| Acetone                   | ND  | 10  |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| Benzene                   | 530 | 120 |  | µg/L | 25 | 11/12/2004 4:33:00 PM |
| Bromodichloromethane      | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| Bromoform                 | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| Bromomethane              | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| Carbon disulfide          | ND  | 10  |  | µg/L | 1  | 11/11/2004 6:36:00 PM |
| Carbon tetrachloride      | ND  | 5.0 |  | µg/L | 1  | 11/11/2004 6:36:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
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H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: November 22, 2004

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL  
Lab ID: 0411050-08

Client Sample ID: TEL-4  
Collection Date: 11/4/2004 2:00:00 PM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed         |
|-------------------------------------|--------|---------------|------|-------|---------------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Ethylbenzene                        | 96     | 5.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| m,p-Xylene                          | 200    | 10            |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Toluene                             | 16     | 5.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Xylenes, Total                      | 210    | 15            |      | µg/L  | 1                   | 11/11/2004 6:36:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 90.4   | 71-126        |      | %REC  | 1                   | 11/11/2004 6:36:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 92.3   | 71-126        |      | %REC  | 25                  | 11/12/2004 4:33:00 PM |
| Surr: 4-Bromofluorobenzene          | 101    | 74-125        |      | %REC  | 1                   | 11/11/2004 6:36:00 PM |
| Surr: 4-Bromofluorobenzene          | 100    | 74-125        |      | %REC  | 25                  | 11/12/2004 4:33:00 PM |
| Surr: Dibromofluoromethane          | 95.1   | 73-126        |      | %REC  | 25                  | 11/12/2004 4:33:00 PM |
| Surr: Dibromofluoromethane          | 96.3   | 73-126        |      | %REC  | 1                   | 11/11/2004 6:36:00 PM |
| Surr: Toluene-d8                    | 102    | 75-125        |      | %REC  | 1                   | 11/11/2004 6:36:00 PM |
| Surr: Toluene-d8                    | 99.4   | 75-125        |      | %REC  | 25                  | 11/12/2004 4:33:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>MG</b>  |                       |
| Chloride                            | 416    | 10.0          |      | mg/L  | 20                  | 11/19/2004 5:12:00 AM |
| Fluoride                            | 0.590  | 0.100         |      | mg/L  | 1                   | 11/19/2004 4:43:00 AM |
| Sulfate                             | 506    | 20.0          |      | mg/L  | 20                  | 11/19/2004 5:12:00 AM |
| Surr: Dichloroacetic acid (surr)    | 94.6   | 80-120        |      | %REC  | 1                   | 11/19/2004 4:43:00 AM |
| Surr: Dichloroacetic acid (surr)    | 105    | 80-120        |      | %REC  | 20                  | 11/19/2004 5:12:00 AM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>LMD</b> |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 794    | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| Alkalinity, Total (As CaCO3)        | 794    | 5.00          |      | mg/L  | 1                   | 11/14/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: <b>LMD</b> |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1                   | 11/12/2004            |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: Nov 22 2004

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11045 InstrumentID: ICP4500

MBLK Sample ID: MBLKW1-110904 Test Code: SW6020 Units: mg/L Analysis Date: 11/16/04 13:19  
 Client ID: Run ID: ICP4500\_041116A SeqNo: 574591 Prep Date: 11/9/2004 DF: 1

| Analyte   | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|-----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 0.001676  | 0.010  |         |               |      |               |               |      |           | J    |
| Arsenic   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Barium    | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Beryllium | ND        | 0.0020 |         |               |      |               |               |      |           |      |
| Boron     | ND        | 0.020  |         |               |      |               |               |      |           |      |
| Cadmium   | ND        | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium   | ND        | 0.50   |         |               |      |               |               |      |           |      |
| Chromium  | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt    | 0.0001279 | 0.0050 |         |               |      |               |               |      |           | J    |
| Copper    | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Iron      | 0.0288    | 0.20   |         |               |      |               |               |      |           | J    |
| Lead      | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Manganese | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel    | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Silver    | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium    | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium  | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc      | ND        | 0.0050 |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW1-110904 Test Code: SW6020 Units: mg/L Analysis Date: 11/16/04 16:14  
 Client ID: Run ID: ICP4500\_041116A SeqNo: 574877 Prep Date: 11/9/2004 DF: 1

| Analyte  | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Selenium | ND     | 0.0050 |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW1-110904 Test Code: SW6020 Units: mg/L Analysis Date: 11/17/04 13:03  
 Client ID: Run ID: ICP4500\_041117A SeqNo: 575369 Prep Date: 11/9/2004 DF: 1

| Analyte    | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Molybdenum | ND     | 0.0050 |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in assoc. Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

U - Analyzed for but not detected

O - Referenced analyte value is &gt; 4 times amount spiked

P - Dual Column results percent difference &gt; 40%

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11045 InstrumentID: ICP4500

LCS Sample ID: MLCSW1-110904 Test Code: SW6020 Units: mg/L Analysis Date: 11/16/04 13:24  
 Client ID: Run ID: ICP4500\_041116A SeqNo: 574592 Prep Date: 11/9/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 0.04427 | 0.010  | 0.05    | 0             | 88.5 | 79-126        | 0             |      |           |      |
| Arsenic   | 0.04549 | 0.0050 | 0.05    | 0             | 91   | 80-121        | 0             |      |           |      |
| Barium    | 0.04361 | 0.0050 | 0.05    | 0             | 87.2 | 79.8-119      | 0             |      |           |      |
| Beryllium | 0.04763 | 0.0020 | 0.05    | 0             | 95.3 | 78.9-120      | 0             |      |           |      |
| Boron     | 0.4892  | 0.020  | 0.5     | 0             | 97.8 | 80-120        | 0             |      |           |      |
| Cadmium   | 0.04708 | 0.0020 | 0.05    | 0             | 94.2 | 79.1-119      | 0             |      |           |      |
| Calcium   | 4.466   | 0.50   | 5       | 0             | 89.3 | 80-121        | 0             |      |           |      |
| Chromium  | 0.04205 | 0.0050 | 0.05    | 0             | 84.1 | 79.3-121      | 0             |      |           |      |
| Cobalt    | 0.0438  | 0.0050 | 0.05    | 0             | 87.6 | 82-121        | 0             |      |           |      |
| Copper    | 0.04398 | 0.0050 | 0.05    | 0             | 88   | 81-120        | 0             |      |           |      |
| Iron      | 4.59    | 0.20   | 5       | 0             | 91.8 | 80-120        | 0             |      |           |      |
| Lead      | 0.04255 | 0.0050 | 0.05    | 0             | 85.1 | 80-118        | 0             |      |           |      |
| Magnesium | 4.605   | 0.20   | 5       | 0             | 92.1 | 80-120        | 0             |      |           |      |
| Manganese | 0.04302 | 0.0050 | 0.05    | 0             | 86   | 82-119        | 0             |      |           |      |
| Nickel    | 0.04372 | 0.0050 | 0.05    | 0             | 87.4 | 82-120        | 0             |      |           |      |
| Potassium | 4.43    | 0.20   | 5       | 0             | 88.6 | 80-120        | 0             |      |           |      |
| Silver    | 0.04196 | 0.0050 | 0.05    | 0             | 83.9 | 80-117        | 0             |      |           |      |
| Sodium    | 4.418   | 0.20   | 5       | 0             | 88.4 | 80.6-119      | 0             |      |           |      |
| Vanadium  | 0.04195 | 0.0050 | 0.05    | 0             | 83.9 | 82.1-119      | 0             |      |           |      |
| Zinc      | 0.04568 | 0.0050 | 0.05    | 0             | 91.4 | 79-118        | 0             |      |           |      |

LCS Sample ID: MLCSW1-110904 Test Code: SW6020 Units: mg/L Analysis Date: 11/16/04 16:18  
 Client ID: Run ID: ICP4500\_041116A SeqNo: 574878 Prep Date: 11/9/2004 DF: 1

| Analyte  | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Selenium | 0.04869 | 0.0050 | 0.05    | 0             | 97.4 | 79.2-118      | 0             |      |           |      |

LCS Sample ID: MLCSW1-110904 Test Code: SW6020 Units: mg/L Analysis Date: 11/17/04 13:07  
 Client ID: Run ID: ICP4500\_041117A SeqNo: 575370 Prep Date: 11/9/2004 DF: 1

| Analyte    | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Molybdenum | 0.0444 | 0.0050 | 0.05    | 0             | 88.8 | 81-115        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11045 InstrumentID: ICP4500

MS Sample ID: 0411068-05CMS Test Code: SW6020 Units: mg/L Analysis Date: 11/16/04 20:04

Client ID: Run ID: ICP4500\_041116A SeqNo: 574948 Prep Date: 11/9/2004 DF: 1

| Analyte    | Result   | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 1.871    | 0.010  | 0.05    | 1.454         | 834  | 79-126        | 0             |      |           | SEO  |
| Arsenic    | 0.04223  | 0.0050 | 0.05    | -0.003737     | 91.9 | 80-121        | 0             |      |           |      |
| Barium     | 0.1964   | 0.0050 | 0.05    | 0.1439        | 105  | 79.8-119      | 0             |      |           |      |
| Beryllium  | 0.05039  | 0.0020 | 0.05    | 0.0001621     | 100  | 78.9-120      | 0             |      |           |      |
| Boron      | 0.6361   | 0.020  | 0.5     | 0.1158        | 104  | 80-120        | 0             |      |           |      |
| Cadmium    | 0.04358  | 0.0020 | 0.05    | 0.0002592     | 86.6 | 79.1-119      | 0             |      |           |      |
| Calcium    | 150.9    | 0.50   | 5       | 149.3         | 32   | 80-121        | 0             |      |           | SEO  |
| Chromium   | 0.05463  | 0.0050 | 0.05    | 0.003694      | 102  | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.05009  | 0.0050 | 0.05    | 0.004229      | 91.7 | 82-121        | 0             |      |           |      |
| Copper     | 0.04699  | 0.0050 | 0.05    | 0.005076      | 83.8 | 80-120        | 0             |      |           |      |
| Iron       | 8.607    | 0.20   | 5       | 2.97          | 113  | 80-120        | 0             |      |           |      |
| Lead       | 0.05052  | 0.0050 | 0.05    | 0.002172      | 96.7 | 80-118        | 0             |      |           |      |
| Magnesium  | 55.02    | 0.20   | 5       | 53.09         | 38.6 | 80-120        | 0             |      |           | SEO  |
| Manganese  | 2.243    | 0.0050 | 0.05    | 2.281         | -76  | 82-119        | 0             |      |           | SEO  |
| Molybdenum | 0.0586   | 0.0050 | 0.05    | 0.01211       | 93   | 81-115        | 0             |      |           |      |
| Nickel     | 0.05455  | 0.0050 | 0.05    | 0.01075       | 87.6 | 82-120        | 0             |      |           |      |
| Potassium  | 6.475    | 0.20   | 5       | 1.318         | 103  | 80-120        | 0             |      |           |      |
| Selenium   | 0.007537 | 0.0050 | 0.05    | -0.02857      | 72.2 | 79.2-118      | 0             |      |           | S    |
| Silver     | 0.03709  | 0.0050 | 0.05    | 0.00005085    | 74.1 | 80-117        | 0             |      |           | S    |
| Sodium     | ND       | 0.20   | 5       | 0             | 0    | 80.6-119      | 0             |      |           | S    |
| Vanadium   | 0.0557   | 0.0050 | 0.05    | 0.00302       | 105  | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.07464  | 0.0050 | 0.05    | 0.03171       | 85.9 | 79-118        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11045 InstrumentID: ICP4500

| MSD        | Sample ID: 0411068-05CMSD |        |         | Test Code: SW6020 |      | Units: mg/L          |               | Analysis Date: 11/16/04 20:09 |           |      |
|------------|---------------------------|--------|---------|-------------------|------|----------------------|---------------|-------------------------------|-----------|------|
| Client ID: | Run ID: ICP4500_041116A   |        |         | SeqNo: 574949     |      | Prep Date: 11/9/2004 |               | DF: 1                         |           |      |
| Analyte    | Result                    | PQL    | SPK Val | SPK Ref Value     | %REC | Control Limit        | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Aluminum   | 1.712                     | 0.010  | 0.05    | 1.454             | 516  | 79-126               | 1.871         | 8.88                          | 15        | SEO  |
| Arsenic    | 0.04289                   | 0.0050 | 0.05    | -0.003737         | 93.3 | 80-121               | 0.04223       | 1.55                          | 15        |      |
| Barium     | 0.1907                    | 0.0050 | 0.05    | 0.1439            | 93.6 | 79.8-119             | 0.1964        | 2.94                          | 15        |      |
| Beryllium  | 0.04939                   | 0.0020 | 0.05    | 0.0001621         | 98.5 | 78.9-120             | 0.05039       | 2                             | 15        |      |
| Boron      | 0.631                     | 0.020  | 0.5     | 0.1158            | 103  | 80-120               | 0.6361        | 0.805                         | 15        |      |
| Cadmium    | 0.0428                    | 0.0020 | 0.05    | 0.0002592         | 85.1 | 79.1-119             | 0.04358       | 1.81                          | 15        |      |
| Calcium    | 145.8                     | 0.50   | 5       | 149.3             | -70  | 80-121               | 150.9         | 3.44                          | 15        | SEO  |
| Chromium   | 0.05199                   | 0.0050 | 0.05    | 0.003694          | 96.6 | 79.3-121             | 0.05463       | 4.95                          | 15        |      |
| Cobalt     | 0.049                     | 0.0050 | 0.05    | 0.004229          | 89.5 | 82-121               | 0.05009       | 2.2                           | 15        |      |
| Copper     | 0.04612                   | 0.0050 | 0.05    | 0.005076          | 82.1 | 81-120               | 0.04699       | 1.87                          | 15        |      |
| Iron       | 8.676                     | 0.20   | 5       | 2.97              | 114  | 80-120               | 8.607         | 0.798                         | 15        |      |
| Lead       | 0.04928                   | 0.0050 | 0.05    | 0.002172          | 94.2 | 80-118               | 0.05052       | 2.48                          | 15        |      |
| Magnesium  | 53.5                      | 0.20   | 5       | 53.09             | 8.2  | 80-120               | 55.02         | 2.8                           | 15        | SEO  |
| Manganese  | 2.188                     | 0.0050 | 0.05    | 2.281             | -186 | 82-119               | 2.243         | 2.48                          | 15        | SEO  |
| Molybdenum | 0.05735                   | 0.0050 | 0.05    | 0.01211           | 90.5 | 81-115               | 0.0586        | 2.16                          | 15        |      |
| Nickel     | 0.05326                   | 0.0050 | 0.05    | 0.01075           | 85   | 82-120               | 0.05455       | 2.39                          | 15        |      |
| Potassium  | 6.283                     | 0.20   | 5       | 1.318             | 99.3 | 80-120               | 6.475         | 3.01                          | 15        |      |
| Selenium   | 0.01074                   | 0.0050 | 0.05    | -0.02857          | 78.6 | 79.2-118             | 0.007537      | 35                            | 15        | SR   |
| Silver     | 0.03652                   | 0.0050 | 0.05    | 0.00005085        | 72.9 | 80-117               | 0.03709       | 1.55                          | 15        | S    |
| Sodium     | ND                        | 0.20   | 5       | 0                 | 0    | 80.6-119             | 0             | 0                             | 15        | S    |
| Vanadium   | 0.0545                    | 0.0050 | 0.05    | 0.00302           | 103  | 82.1-119             | 0.0557        | 2.18                          | 15        |      |
| Zinc       | 0.06645                   | 0.0050 | 0.05    | 0.03171           | 69.5 | 79-118               | 0.07464       | 11.6                          | 15        | S    |

| DUP        | Sample ID: 0411068-05CDUP |        |         | Test Code: SW6020 |      | Units: mg/L          |               | Analysis Date: 11/16/04 19:06 |           |      |
|------------|---------------------------|--------|---------|-------------------|------|----------------------|---------------|-------------------------------|-----------|------|
| Client ID: | Run ID: ICP4500_041116A   |        |         | SeqNo: 574943     |      | Prep Date: 11/9/2004 |               | DF: 1                         |           |      |
| Analyte    | Result                    | PQL    | SPK Val | SPK Ref Value     | %REC | Control Limit        | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Arsenic    | ND                        | 0.0050 | 0       | 0                 | 0    | 0-0                  | -0.003737     | 0                             | 25        |      |
| Barium     | 0.1485                    | 0.0050 | 0       | 0                 | 0    | 0-0                  | 0.1439        | 3.15                          | 25        |      |
| Beryllium  | ND                        | 0.0020 | 0       | 0                 | 0    | 0-0                  | 0.0001621     | 0                             | 25        |      |
| Boron      | 0.1175                    | 0.020  | 0       | 0                 | 0    | 0-0                  | 0.1158        | 1.46                          | 25        |      |
| Cadmium    | 0.0002257                 | 0.0020 | 0       | 0                 | 0    | 0-0                  | 0.0002592     | 0                             | 25        | J    |
| Cobalt     | 0.004406                  | 0.0050 | 0       | 0                 | 0    | 0-0                  | 0.004229      | 0                             | 25        | J    |
| Copper     | 0.005255                  | 0.0050 | 0       | 0                 | 0    | 0-0                  | 0.005076      | 3.47                          | 25        |      |
| Iron       | 3.423                     | 0.20   | 0       | 0                 | 0    | 0-0                  | 2.97          | 14.2                          | 25        |      |
| Nickel     | 0.01132                   | 0.0050 | 0       | 0                 | 0    | 0-0                  | 0.01075       | 5.17                          | 25        |      |
| Potassium  | 1.532                     | 0.20   | 0       | 0                 | 0    | 0-0                  | 1.318         | 15                            | 25        |      |
| Silver     | ND                        | 0.0050 | 0       | 0                 | 0    | 0-0                  | 0.00005085    | 0                             | 25        |      |
| Zinc       | 0.03252                   | 0.0050 | 0       | 0                 | 0    | 0-0                  | 0.03171       | 2.52                          | 25        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11045 InstrumentID: ICP4500

DUP Sample ID: 0411068-05CDUP Test Code: SW6020 Units: mg/L Analysis Date: 11/17/04 13:45

Client ID: Run ID: ICP4500\_041117A SeqNo: 575377 Prep Date: 11/9/2004 DF: 20

| Analyte   | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 1.681  | 0.20 | 0       | 0             | 0    | 0-0           | 1.33          | 23.3 | 25        |      |
| Calcium   | 144.1  | 10   | 0       | 0             | 0    | 0-0           | 139.7         | 3.1  | 25        |      |
| Magnesium | 51.58  | 4.0  | 0       | 0             | 0    | 0-0           | 50.92         | 1.29 | 25        |      |
| Manganese | 2.289  | 0.10 | 0       | 0             | 0    | 0-0           | 2.246         | 1.9  | 25        |      |

DUP Sample ID: 0411068-05CDUP Test Code: SW6020 Units: mg/L Analysis Date: 11/17/04 13:55

Client ID: Run ID: ICP4500\_041117A SeqNo: 575379 Prep Date: 11/9/2004 DF: 100

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Sodium  | 600.2  | 20  | 0       | 0             | 0    | 0-0           | 534.7         | 11.5 | 25        |      |

DUP Sample ID: 0411068-05CDUP Test Code: SW6020 Units: mg/L Analysis Date: 11/17/04 14:51

Client ID: Run ID: ICP4500\_041117A SeqNo: 575414 Prep Date: 11/9/2004 DF: 5

| Analyte  | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Selenium | ND     | 0.025 | 0       | 0             | 0    | 0-0           | -0.01575      | 0    | 25        |      |

DUP Sample ID: 0411068-05CDUP Test Code: SW6020 Units: mg/L Analysis Date: 11/17/04 15:00

Client ID: Run ID: ICP4500\_041117A SeqNo: 575416 Prep Date: 11/9/2004 DF: 1

| Analyte    | Result   | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chromium   | 0.003627 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.003127      | 0    | 25        | J    |
| Lead       | 0.002121 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.002133      | 0    | 25        | J    |
| Molybdenum | 0.01091  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.01065       | 2.41 | 25        |      |
| Vanadium   | 0.003494 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.002871      | 0    | 25        | J    |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0411050-01C | 0411050-02C | 0411050-03C |
| 0411050-04C | 0411050-05C | 0411050-06C |
| 0411050-07C | 0411050-08C |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11077 InstrumentID: Mercury

MBLK Sample ID: GBLKW4-111004 Test Code: SW7470 Units: mg/L Analysis Date: 11/11/04 15:18

Client ID: Run ID: MERCURY\_041111E SeqNo: 571950 Prep Date: 11/10/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW4-111004 Test Code: SW7470 Units: mg/L Analysis Date: 11/11/04 15:20

Client ID: Run ID: MERCURY\_041111E SeqNo: 571952 Prep Date: 11/10/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00463 | 0.00020 | 0.005   | 0             | 92.6 | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW4-111004 Test Code: SW7470 Units: mg/L Analysis Date: 11/11/04 15:21

Client ID: Run ID: MERCURY\_041111E SeqNo: 571953 Prep Date: 11/10/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00457 | 0.00020 | 0.005   | 0             | 91.4 | 83-115        | 0.00463       | 1.3  | 20        |      |

MS Sample ID: 0411040-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 11/11/04 15:26

Client ID: Run ID: MERCURY\_041111E SeqNo: 571956 Prep Date: 11/10/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00474 | 0.00020 | 0.005   | 0.00001       | 94.6 | 83-115        | 0             |      |           |      |

MSD Sample ID: 0411040-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 11/11/04 15:28

Client ID: Run ID: MERCURY\_041111E SeqNo: 571957 Prep Date: 11/10/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Mercury | 0.00473 | 0.00020 | 0.005   | 0.00001       | 94.4 | 83-115        | 0.00474       | 0.211 | 20        |      |

DUP Sample ID: 0411040-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 11/11/04 15:25

Client ID: Run ID: MERCURY\_041111E SeqNo: 571955 Prep Date: 11/10/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | 0.00001       | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0411050-01C | 0411050-02C | 0411050-03C |
| 0411050-04C | 0411050-05C | 0411050-06C |
| 0411050-07C | 0411050-08C |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11038 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-041108 Test Code: SW8270 Units: µg/L Analysis Date: 11/10/04 16:48  
 Client ID: Run ID: SV-3\_041110A SeqNo: 572237 Prep Date: 11/8/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3&4-Methylphenol           | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 94     | 10  | 100     | 0             | 94   | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 84.79  | 10  | 100     | 0             | 84.8 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 40.98  | 10  | 100     | 0             | 41   | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 93.24  | 10  | 100     | 0             | 93.2 | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 82.52  | 10  | 100     | 0             | 82.5 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 25.3   | 10  | 100     | 0             | 25.3 | 11-100        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11038 InstrumentID: SV-3

LCS Sample ID: SLCSW1-041108 Test Code: SW8270 Units: µg/L Analysis Date: 11/10/04 17:14  
 Client ID: Run ID: SV-3\_041110A SeqNo: 574108 Prep Date: 11/8/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 38.5   | 10  | 50      | 0             | 77   | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 74.77  | 10  | 100     | 0             | 74.8 | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 78.55  | 10  | 100     | 0             | 78.5 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 37.92  | 10  | 50      | 0             | 75.8 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 66.14  | 10  | 100     | 0             | 66.1 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 38.34  | 10  | 50      | 0             | 76.7 | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 80.45  | 10  | 100     | 0             | 80.5 | 60-119        | 0             |      |           |      |
| 3&4-Methylphenol           | 86.7   | 10  | 150     | 0             | 57.8 | 44-115        | 0             |      |           |      |
| 3-Nitroaniline             | 30.95  | 10  | 50      | 0             | 61.9 | 61-118        | 0             |      |           |      |
| 4-Nitroaniline             | 34.99  | 10  | 50      | 0             | 70   | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 32.54  | 10  | 100     | 0             | 32.5 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 38.91  | 10  | 50      | 0             | 77.8 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 39.46  | 10  | 50      | 0             | 78.9 | 67-116        | 0             |      |           |      |
| Aniline                    | 37.18  | 10  | 50      | 0             | 74.4 | 40-130        | 0             |      |           |      |
| Anthracene                 | 42.16  | 10  | 50      | 0             | 84.3 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 38.49  | 10  | 50      | 0             | 77   | 55-131        | 0             |      |           |      |
| Benzidine                  | 21.12  | 10  | 50      | 0             | 42.2 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 39.29  | 10  | 50      | 0             | 78.6 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 39.89  | 10  | 50      | 0             | 79.8 | 42-123        | 0             |      |           |      |
| Isophorone                 | 41.33  | 10  | 50      | 0             | 82.7 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 41.92  | 10  | 50      | 0             | 83.8 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 20.21  | 10  | 50      | 0             | 40.4 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 43.43  | 10  | 50      | 0             | 86.9 | 72-144        | 0             |      |           |      |
| Naphthalene                | 38.85  | 10  | 50      | 0             | 77.7 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 37.63  | 10  | 50      | 0             | 75.3 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 81.34  | 10  | 100     | 0             | 81.3 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 42.52  | 10  | 50      | 0             | 85   | 69-119        | 0             |      |           |      |
| Phenol                     | 30.25  | 10  | 100     | 0             | 30.3 | 16-115        | 0             |      |           |      |
| Pyrene                     | 39.24  | 10  | 50      | 0             | 78.5 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 96.1   | 10  | 100     | 0             | 96.1 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 84.53  | 10  | 100     | 0             | 84.5 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 46.2   | 10  | 100     | 0             | 46.2 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 88.46  | 10  | 100     | 0             | 88.5 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 83.63  | 10  | 100     | 0             | 83.6 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 31.24  | 10  | 100     | 0             | 31.2 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11038 InstrumentID: SV-3

LCSO Sample ID: SLCSDW1-041108 Test Code: SW8270 Units: µg/L Analysis Date: 11/10/04 17:40

Client ID: Run ID: SV-3\_041110A SeqNo: 574109 Prep Date: 11/8/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 40.34  | 10  | 50      | 0             | 80.7 | 50-115        | 38.5          | 4.66 | 30        |      |
| 2,4,5-Trichlorophenol      | 83.81  | 10  | 100     | 0             | 83.8 | 68-128        | 74.77         | 11.4 | 30        |      |
| 2,4,6-Trichlorophenol      | 88.1   | 10  | 100     | 0             | 88.1 | 66-125        | 78.55         | 11.5 | 30        |      |
| 2-Methylnaphthalene        | 39.76  | 10  | 50      | 0             | 79.5 | 47-122        | 37.92         | 4.72 | 30        |      |
| 2-Methylphenol             | 75.07  | 10  | 100     | 0             | 75.1 | 51-115        | 66.14         | 12.6 | 30        |      |
| 2-Nitroaniline             | 42.44  | 10  | 50      | 0             | 84.9 | 64-128        | 38.34         | 10.1 | 30        |      |
| 2-Nitrophenol              | 90.87  | 10  | 100     | 0             | 90.9 | 60-119        | 80.45         | 12.2 | 30        |      |
| 3&4-Methylphenol           | 100.3  | 10  | 150     | 0             | 66.9 | 44-115        | 86.7          | 14.5 | 30        |      |
| 3-Nitroaniline             | 31.92  | 10  | 50      | 0             | 63.8 | 61-118        | 30.95         | 3.1  | 30        |      |
| 4-Nitroaniline             | 37.61  | 10  | 50      | 0             | 75.2 | 61-123        | 34.99         | 7.21 | 30        |      |
| 4-Nitrophenol              | 40.56  | 10  | 100     | 0             | 40.6 | 17-100        | 32.54         | 21.9 | 30        |      |
| Acenaphthene               | 42.99  | 10  | 50      | 0             | 86   | 68-115        | 38.91         | 9.98 | 30        |      |
| Acenaphthylene             | 43.76  | 10  | 50      | 0             | 87.5 | 67-116        | 39.46         | 10.3 | 30        |      |
| Aniline                    | 32.38  | 10  | 50      | 0             | 64.8 | 40-130        | 37.18         | 13.8 | 30        |      |
| Anthracene                 | 45.87  | 10  | 50      | 0             | 91.7 | 70-129        | 42.16         | 8.43 | 30        |      |
| Benz(a)anthracene          | 43.88  | 10  | 50      | 0             | 87.8 | 55-131        | 38.49         | 13.1 | 30        |      |
| Benzidine                  | 8.579  | 10  | 50      | 0             | 17.2 | 10-115        | 21.12         | 0    | 30        | J    |
| Hexachloroethane           | 37.17  | 10  | 50      | 0             | 74.3 | 46-115        | 39.29         | 5.54 | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 44.38  | 10  | 50      | 0             | 88.8 | 42-123        | 39.89         | 10.7 | 30        |      |
| Isophorone                 | 45.58  | 10  | 50      | 0             | 91.2 | 63-117        | 41.33         | 9.8  | 30        |      |
| N-Nitrosodi-n-propylamine  | 45.35  | 10  | 50      | 0             | 90.7 | 67-115        | 41.92         | 7.88 | 30        |      |
| N-Nitrosodimethylamine     | 20.98  | 10  | 50      | 0             | 42   | 28-115        | 20.21         | 3.72 | 30        |      |
| N-Nitrosodiphenylamine     | 47.09  | 10  | 50      | 0             | 94.2 | 72-144        | 43.43         | 8.09 | 30        |      |
| Naphthalene                | 43.22  | 10  | 50      | 0             | 86.4 | 52-115        | 38.85         | 10.7 | 30        |      |
| Nitrobenzene               | 44.74  | 10  | 50      | 0             | 89.5 | 65-115        | 37.63         | 17.3 | 30        |      |
| Pentachlorophenol          | 88.66  | 10  | 100     | 0             | 88.7 | 65-123        | 81.34         | 8.61 | 30        |      |
| Phenanthrene               | 46.74  | 10  | 50      | 0             | 93.5 | 69-119        | 42.52         | 9.45 | 30        |      |
| Phenol                     | 37.34  | 10  | 100     | 0             | 37.3 | 16-115        | 30.25         | 21   | 30        |      |
| Pyrene                     | 43.59  | 10  | 50      | 0             | 87.2 | 51-130        | 39.24         | 10.5 | 30        |      |
| Surr: 2,4,6-Tribromophenol | 97.67  | 10  | 100     | 0             | 97.7 | 39-153        | 96.1          | 1.62 | 30        |      |
| Surr: 2-Fluorobiphenyl     | 85.52  | 10  | 100     | 0             | 85.5 | 40-147        | 84.53         | 1.16 | 30        |      |
| Surr: 2-Fluorophenol       | 56.13  | 10  | 100     | 0             | 56.1 | 21-110        | 46.2          | 19.4 | 30        |      |
| Surr: 4-Terphenyl-d14      | 93.78  | 10  | 100     | 0             | 93.8 | 39-141        | 88.46         | 5.83 | 30        |      |
| Surr: Nitrobenzene-d5      | 89.1   | 10  | 100     | 0             | 89.1 | 37-140        | 83.63         | 6.34 | 30        |      |
| Surr: Phenol-d6            | 37.16  | 10  | 100     | 0             | 37.2 | 11-100        | 31.24         | 17.3 | 30        |      |

The following samples were analyzed in this batch:

0411050-01E 0411050-02E

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11086 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-041111 Test Code: SW8270 Units: µg/L Analysis Date: 11/13/04 11:19

Client ID: Run ID: SV-3\_041112A SeqNo: 573969 Prep Date: 11/11/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3&4-Methylphenol           | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 93.8   | 10  | 100     | 0             | 93.8 | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 92.13  | 10  | 100     | 0             | 92.1 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 43.56  | 10  | 100     | 0             | 43.6 | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 97.74  | 10  | 100     | 0             | 97.7 | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 84.35  | 10  | 100     | 0             | 84.3 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 25.94  | 10  | 100     | 0             | 25.9 | 11-100        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11086 InstrumentID: SV-3

LCS Sample ID: SLCSW1-041111 Test Code: SW8270 Units: µg/L Analysis Date: 11/13/04 11:44

Client ID: Run ID: SV-3\_041112A SeqNo: 573970 Prep Date: 11/11/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 43.95  | 10  | 50      | 0             | 87.9 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 88.82  | 10  | 100     | 0             | 88.8 | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 87.3   | 10  | 100     | 0             | 87.3 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 46.8   | 10  | 50      | 0             | 93.6 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 67.92  | 10  | 100     | 0             | 67.9 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 39.97  | 10  | 50      | 0             | 79.9 | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 87.05  | 10  | 100     | 0             | 87.1 | 60-119        | 0             |      |           |      |
| 3&4-Methylphenol           | 90.06  | 10  | 150     | 0             | 60   | 44-115        | 0             |      |           |      |
| 3-Nitroaniline             | 32.07  | 10  | 50      | 0             | 64.1 | 61-118        | 0             |      |           |      |
| 4-Nitroaniline             | 37.84  | 10  | 50      | 0             | 75.7 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 31.62  | 10  | 100     | 0             | 31.6 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 44.29  | 10  | 50      | 0             | 88.6 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 44.89  | 10  | 50      | 0             | 89.8 | 67-116        | 0             |      |           |      |
| Aniline                    | 26.5   | 10  | 50      | 0             | 53   | 40-130        | 0             |      |           |      |
| Anthracene                 | 46.19  | 10  | 50      | 0             | 92.4 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 44.57  | 10  | 50      | 0             | 89.1 | 55-131        | 0             |      |           |      |
| Benzidine                  | 17.26  | 10  | 50      | 0             | 34.5 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 44.57  | 10  | 50      | 0             | 89.1 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 39.91  | 10  | 50      | 0             | 79.8 | 42-123        | 0             |      |           |      |
| Isophorone                 | 42.39  | 10  | 50      | 0             | 84.8 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 41.73  | 10  | 50      | 0             | 83.5 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 23.87  | 10  | 50      | 0             | 47.7 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 45.75  | 10  | 50      | 0             | 91.5 | 72-144        | 0             |      |           |      |
| Naphthalene                | 43.25  | 10  | 50      | 0             | 86.5 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 42.81  | 10  | 50      | 0             | 85.6 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 72.89  | 10  | 100     | 0             | 72.9 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 46.44  | 10  | 50      | 0             | 92.9 | 69-119        | 0             |      |           |      |
| Phenol                     | 28.44  | 10  | 100     | 0             | 28.4 | 16-115        | 0             |      |           |      |
| Pyrene                     | 44.33  | 10  | 50      | 0             | 88.7 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 91.27  | 10  | 100     | 0             | 91.3 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 87.19  | 10  | 100     | 0             | 87.2 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 48.96  | 10  | 100     | 0             | 49   | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 87.75  | 10  | 100     | 0             | 87.7 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 82.17  | 10  | 100     | 0             | 82.2 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 29.46  | 10  | 100     | 0             | 29.5 | 11-100        | 0             |      |           |      |

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11086 InstrumentID: SV-3

LCSD Sample ID: SLCSDW1-041111 Test Code: SW8270 Units: µg/L Analysis Date: 11/13/04 12:10

Client ID: Run ID: SV-3\_041112A SeqNo: 573972 Prep Date: 11/11/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,2,4-Trichlorobenzene     | 45.63  | 10  | 50      | 0             | 91.3 | 50-115        | 43.95         | 3.75  | 30        |      |
| 2,4,5-Trichlorophenol      | 88.91  | 10  | 100     | 0             | 88.9 | 68-128        | 88.82         | 0.098 | 30        |      |
| 2,4,6-Trichlorophenol      | 90.16  | 10  | 100     | 0             | 90.2 | 66-125        | 87.3          | 3.22  | 30        |      |
| 2-Methylnaphthalene        | 49.28  | 10  | 50      | 0             | 98.6 | 47-122        | 46.8          | 5.17  | 30        |      |
| 2-Methylphenol             | 71.2   | 10  | 100     | 0             | 71.2 | 51-115        | 67.92         | 4.71  | 30        |      |
| 2-Nitroaniline             | 40.7   | 10  | 50      | 0             | 81.4 | 64-128        | 39.97         | 1.8   | 30        |      |
| 2-Nitrophenol              | 93.02  | 10  | 100     | 0             | 93   | 60-119        | 87.05         | 6.63  | 30        |      |
| 3&4-Methylphenol           | 95.56  | 10  | 150     | 0             | 63.7 | 44-115        | 90.06         | 5.92  | 30        |      |
| 3-Nitroaniline             | 31.28  | 10  | 50      | 0             | 62.6 | 61-118        | 32.07         | 2.48  | 30        |      |
| 4-Nitroaniline             | 40.33  | 10  | 50      | 0             | 80.7 | 61-123        | 37.84         | 6.36  | 30        |      |
| 4-Nitrophenol              | 31.54  | 10  | 100     | 0             | 31.5 | 17-100        | 31.62         | 0.257 | 30        |      |
| Acenaphthene               | 45.5   | 10  | 50      | 0             | 91   | 68-115        | 44.29         | 2.68  | 30        |      |
| Acenaphthylene             | 45.88  | 10  | 50      | 0             | 91.8 | 67-116        | 44.89         | 2.2   | 30        |      |
| Aniline                    | 27.84  | 10  | 50      | 0             | 55.7 | 40-130        | 26.5          | 4.91  | 30        |      |
| Anthracene                 | 46.05  | 10  | 50      | 0             | 92.1 | 70-129        | 46.19         | 0.303 | 30        |      |
| Benz(a)anthracene          | 44.16  | 10  | 50      | 0             | 88.3 | 55-131        | 44.57         | 0.91  | 30        |      |
| Benzidine                  | 21.02  | 10  | 50      | 0             | 42   | 10-115        | 17.26         | 19.6  | 30        |      |
| Hexachloroethane           | 45.28  | 10  | 50      | 0             | 90.6 | 46-115        | 44.57         | 1.57  | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 39.07  | 10  | 50      | 0             | 78.1 | 42-123        | 39.91         | 2.14  | 30        |      |
| Isophorone                 | 44.04  | 10  | 50      | 0             | 88.1 | 63-117        | 42.39         | 3.83  | 30        |      |
| N-Nitrosodi-n-propylamine  | 42.7   | 10  | 50      | 0             | 85.4 | 67-115        | 41.73         | 2.31  | 30        |      |
| N-Nitrosodimethylamine     | 25.93  | 10  | 50      | 0             | 51.9 | 28-115        | 23.87         | 8.27  | 30        |      |
| N-Nitrosodiphenylamine     | 46.24  | 10  | 50      | 0             | 92.5 | 72-144        | 45.75         | 1.07  | 30        |      |
| Naphthalene                | 45.33  | 10  | 50      | 0             | 90.7 | 52-115        | 43.25         | 4.7   | 30        |      |
| Nitrobenzene               | 44.53  | 10  | 50      | 0             | 89.1 | 65-115        | 42.81         | 3.95  | 30        |      |
| Pentachlorophenol          | 72.38  | 10  | 100     | 0             | 72.4 | 65-123        | 72.89         | 0.694 | 30        |      |
| Phenanthrene               | 45.34  | 10  | 50      | 0             | 90.7 | 69-119        | 46.44         | 2.39  | 30        |      |
| Phenol                     | 30.16  | 10  | 100     | 0             | 30.2 | 16-115        | 28.44         | 5.86  | 30        |      |
| Pyrene                     | 46.09  | 10  | 50      | 0             | 92.2 | 51-130        | 44.33         | 3.91  | 30        |      |
| Surr: 2,4,6-Tribromophenol | 91.99  | 10  | 100     | 0             | 92   | 39-153        | 91.27         | 0.785 | 30        |      |
| Surr: 2-Fluorobiphenyl     | 88.33  | 10  | 100     | 0             | 88.3 | 40-147        | 87.19         | 1.3   | 30        |      |
| Surr: 2-Fluorophenol       | 51.46  | 10  | 100     | 0             | 51.5 | 21-110        | 48.96         | 4.97  | 30        |      |
| Surr: 4-Terphenyl-d14      | 89.38  | 10  | 100     | 0             | 89.4 | 39-141        | 87.75         | 1.85  | 30        |      |
| Surr: Nitrobenzene-d5      | 85.34  | 10  | 100     | 0             | 85.3 | 37-140        | 82.17         | 3.79  | 30        |      |
| Surr: Phenol-d6            | 29.73  | 10  | 100     | 0             | 29.7 | 11-100        | 29.46         | 0.916 | 30        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0411050-03E | 0411050-04E | 0411050-05E |
| 0411050-06E | 0411050-07E | 0411050-08E |

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CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

# QC BATCH REPORT

Batch ID: R24456 InstrumentID: VOA1

MBLK Sample ID: VBLKW-1109 Test Code: SW8260 Units: µg/L Analysis Date: 11/09/04 12:52  
 Client ID: Run ID: VOA1\_041109A SeqNo: 570954 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.8   | 5.0 | 50      | 0             | 91.6 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 50.03  | 5.0 | 50      | 0             | 100  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 47.15  | 5.0 | 50      | 0             | 94.3 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 50.37  | 5.0 | 50      | 0             | 101  | 75-125        | 0             |      |           |      |

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CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24456 Instrument ID: VOA1

| LCS                         |        | Sample ID: VLCSW-1109 |         | Test Code: SW8260 |      | Units: µg/L   |               | Analysis Date: 11/09/04 11:57 |           |      |
|-----------------------------|--------|-----------------------|---------|-------------------|------|---------------|---------------|-------------------------------|-----------|------|
| Client ID:                  |        | Run ID: VOA1_041109A  |         | SeqNo: 570952     |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                     | Result | PQL                   | SPK Val | SPK Ref Value     | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 51.58  | 5.0                   | 50      | 0                 | 103  | 75.2-120      | 0             |                               |           |      |
| 1,1,2,2-Tetrachloroethane   | 50.27  | 5.0                   | 50      | 0                 | 101  | 72.4-121      | 0             |                               |           |      |
| 1,1,2-Trichloroethane       | 49.56  | 5.0                   | 50      | 0                 | 99.1 | 80-120        | 0             |                               |           |      |
| 1,1-Dichloroethane          | 47     | 5.0                   | 50      | 0                 | 94   | 76.9-120      | 0             |                               |           |      |
| 1,1-Dichloroethene          | 47.3   | 5.0                   | 50      | 0                 | 94.6 | 72.6-123      | 0             |                               |           |      |
| 1,2-Dichloroethane          | 49.07  | 5.0                   | 50      | 0                 | 98.1 | 80-120        | 0             |                               |           |      |
| 2-Butanone                  | 105.3  | 10                    | 100     | 0                 | 105  | 69-131        | 0             |                               |           |      |
| 2-Chloroethyl vinyl ether   | 97.73  | 10                    | 100     | 0                 | 97.7 | 60-135        | 0             |                               |           |      |
| 2-Hexanone                  | 108.3  | 10                    | 100     | 0                 | 108  | 55.6-126      | 0             |                               |           |      |
| 4-Methyl-2-pentanone        | 103.7  | 10                    | 100     | 0                 | 104  | 67.4-121      | 0             |                               |           |      |
| Acetone                     | 115.6  | 10                    | 100     | 0                 | 116  | 64.4-140      | 0             |                               |           |      |
| Benzene                     | 48.95  | 5.0                   | 50      | 0                 | 97.9 | 80-120        | 0             |                               |           |      |
| Bromodichloromethane        | 51.01  | 5.0                   | 50      | 0                 | 102  | 80-120        | 0             |                               |           |      |
| Bromoform                   | 55.15  | 5.0                   | 50      | 0                 | 110  | 77.9-121      | 0             |                               |           |      |
| Bromomethane                | 43.39  | 5.0                   | 50      | 0                 | 86.8 | 63.3-137      | 0             |                               |           |      |
| Carbon disulfide            | 102.1  | 10                    | 100     | 0                 | 102  | 74.1-123      | 0             |                               |           |      |
| Carbon tetrachloride        | 50.92  | 5.0                   | 50      | 0                 | 102  | 74.7-120      | 0             |                               |           |      |
| Chlorobenzene               | 50.97  | 5.0                   | 50      | 0                 | 102  | 80-120        | 0             |                               |           |      |
| Chloroethane                | 45.82  | 5.0                   | 50      | 0                 | 91.6 | 74.7-126      | 0             |                               |           |      |
| Chloroform                  | 48.35  | 5.0                   | 50      | 0                 | 96.7 | 80-120        | 0             |                               |           |      |
| Chloromethane               | 47.74  | 5.0                   | 50      | 0                 | 95.5 | 64.5-132      | 0             |                               |           |      |
| cis-1,3-Dichloropropene     | 52.6   | 5.0                   | 50      | 0                 | 105  | 80-120        | 0             |                               |           |      |
| Dibromochloromethane        | 51.49  | 5.0                   | 50      | 0                 | 103  | 80-120        | 0             |                               |           |      |
| Ethylbenzene                | 53.2   | 5.0                   | 50      | 0                 | 106  | 80-120        | 0             |                               |           |      |
| m,p-Xylene                  | 106.7  | 10                    | 100     | 0                 | 107  | 80-120        | 0             |                               |           |      |
| Methylene chloride          | 48.27  | 10                    | 50      | 0                 | 96.5 | 76.2-120      | 0             |                               |           |      |
| Styrene                     | 52.93  | 5.0                   | 50      | 0                 | 106  | 80-120        | 0             |                               |           |      |
| Tetrachloroethene           | 51.66  | 5.0                   | 50      | 0                 | 103  | 68.5-130      | 0             |                               |           |      |
| Toluene                     | 50.77  | 5.0                   | 50      | 0                 | 102  | 80-120        | 0             |                               |           |      |
| trans-1,3-Dichloropropene   | 52.84  | 5.0                   | 50      | 0                 | 106  | 80-120        | 0             |                               |           |      |
| Trichloroethene             | 51.21  | 5.0                   | 50      | 0                 | 102  | 78.9-120      | 0             |                               |           |      |
| Vinyl acetate               | 97.69  | 10                    | 100     | 0                 | 97.7 | 62.4-133      | 0             |                               |           |      |
| Vinyl chloride              | 49.36  | 2.0                   | 50      | 0                 | 98.7 | 72.7-128      | 0             |                               |           |      |
| Xylenes, Total              | 159.4  | 15                    | 150     | 0                 | 106  | 80-120        | 0             |                               |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.48  | 5.0                   | 50      | 0                 | 91   | 71-126        | 0             |                               |           |      |
| Surr: 4-Bromofluorobenzene  | 50.1   | 5.0                   | 50      | 0                 | 100  | 74-125        | 0             |                               |           |      |
| Surr: Dibromofluoromethane  | 46.75  | 5.0                   | 50      | 0                 | 93.5 | 73-126        | 0             |                               |           |      |
| Surr: Toluene-d8            | 51.52  | 5.0                   | 50      | 0                 | 103  | 75-125        | 0             |                               |           |      |

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CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24456 InstrumentID: VOA1

MS Sample ID: 0411036-29AMS Test Code: SW8260 Units: µg/L Analysis Date: 11/09/04 16:58

Client ID: Run ID: VOA1\_041109A SeqNo: 570957 Prep Date: DF: 10

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 467.9  | 50  | 500     | 0             | 93.6 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 481.7  | 50  | 500     | 0             | 96.3 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 466.7  | 50  | 500     | 0             | 93.3 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 453.4  | 50  | 500     | 0             | 90.7 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 447.7  | 50  | 500     | 0             | 89.5 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 488    | 50  | 500     | 0             | 97.6 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 792.9  | 100 | 1000    | 0             | 79.3 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 24.32  | 100 | 1000    | 0             | 2.43 | 60-135        | 0             |      |           | JS   |
| 2-Hexanone                  | 830    | 100 | 1000    | 0             | 83   | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 935.5  | 100 | 1000    | 0             | 93.5 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 588.9  | 100 | 1000    | 0             | 58.9 | 64.4-140      | 0             |      |           | S    |
| Benzene                     | 471.9  | 50  | 500     | 0             | 94.4 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 483.2  | 50  | 500     | 0             | 96.6 | 80-120        | 0             |      |           |      |
| Bromoform                   | 536.5  | 50  | 500     | 0             | 107  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 263.8  | 50  | 500     | 0             | 52.8 | 63.3-137      | 0             |      |           | S    |
| Carbon disulfide            | 897.7  | 100 | 1000    | 0             | 89.8 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 456.5  | 50  | 500     | 0             | 91.3 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 482.4  | 50  | 500     | 0             | 96.5 | 80-120        | 0             |      |           |      |
| Chloroethane                | 418.7  | 50  | 500     | 0             | 83.7 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 456.4  | 50  | 500     | 0             | 91.3 | 80-120        | 0             |      |           |      |
| Chloromethane               | 415.2  | 50  | 500     | 0             | 83   | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 482.1  | 50  | 500     | 0             | 96.4 | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 500.8  | 50  | 500     | 0             | 100  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 479    | 50  | 500     | 0             | 95.8 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 935.6  | 100 | 1000    | 0             | 93.6 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 467.1  | 100 | 500     | 0             | 93.4 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 510.9  | 50  | 500     | 0             | 102  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 1274   | 50  | 500     | 999.6         | 54.9 | 68.5-130      | 0             |      |           | S    |
| Toluene                     | 479.9  | 50  | 500     | 0             | 96   | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 511.9  | 50  | 500     | 0             | 102  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 459.2  | 50  | 500     | 0             | 91.8 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 1007   | 100 | 1000    | 0             | 101  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 447.8  | 20  | 500     | 0             | 89.6 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 1434   | 150 | 1500    | 0             | 95.6 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 453.3  | 50  | 500     | 0             | 90.7 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 495.1  | 50  | 500     | 0             | 99   | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 471.9  | 50  | 500     | 0             | 94.4 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 489.5  | 50  | 500     | 0             | 97.9 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24456 InstrumentID: VOA1

| MSD                         | Sample ID: 0411036-29AMSD |     |         | Test Code: SW8260 |      | Units: µg/L   |               | Analysis Date: 11/09/04 17:25 |           |      |
|-----------------------------|---------------------------|-----|---------|-------------------|------|---------------|---------------|-------------------------------|-----------|------|
| Client ID:                  | Run ID: VOA1_041109A      |     |         | SeqNo: 570958     |      | Prep Date:    |               | DF: 10                        |           |      |
| Analyte                     | Result                    | PQL | SPK Val | SPK Ref Value     | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 476.4                     | 50  | 500     | 0                 | 95.3 | 75.2-120      | 467.9         | 1.8                           | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 501.4                     | 50  | 500     | 0                 | 100  | 72.4-121      | 481.7         | 4.02                          | 20        |      |
| 1,1,2-Trichloroethane       | 480.9                     | 50  | 500     | 0                 | 96.2 | 80-120        | 466.7         | 2.99                          | 20        |      |
| 1,1-Dichloroethane          | 468.4                     | 50  | 500     | 0                 | 93.7 | 76.9-120      | 453.4         | 3.26                          | 20        |      |
| 1,1-Dichloroethene          | 473                       | 50  | 500     | 0                 | 94.6 | 72.6-123      | 447.7         | 5.5                           | 20        |      |
| 1,2-Dichloroethane          | 506.8                     | 50  | 500     | 0                 | 101  | 80-120        | 488           | 3.77                          | 20        |      |
| 2-Butanone                  | 799.9                     | 100 | 1000    | 0                 | 80   | 69-131        | 792.9         | 0.875                         | 20        |      |
| 2-Chloroethyl vinyl ether   | 10.19                     | 100 | 1000    | 0                 | 1.02 | 60-135        | 24.32         | 0                             | 20        | JS   |
| 2-Hexanone                  | 848.9                     | 100 | 1000    | 0                 | 84.9 | 55.6-126      | 830           | 2.25                          | 20        |      |
| 4-Methyl-2-pentanone        | 971.2                     | 100 | 1000    | 0                 | 97.1 | 67.4-121      | 935.5         | 3.75                          | 20        |      |
| Acetone                     | 654.1                     | 100 | 1000    | 0                 | 65.4 | 64.4-140      | 588.9         | 10.5                          | 20        |      |
| Benzene                     | 490.7                     | 50  | 500     | 0                 | 98.1 | 80-120        | 471.9         | 3.91                          | 20        |      |
| Bromodichloromethane        | 490.9                     | 50  | 500     | 0                 | 98.2 | 80-120        | 483.2         | 1.59                          | 20        |      |
| Bromoform                   | 515.3                     | 50  | 500     | 0                 | 103  | 77.9-121      | 536.5         | 4.02                          | 20        |      |
| Bromomethane                | 334.9                     | 50  | 500     | 0                 | 67   | 63.3-137      | 263.8         | 23.7                          | 20        | R    |
| Carbon disulfide            | 943.7                     | 100 | 1000    | 0                 | 94.4 | 74.1-123      | 897.7         | 4.99                          | 20        |      |
| Carbon tetrachloride        | 472.5                     | 50  | 500     | 0                 | 94.5 | 74.7-120      | 456.5         | 3.45                          | 20        |      |
| Chlorobenzene               | 476.9                     | 50  | 500     | 0                 | 95.4 | 80-120        | 482.4         | 1.16                          | 20        |      |
| Chloroethane                | 447.1                     | 50  | 500     | 0                 | 89.4 | 74.7-126      | 418.7         | 6.55                          | 20        |      |
| Chloroform                  | 475.9                     | 50  | 500     | 0                 | 95.2 | 80-120        | 456.4         | 4.19                          | 20        |      |
| Chloromethane               | 437.9                     | 50  | 500     | 0                 | 87.6 | 64.5-132      | 415.2         | 5.3                           | 20        |      |
| cis-1,3-Dichloropropene     | 494.3                     | 50  | 500     | 0                 | 98.9 | 80-120        | 482.1         | 2.5                           | 20        |      |
| Dibromochloromethane        | 495.8                     | 50  | 500     | 0                 | 99.2 | 80-120        | 500.8         | 0.993                         | 20        |      |
| Ethylbenzene                | 469.3                     | 50  | 500     | 0                 | 93.9 | 80-120        | 479           | 2.05                          | 20        |      |
| m,p-Xylene                  | 946.4                     | 100 | 1000    | 0                 | 94.6 | 80-120        | 935.6         | 1.15                          | 20        |      |
| Methylene chloride          | 495.7                     | 100 | 500     | 0                 | 99.1 | 76.2-120      | 467.1         | 5.94                          | 20        |      |
| Styrene                     | 482.1                     | 50  | 500     | 0                 | 96.4 | 80-120        | 510.9         | 5.81                          | 20        |      |
| Tetrachloroethene           | 1247                      | 50  | 500     | 999.6             | 49.5 | 68.5-130      | 1274          | 2.15                          | 20        | S    |
| Toluene                     | 473                       | 50  | 500     | 0                 | 94.6 | 80-120        | 479.9         | 1.43                          | 20        |      |
| trans-1,3-Dichloropropene   | 509.6                     | 50  | 500     | 0                 | 102  | 80-120        | 511.9         | 0.46                          | 20        |      |
| Trichloroethene             | 473.4                     | 50  | 500     | 0                 | 94.7 | 78.9-120      | 459.2         | 3.06                          | 20        |      |
| Vinyl acetate               | 1031                      | 100 | 1000    | 0                 | 103  | 62.4-133      | 1007          | 2.37                          | 20        |      |
| Vinyl chloride              | 462.7                     | 20  | 500     | 0                 | 92.5 | 72.7-128      | 447.8         | 3.28                          | 20        |      |
| Xylenes, Total              | 1426                      | 150 | 1500    | 0                 | 95   | 80-120        | 1434          | 0.598                         | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 468.3                     | 50  | 500     | 0                 | 93.7 | 71-126        | 453.3         | 3.24                          | 20        |      |
| Surr: 4-Bromofluorobenzene  | 476.2                     | 50  | 500     | 0                 | 95.2 | 74-125        | 495.1         | 3.88                          | 20        |      |
| Surr: Dibromofluoromethane  | 473.5                     | 50  | 500     | 0                 | 94.7 | 73-126        | 471.9         | 0.345                         | 20        |      |
| Surr: Toluene-d8            | 490.8                     | 50  | 500     | 0                 | 98.2 | 75-125        | 489.5         | 0.283                         | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0411050-01A | 0411050-02A | 0411050-03A |
| 0411050-04A |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24521 InstrumentID: VOA1

MBLK Sample ID: VBLKW-1111 Test Code: SW8260 Units: µg/L Analysis Date: 11/11/04 11:46

Client ID: Run ID: VOA1\_041111A SeqNo: 572384 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 47.3   | 5.0 | 50      | 0             | 94.6 | 71-126        |               | 0    |           |      |
| Surr: 4-Bromofluorobenzene  | 46.06  | 5.0 | 50      | 0             | 92.1 | 74-125        |               | 0    |           |      |
| Surr: Dibromofluoromethane  | 49.2   | 5.0 | 50      | 0             | 98.4 | 73-126        |               | 0    |           |      |
| Surr: Toluene-d8            | 49.87  | 5.0 | 50      | 0             | 99.7 | 75-125        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24521 InstrumentID: VOA1

LCS Sample ID: VLCSW-1111 Test Code: SW8260 Units: µg/L Analysis Date: 11/11/04 10:51

Client ID: Run ID: VOA1\_041111A SeqNo: 572383 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 51.61  | 5.0 | 50      | 0             | 103  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 49.82  | 5.0 | 50      | 0             | 99.6 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 49.59  | 5.0 | 50      | 0             | 99.2 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 48.43  | 5.0 | 50      | 0             | 96.9 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 49.75  | 5.0 | 50      | 0             | 99.5 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 48.65  | 5.0 | 50      | 0             | 97.3 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 101.8  | 10  | 100     | 0             | 102  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 98.25  | 10  | 100     | 0             | 98.2 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 105.6  | 10  | 100     | 0             | 106  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 99.26  | 10  | 100     | 0             | 99.3 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 101.6  | 10  | 100     | 0             | 102  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 49.59  | 5.0 | 50      | 0             | 99.2 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 51.26  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Bromoform                   | 46.8   | 5.0 | 50      | 0             | 93.6 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 55.65  | 5.0 | 50      | 0             | 111  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 99.89  | 10  | 100     | 0             | 99.9 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 46.81  | 5.0 | 50      | 0             | 93.6 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 49.4   | 5.0 | 50      | 0             | 98.8 | 80-120        | 0             |      |           |      |
| Chloroethane                | 51.64  | 5.0 | 50      | 0             | 103  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 48.85  | 5.0 | 50      | 0             | 97.7 | 80-120        | 0             |      |           |      |
| Chloromethane               | 51.05  | 5.0 | 50      | 0             | 102  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 52.33  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 46.31  | 5.0 | 50      | 0             | 92.6 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 49.91  | 5.0 | 50      | 0             | 99.8 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 101.4  | 10  | 100     | 0             | 101  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 47.78  | 10  | 50      | 0             | 95.6 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 51.88  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 48.42  | 5.0 | 50      | 0             | 96.8 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 50.36  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 47.76  | 5.0 | 50      | 0             | 95.5 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 47.71  | 5.0 | 50      | 0             | 95.4 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 114.3  | 10  | 100     | 0             | 114  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 51.72  | 2.0 | 50      | 0             | 103  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 152.9  | 15  | 150     | 0             | 102  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.69  | 5.0 | 50      | 0             | 91.4 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 49.59  | 5.0 | 50      | 0             | 99.2 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.38  | 5.0 | 50      | 0             | 96.8 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.2   | 5.0 | 50      | 0             | 98.4 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24521 InstrumentID: VOA1

MS Sample ID: 0411072-05AMS Test Code: SW8260 Units: µg/L Analysis Date: 11/11/04 14:57

Client ID: Run ID: VOA1\_041111A SeqNo: 572386 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 51.05  | 5.0 | 50      | 0             | 102  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 53.87  | 5.0 | 50      | 0             | 108  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 51.43  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 47.47  | 5.0 | 50      | 0             | 94.9 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 50.59  | 5.0 | 50      | 0             | 101  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 49.55  | 5.0 | 50      | 0             | 99.1 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 108.9  | 10  | 100     | 0             | 109  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 17.79  | 10  | 100     | 0             | 17.8 | 60-135        | 0             |      |           | S    |
| 2-Hexanone                  | 103.9  | 10  | 100     | 0             | 104  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 109.1  | 10  | 100     | 0             | 109  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 100.7  | 10  | 100     | 0             | 101  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 50.49  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 51.52  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Bromoform                   | 50.82  | 5.0 | 50      | 0             | 102  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 28.54  | 5.0 | 50      | 0             | 57.1 | 63.3-137      | 0             |      |           | S    |
| Carbon disulfide            | 104.2  | 10  | 100     | 0             | 104  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 46.65  | 5.0 | 50      | 0             | 93.3 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 49.14  | 5.0 | 50      | 0             | 98.3 | 80-120        | 0             |      |           |      |
| Chloroethane                | 50.84  | 5.0 | 50      | 0             | 102  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 48.98  | 5.0 | 50      | 0             | 98   | 80-120        | 0             |      |           |      |
| Chloromethane               | 50.78  | 5.0 | 50      | 0             | 102  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 53.06  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 48.8   | 5.0 | 50      | 0             | 97.6 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 51.46  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 104    | 10  | 100     | 0             | 104  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 45.43  | 10  | 50      | 0             | 90.9 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 53.5   | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 49.48  | 5.0 | 50      | 0             | 99   | 68.5-130      | 0             |      |           |      |
| Toluene                     | 51.04  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 48.47  | 5.0 | 50      | 0             | 96.9 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 47.05  | 5.0 | 50      | 0             | 94.1 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 116.8  | 10  | 100     | 0             | 117  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 52.23  | 2.0 | 50      | 0             | 104  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 157.6  | 15  | 150     | 0             | 105  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.46  | 5.0 | 50      | 0             | 92.9 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 50.98  | 5.0 | 50      | 0             | 102  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.46  | 5.0 | 50      | 0             | 96.9 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.94  | 5.0 | 50      | 0             | 99.9 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24521 InstrumentID: VOA1

MSD Sample ID: 0411072-05AMSD Test Code: SW8260 Units: µg/L Analysis Date: 11/11/04 15:25

Client ID: Run ID: VOA1\_041111A SeqNo: 572387 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 51.27  | 5.0 | 50      | 0             | 103  | 75.2-120      | 51.05         | 0.441  | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 55.49  | 5.0 | 50      | 0             | 111  | 72.4-121      | 53.87         | 2.96   | 20        |      |
| 1,1,2-Trichloroethane       | 49.87  | 5.0 | 50      | 0             | 99.7 | 80-120        | 51.43         | 3.07   | 20        |      |
| 1,1-Dichloroethane          | 49.34  | 5.0 | 50      | 0             | 98.7 | 76.9-120      | 47.47         | 3.88   | 20        |      |
| 1,1-Dichloroethene          | 50.81  | 5.0 | 50      | 0             | 102  | 72.6-123      | 50.59         | 0.441  | 20        |      |
| 1,2-Dichloroethane          | 50.25  | 5.0 | 50      | 0             | 100  | 80-120        | 49.55         | 1.39   | 20        |      |
| 2-Butanone                  | 106.7  | 10  | 100     | 0             | 107  | 69-131        | 108.9         | 2.02   | 20        |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 60-135        | 17.79         | 0      | 20        | S    |
| 2-Hexanone                  | 105.1  | 10  | 100     | 0             | 105  | 55.6-126      | 103.9         | 1.16   | 20        |      |
| 4-Methyl-2-pentanone        | 106.4  | 10  | 100     | 0             | 106  | 67.4-121      | 109.1         | 2.43   | 20        |      |
| Acetone                     | 98.1   | 10  | 100     | 0             | 98.1 | 64.4-140      | 100.7         | 2.61   | 20        |      |
| Benzene                     | 51.93  | 5.0 | 50      | 0             | 104  | 80-120        | 50.49         | 2.81   | 20        |      |
| Bromodichloromethane        | 52.98  | 5.0 | 50      | 0             | 106  | 80-120        | 51.52         | 2.78   | 20        |      |
| Bromoform                   | 49.84  | 5.0 | 50      | 0             | 99.7 | 77.9-121      | 50.82         | 1.95   | 20        |      |
| Bromomethane                | 36.91  | 5.0 | 50      | 0             | 73.8 | 63.3-137      | 28.54         | 25.6   | 20        | R    |
| Carbon disulfide            | 106.5  | 10  | 100     | 0             | 107  | 74.1-123      | 104.2         | 2.22   | 20        |      |
| Carbon tetrachloride        | 46.08  | 5.0 | 50      | 0             | 92.2 | 74.7-120      | 46.65         | 1.23   | 20        |      |
| Chlorobenzene               | 48.38  | 5.0 | 50      | 0             | 96.8 | 80-120        | 49.14         | 1.57   | 20        |      |
| Chloroethane                | 50.96  | 5.0 | 50      | 0             | 102  | 74.7-126      | 50.84         | 0.231  | 20        |      |
| Chloroform                  | 48.7   | 5.0 | 50      | 0             | 97.4 | 80-120        | 48.98         | 0.565  | 20        |      |
| Chloromethane               | 50.61  | 5.0 | 50      | 0             | 101  | 64.5-132      | 50.78         | 0.335  | 20        |      |
| cis-1,3-Dichloropropene     | 53.98  | 5.0 | 50      | 0             | 108  | 80-120        | 53.06         | 1.71   | 20        |      |
| Dibromochloromethane        | 49.19  | 5.0 | 50      | 0             | 98.4 | 80-120        | 48.8          | 0.796  | 20        |      |
| Ethylbenzene                | 52.27  | 5.0 | 50      | 0             | 105  | 80-120        | 51.46         | 1.56   | 20        |      |
| m,p-Xylene                  | 99.93  | 10  | 100     | 0             | 99.9 | 80-120        | 104           | 3.97   | 20        |      |
| Methylene chloride          | 47.66  | 10  | 50      | 0             | 95.3 | 76.2-120      | 45.43         | 4.78   | 20        |      |
| Styrene                     | 51.99  | 5.0 | 50      | 0             | 104  | 80-120        | 53.5          | 2.87   | 20        |      |
| Tetrachloroethene           | 50.02  | 5.0 | 50      | 0             | 100  | 68.5-130      | 49.48         | 1.09   | 20        |      |
| Toluene                     | 52.21  | 5.0 | 50      | 0             | 104  | 80-120        | 51.04         | 2.27   | 20        |      |
| trans-1,3-Dichloropropene   | 50.68  | 5.0 | 50      | 0             | 101  | 80-120        | 48.47         | 4.47   | 20        |      |
| Trichloroethene             | 49.63  | 5.0 | 50      | 0             | 99.3 | 78.9-120      | 47.05         | 5.36   | 20        |      |
| Vinyl acetate               | 116.8  | 10  | 100     | 0             | 117  | 62.4-133      | 116.8         | 0.0193 | 20        |      |
| Vinyl chloride              | 53.44  | 2.0 | 50      | 0             | 107  | 72.7-128      | 52.23         | 2.29   | 20        |      |
| Xylenes, Total              | 151.8  | 15  | 150     | 0             | 101  | 80-120        | 157.6         | 3.72   | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 45.48  | 5.0 | 50      | 0             | 91   | 71-126        | 46.46         | 2.14   | 20        |      |
| Surr: 4-Bromofluorobenzene  | 50.26  | 5.0 | 50      | 0             | 101  | 74-125        | 50.98         | 1.41   | 20        |      |
| Surr: Dibromofluoromethane  | 48.21  | 5.0 | 50      | 0             | 96.4 | 73-126        | 48.46         | 0.502  | 20        |      |
| Surr: Toluene-d8            | 49.22  | 5.0 | 50      | 0             | 98.4 | 75-125        | 49.94         | 1.46   | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0411050-05A | 0411050-06A | 0411050-07A |
| 0411050-08A |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24587 InstrumentID: VOA1

MBLK Sample ID: VBLKW-1112 Test Code: SW8260 Units: µg/L Analysis Date: 11/12/04 13:27

Client ID: Run ID: VOA1\_041112A SeqNo: 573890 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.85  | 5.0 | 50      | 0             | 91.7 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 47.84  | 5.0 | 50      | 0             | 95.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.23  | 5.0 | 50      | 0             | 96.5 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.18  | 5.0 | 50      | 0             | 98.4 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24587 Instrument ID: VOA1

LCS Sample ID: VLCSW-1112 Test Code: SW8260 Units: µg/L Analysis Date: 11/12/04 12:09

Client ID: Run ID: VOA1\_041112A SeqNo: 573889 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 50.34  | 5.0 | 50      | 0             | 101  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 55.63  | 5.0 | 50      | 0             | 111  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 47.39  | 5.0 | 50      | 0             | 94.8 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 48.04  | 5.0 | 50      | 0             | 96.1 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 48.44  | 5.0 | 50      | 0             | 96.9 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 46.28  | 5.0 | 50      | 0             | 92.6 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 108.5  | 10  | 100     | 0             | 108  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 94.19  | 10  | 100     | 0             | 94.2 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 105.2  | 10  | 100     | 0             | 105  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 100.5  | 10  | 100     | 0             | 100  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 109.7  | 10  | 100     | -0            | 110  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 49.28  | 5.0 | 50      | 0             | 98.6 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 50.67  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Bromoform                   | 46.24  | 5.0 | 50      | 0             | 92.5 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 46.02  | 5.0 | 50      | 0             | 92   | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 101.3  | 10  | 100     | 0             | 101  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 43.13  | 5.0 | 50      | 0             | 86.3 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 47.99  | 5.0 | 50      | 0             | 96   | 80-120        | 0             |      |           |      |
| Chloroethane                | 50.66  | 5.0 | 50      | 0             | 101  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 49.29  | 5.0 | 50      | 0             | 98.6 | 80-120        | 0             |      |           |      |
| Chloromethane               | 52.04  | 5.0 | 50      | 0             | 104  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 51.72  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 44.46  | 5.0 | 50      | 0             | 88.9 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 48.59  | 5.0 | 50      | 0             | 97.2 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 100.5  | 10  | 100     | 0             | 101  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 48.86  | 10  | 50      | 0             | 97.7 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.79  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 45.11  | 5.0 | 50      | 0             | 90.2 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 47.71  | 5.0 | 50      | 0             | 95.4 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 46.19  | 5.0 | 50      | 0             | 92.4 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 46.24  | 5.0 | 50      | 0             | 92.5 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 114.2  | 10  | 100     | 0             | 114  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 54.54  | 2.0 | 50      | 0             | 109  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 151.8  | 15  | 150     | 0             | 101  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.14  | 5.0 | 50      | 0             | 90.3 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.83  | 5.0 | 50      | 0             | 97.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.02  | 5.0 | 50      | 0             | 96   | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 48.31  | 5.0 | 50      | 0             | 96.6 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24587 InstrumentID: VOA1

| MS                          | Sample ID: 0411050-08AMS | Test Code: SW8260 |         |               |       | Units: µg/L   | Analysis Date: 11/12/04 17:00 |      |           |      |
|-----------------------------|--------------------------|-------------------|---------|---------------|-------|---------------|-------------------------------|------|-----------|------|
| Client ID: TEL-4            | Run ID: VOA1_041112A     | SeqNo: 573893     |         | Prep Date:    |       | DF: 25        |                               |      |           |      |
| Analyte                     | Result                   | PQL               | SPK Val | SPK Ref Value | %REC  | Control Limit | RPD Ref Value                 | %RPD | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 1304                     | 120               | 1250    | 0             | 104   | 75.2-120      | 0                             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 1288                     | 120               | 1250    | 0             | 103   | 72.4-121      | 0                             |      |           |      |
| 1,1,2-Trichloroethane       | 1282                     | 120               | 1250    | 0             | 103   | 80-120        | 0                             |      |           |      |
| 1,1-Dichloroethane          | 1253                     | 120               | 1250    | 0             | 100   | 76.9-120      | 0                             |      |           |      |
| 1,1-Dichloroethene          | 1284                     | 120               | 1250    | 0             | 103   | 72.6-123      | 0                             |      |           |      |
| 1,2-Dichloroethane          | 1241                     | 120               | 1250    | 0             | 99.2  | 80-120        | 0                             |      |           |      |
| 2-Butanone                  | 2594                     | 250               | 2500    | 52.59         | 102   | 69-131        | 0                             |      |           |      |
| 2-Chloroethyl vinyl ether   | 1671                     | 250               | 2500    | 0             | 66.9  | 60-135        | 0                             |      |           |      |
| 2-Hexanone                  | 2572                     | 250               | 2500    | 0             | 103   | 55.6-126      | 0                             |      |           |      |
| 4-Methyl-2-pentanone        | 2659                     | 250               | 2500    | 0             | 106   | 67.4-121      | 0                             |      |           |      |
| Acetone                     | 2743                     | 250               | 2500    | 3559          | -32.7 | 64.4-140      | 0                             |      |           | S    |
| Benzene                     | 1765                     | 120               | 1250    | 531.5         | 98.7  | 80-120        | 0                             |      |           |      |
| Bromodichloromethane        | 1301                     | 120               | 1250    | 0             | 104   | 80-120        | 0                             |      |           |      |
| Bromoform                   | 1150                     | 120               | 1250    | 0             | 92    | 77.9-121      | 0                             |      |           |      |
| Bromomethane                | 642.1                    | 120               | 1250    | 0             | 51.4  | 63.3-137      | 0                             |      |           | S    |
| Carbon disulfide            | 2668                     | 250               | 2500    | 0             | 107   | 74.1-123      | 0                             |      |           |      |
| Carbon tetrachloride        | 1151                     | 120               | 1250    | 0             | 92.1  | 74.7-120      | 0                             |      |           |      |
| Chlorobenzene               | 1203                     | 120               | 1250    | 0             | 96.2  | 80-120        | 0                             |      |           |      |
| Chloroethane                | 1330                     | 120               | 1250    | 0             | 106   | 74.7-126      | 0                             |      |           |      |
| Chloroform                  | 1270                     | 120               | 1250    | 0             | 102   | 80-120        | 0                             |      |           |      |
| Chloromethane               | 1272                     | 120               | 1250    | 0             | 102   | 64.5-132      | 0                             |      |           |      |
| cis-1,3-Dichloropropene     | 1326                     | 120               | 1250    | 0             | 106   | 80-120        | 0                             |      |           |      |
| Dibromochloromethane        | 1191                     | 120               | 1250    | 0             | 95.2  | 80-120        | 0                             |      |           |      |
| Ethylbenzene                | 1424                     | 120               | 1250    | 101.5         | 106   | 80-120        | 0                             |      |           |      |
| m,p-Xylene                  | 2744                     | 250               | 2500    | 211.5         | 101   | 80-120        | 0                             |      |           |      |
| Methylene chloride          | 1249                     | 250               | 1250    | 0             | 100   | 76.2-120      | 0                             |      |           |      |
| Styrene                     | 1270                     | 120               | 1250    | 0             | 102   | 80-120        | 0                             |      |           |      |
| Tetrachloroethene           | 1230                     | 120               | 1250    | 0             | 98.4  | 68.5-130      | 0                             |      |           |      |
| Toluene                     | 1308                     | 120               | 1250    | 0             | 105   | 80-120        | 0                             |      |           |      |
| trans-1,3-Dichloropropene   | 1228                     | 120               | 1250    | 0             | 98.3  | 80-120        | 0                             |      |           |      |
| Trichloroethene             | 1197                     | 120               | 1250    | 0             | 95.7  | 78.9-120      | 0                             |      |           |      |
| Vinyl acetate               | 3025                     | 250               | 2500    | 0             | 121   | 62.4-133      | 0                             |      |           |      |
| Vinyl chloride              | 1319                     | 50                | 1250    | 0             | 106   | 72.7-128      | 0                             |      |           |      |
| Xylenes, Total              | 4021                     | 380               | 3750    | 211.5         | 102   | 80-120        | 0                             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 1158                     | 120               | 1250    | 0             | 92.6  | 71-126        | 0                             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 1253                     | 120               | 1250    | 0             | 100   | 74-125        | 0                             |      |           |      |
| Surr: Dibromofluoromethane  | 1224                     | 120               | 1250    | 0             | 97.9  | 73-126        | 0                             |      |           |      |
| Surr: Toluene-d8            | 1259                     | 120               | 1250    | 0             | 101   | 75-125        | 0                             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24587 InstrumentID: VOA1

MSD Sample ID: 0411050-08AMSD Test Code: SW8260 Units: µg/L Analysis Date: 11/12/04 17:36

Client ID: TEL-4 Run ID: VOA1\_041112A SeqNo: 573894 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC  | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|-------|---------------|---------------|-------|-----------|------|
| 1,1,1-Trichloroethane       | 1293   | 120 | 1250    | 0             | 103   | 75.2-120      | 1304          | 0.866 | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 1320   | 120 | 1250    | 0             | 106   | 72.4-121      | 1288          | 2.51  | 20        |      |
| 1,1,2-Trichloroethane       | 1299   | 120 | 1250    | 0             | 104   | 80-120        | 1282          | 1.36  | 20        |      |
| 1,1-Dichloroethane          | 1281   | 120 | 1250    | 0             | 102   | 76.9-120      | 1253          | 2.23  | 20        |      |
| 1,1-Dichloroethene          | 1273   | 120 | 1250    | 0             | 102   | 72.6-123      | 1284          | 0.866 | 20        |      |
| 1,2-Dichloroethane          | 1234   | 120 | 1250    | 0             | 98.7  | 80-120        | 1241          | 0.53  | 20        |      |
| 2-Butanone                  | 2709   | 250 | 2500    | 52.59         | 106   | 69-131        | 2594          | 4.35  | 20        |      |
| 2-Chloroethyl vinyl ether   | 1316   | 250 | 2500    | 0             | 52.6  | 60-135        | 1671          | 23.8  | 20        | SR   |
| 2-Hexanone                  | 2583   | 250 | 2500    | 0             | 103   | 55.6-126      | 2572          | 0.461 | 20        |      |
| 4-Methyl-2-pentanone        | 2672   | 250 | 2500    | 0             | 107   | 67.4-121      | 2659          | 0.452 | 20        |      |
| Acetone                     | 2543   | 250 | 2500    | 3559          | -40.7 | 64.4-140      | 2743          | 7.56  | 20        | S    |
| Benzene                     | 1762   | 120 | 1250    | 531.5         | 98.5  | 80-120        | 1765          | 0.177 | 20        |      |
| Bromodichloromethane        | 1328   | 120 | 1250    | 0             | 106   | 80-120        | 1301          | 2.02  | 20        |      |
| Bromoform                   | 1196   | 120 | 1250    | 0             | 95.7  | 77.9-121      | 1150          | 3.91  | 20        |      |
| Bromomethane                | 699.3  | 120 | 1250    | 0             | 55.9  | 63.3-137      | 642.1         | 8.53  | 20        | S    |
| Carbon disulfide            | 2648   | 250 | 2500    | 0             | 106   | 74.1-123      | 2668          | 0.741 | 20        |      |
| Carbon tetrachloride        | 1158   | 120 | 1250    | 0             | 92.6  | 74.7-120      | 1151          | 0.594 | 20        |      |
| Chlorobenzene               | 1228   | 120 | 1250    | 0             | 98.2  | 80-120        | 1203          | 2.02  | 20        |      |
| Chloroethane                | 1356   | 120 | 1250    | 0             | 108   | 74.7-126      | 1330          | 1.92  | 20        |      |
| Chloroform                  | 1228   | 120 | 1250    | 0             | 98.2  | 80-120        | 1270          | 3.4   | 20        |      |
| Chloromethane               | 1287   | 120 | 1250    | 0             | 103   | 64.5-132      | 1272          | 1.14  | 20        |      |
| cis-1,3-Dichloropropene     | 1332   | 120 | 1250    | 0             | 107   | 80-120        | 1326          | 0.459 | 20        |      |
| Dibromochloromethane        | 1165   | 120 | 1250    | 0             | 93.2  | 80-120        | 1191          | 2.18  | 20        |      |
| Ethylbenzene                | 1443   | 120 | 1250    | 101.5         | 107   | 80-120        | 1424          | 1.28  | 20        |      |
| m,p-Xylene                  | 2815   | 250 | 2500    | 211.5         | 104   | 80-120        | 2744          | 2.56  | 20        |      |
| Methylene chloride          | 1245   | 250 | 1250    | 0             | 99.6  | 76.2-120      | 1249          | 0.359 | 20        |      |
| Styrene                     | 1329   | 120 | 1250    | 0             | 106   | 80-120        | 1270          | 4.58  | 20        |      |
| Tetrachloroethene           | 1264   | 120 | 1250    | 0             | 101   | 68.5-130      | 1230          | 2.76  | 20        |      |
| Toluene                     | 1297   | 120 | 1250    | 0             | 104   | 80-120        | 1308          | 0.887 | 20        |      |
| trans-1,3-Dichloropropene   | 1247   | 120 | 1250    | 0             | 99.8  | 80-120        | 1228          | 1.53  | 20        |      |
| Trichloroethene             | 1220   | 120 | 1250    | 0             | 97.6  | 78.9-120      | 1197          | 1.95  | 20        |      |
| Vinyl acetate               | 2988   | 250 | 2500    | 0             | 120   | 62.4-133      | 3025          | 1.24  | 20        |      |
| Vinyl chloride              | 1324   | 50  | 1250    | 0             | 106   | 72.7-128      | 1319          | 0.396 | 20        |      |
| Xylenes, Total              | 4124   | 380 | 3750    | 211.5         | 104   | 80-120        | 4021          | 2.54  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 1116   | 120 | 1250    | 0             | 89.3  | 71-126        | 1158          | 3.73  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 1257   | 120 | 1250    | 0             | 101   | 74-125        | 1253          | 0.327 | 20        |      |
| Surr: Dibromofluoromethane  | 1198   | 120 | 1250    | 0             | 95.8  | 73-126        | 1224          | 2.15  | 20        |      |
| Surr: Toluene-d8            | 1209   | 120 | 1250    | 0             | 96.7  | 75-125        | 1259          | 4.03  | 20        |      |

The following samples were analyzed in this batch:

0411050-08A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411050  
**Project:** NCL/TEL

## QC BATCH REPORT

Batch ID: **R24541** InstrumentID: **UV-2101PC**

**MBLK** Sample ID: **WBLKW1-111004** Test Code: **E335.3** Units: **mg/L** Analysis Date: **11/12/04 0:00**

Client ID: Run ID: **UV-2101PC\_041112B** SeqNo: **572880** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

**LCS** Sample ID: **WLCSW1-111004** Test Code: **E335.3** Units: **mg/L** Analysis Date: **11/12/04 0:00**

Client ID: Run ID: **UV-2101PC\_041112B** SeqNo: **572881** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2018 | 0.020 | 0.2     | 0             | 101  | 80-120        | 0             |      |           |      |

**MS** Sample ID: **0411033-12BMS** Test Code: **E335.3** Units: **mg/L** Analysis Date: **11/12/04 0:00**

Client ID: Run ID: **UV-2101PC\_041112B** SeqNo: **572903** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1995 | 0.020 | 0.2     | 0.0034        | 98   | 75-125        | 0             |      |           |      |

**MSD** Sample ID: **0411033-12BMSD** Test Code: **E335.3** Units: **mg/L** Analysis Date: **11/12/04 0:00**

Client ID: Run ID: **UV-2101PC\_041112B** SeqNo: **572904** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1937 | 0.020 | 0.2     | 0.0034        | 95.2 | 75-125        | 0.1995        | 2.95 | 25        |      |

**DUP** Sample ID: **0411033-12BDUP** Test Code: **E335.3** Units: **mg/L** Analysis Date: **11/12/04 0:00**

Client ID: Run ID: **UV-2101PC\_041112B** SeqNo: **572902** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.0039 | 0.020 | 0       | 0             | 0    | 0-0           | 0.0034        | 0    | 20        | J    |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0411050-01D | 0411050-02D | 0411050-03D |
| 0411050-04D | 0411050-05D | 0411050-06D |
| 0411050-07D | 0411050-08D |             |

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J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

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E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24554 InstrumentID: WetChem

MBLK Sample ID: WBLKW1-111404 Test Code: E310.1 Units: mg/L Analysis Date: 11/14/04 0:00

Client ID: Run ID: WETCHEM\_041114C SeqNo: 573118 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-111404 Test Code: E310.1 Units: mg/L Analysis Date: 11/14/04 0:00

Client ID: Run ID: WETCHEM\_041114C SeqNo: 573119 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 931.6  | 5.0 | 0       | 0.9807        | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Total (As CaCO3)       | 931.6  | 5.0 | 1000    | 0             | 93.2 | 80-120        | 0             |      |           |      |

DUP Sample ID: 0411009-02DDUP Test Code: E310.1 Units: mg/L Analysis Date: 11/14/04 0:00

Client ID: Run ID: WETCHEM\_041114C SeqNo: 573134 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 475.6  | 5.0 | 0       | 0             | 0    | 0-0           | 475.6         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 475.6  | 5.0 | 0       | 0             | 0    | 0-0           | 475.6         | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0411050-01B | 0411050-02B | 0411050-03B |
| 0411050-04B | 0411050-05B | 0411050-06B |
| 0411050-07B | 0411050-08B |             |

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J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R24646** InstrumentID: **IC201**

**MBLK** Sample ID: **WBLKW1-111704** Test Code: **E300** Units: **mg/L** Analysis Date: **11/17/04 11:22**

Client ID: Run ID: **IC201\_041117A** SeqNo: **575427** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.11   | 0.10 | 5       | 0             | 102  | 80-120        | 0             |      |           |      |

**LCS** Sample ID: **WLCSW1-111704** Test Code: **E300** Units: **mg/L** Analysis Date: **11/17/04 11:51**

Client ID: Run ID: **IC201\_041117A** SeqNo: **575428** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.09   | 0.50 | 10      | 0             | 90.9 | 80-120        | 0             |      |           |      |
| Fluoride                         | 1.83   | 0.10 | 2       | 0             | 91.5 | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.88   | 1.0  | 10      | 0             | 98.8 | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.1    | 0.10 | 5       | 0             | 102  | 80-120        | 0             |      |           |      |

**LCSD** Sample ID: **WLCSDW1-11170** Test Code: **E300** Units: **mg/L** Analysis Date: **11/17/04 12:19**

Client ID: Run ID: **IC201\_041117A** SeqNo: **575429** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 9.18   | 0.50 | 10      | 0             | 91.8 | 80-120        | 9.09          | 0.985 | 20        |      |
| Fluoride                         | 1.99   | 0.10 | 2       | 0             | 99.5 | 80-120        | 1.83          | 8.38  | 20        |      |
| Sulfate                          | 9.92   | 1.0  | 10      | 0             | 99.2 | 80-120        | 9.88          | 0.404 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.28   | 0.10 | 5       | 0             | 106  | 80-120        | 5.1           | 3.47  | 20        |      |

**MS** Sample ID: **0411047-01CMS** Test Code: **E300** Units: **mg/L** Analysis Date: **11/17/04 13:45**

Client ID: Run ID: **IC201\_041117A** SeqNo: **575432** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 169.6  | 0.50 | 10      | 159.6         | 99.3 | 75-125        | 0             |      |           | EO   |
| Fluoride                         | 2.43   | 0.10 | 2       | 0.64          | 89.5 | 75-125        | 0             |      |           |      |
| Sulfate                          | 56.62  | 1.0  | 10      | 44.77         | 118  | 75-125        | 0             |      |           | EO   |
| Surr: Dichloroacetic acid (surr) | 5.15   | 0.10 | 5       | 0             | 103  | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24646 InstrumentID: IC201

MSD Sample ID: 0411047-01CMSD Test Code: E300 Units: mg/L Analysis Date: 11/17/04 14:14

Client ID: Run ID: IC201\_041117A SeqNo: 575433 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 170.1  | 0.50 | 10      | 159.6         | 104  | 75-125        | 169.6         | 0.289 | 20        | EO   |
| Fluoride                         | 2.43   | 0.10 | 2       | 0.64          | 89.5 | 75-125        | 2.43          | 0     | 20        |      |
| Sulfate                          | 56.51  | 1.0  | 10      | 44.77         | 117  | 75-125        | 56.62         | 0.194 | 20        | EO   |
| Surr: Dichloroacetic acid (surr) | 5.18   | 0.10 | 5       | 0             | 104  | 80-120        | 5.15          | 0.581 | 20        |      |

DUP Sample ID: 0411047-01CDUP Test Code: E300 Units: mg/L Analysis Date: 11/17/04 15:11

Client ID: Run ID: IC201\_041117A SeqNo: 575435 Prep Date: DF: 5

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 131.8  | 2.5  | 0       | 0             | 0    | 0-0           | 131.6         | 0.152 | 20        |      |
| Fluoride                         | 0.6    | 0.50 | 0       | 0             | 0    | 0-0           | 0.6           | 0     | 20        |      |
| Sulfate                          | 39.25  | 5.0  | 0       | 0             | 0    | 0-0           | 38.75         | 1.28  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 25.8   | 0.50 | 25      | 0             | 103  | 80-120        | 26.45         | 2.49  | 20        |      |

DUP Sample ID: 0411050-01BDUP Test Code: E300 Units: mg/L Analysis Date: 11/17/04 21:50

Client ID: NCL-49 Run ID: IC201\_041117A SeqNo: 575688 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 217    | 50  | 0       | 0             | 0    | 0-0           | 219           | 0.917  | 20        |      |
| Fluoride                         | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0      | 20        |      |
| Sulfate                          | 1945   | 100 | 0       | 0             | 0    | 0-0           | 1944          | 0.0514 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 539    | 10  | 500     | 0             | 108  | 80-120        | 546           | 1.29   | 20        |      |

DUP Sample ID: 0411209-01ADUP Test Code: E300 Units: mg/L Analysis Date: 11/18/04 12:05

Client ID: Run ID: IC201\_041117A SeqNo: 576056 Prep Date: DF: 10

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 1.6           | 0    | 20        |      |
| Fluoride                         | ND     | 1.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Sulfate                          | ND     | 10  | 0       | 0             | 0    | 0-0           | 5.1           | 0    | 20        |      |
| Surr: Dichloroacetic acid (surr) | 57.1   | 1.0 | 50      | 0             | 114  | 80-120        | 56.4          | 1.23 | 20        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0411050  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24646 InstrumentID: IC201

DUP Sample ID: 0411210-07CDUP Test Code: E300 Units: mg/L Analysis Date: 11/18/04 3:32

Client ID: Run ID: IC201\_041117A SeqNo: 576062 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD    | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|---------|-----------|------|
| Chloride                         | 124.9  | 0.50 | 0       | 0             | 0    | 0-0           | 124.9         | 0.016   | 20        | E    |
| Fluoride                         | 0.66   | 0.10 | 0       | 0             | 0    | 0-0           | 0.66          | 0       | 20        |      |
| Sulfate                          | 197.6  | 1.0  | 0       | 0             | 0    | 0-0           | 197.6         | 0.00506 | 20        | E    |
| Surr: Dichloroacetic acid (surr) | 5.64   | 0.10 | 5       | 0             | 113  | 80-120        | 5.37          | 4.9     | 20        |      |

DUP Sample ID: 0411210-02CDUP Test Code: E300 Units: mg/L Analysis Date: 11/18/04 9:43

Client ID: Run ID: IC201\_041117A SeqNo: 576072 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 94.55  | 0.50 | 0       | 0             | 0    | 0-0           | 92.16         | 2.56   | 20        | E    |
| Fluoride                         | 0.23   | 0.10 | 0       | 0             | 0    | 0-0           | 0.2           | 14     | 20        |      |
| Sulfate                          | 150.7  | 1.0  | 0       | 0             | 0    | 0-0           | 150.9         | 0.0928 | 20        | E    |
| Surr: Dichloroacetic acid (surr) | 5.41   | 0.10 | 5       | 0             | 108  | 80-120        | 5.48          | 1.29   | 20        |      |

The following samples were analyzed in this batch:

0411050-01B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24718 InstrumentID: IC201

MBLK Sample ID: WBLKW1-111804 Test Code: E300 Units: mg/L Analysis Date: 11/18/04 13:31

Client ID: Run ID: IC201\_041118B SeqNo: 577005 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.21   | 0.10 | 5       | 0             | 104  | 80-120        | 0             |      |           |      |

LCS Sample ID: WLCSW1-111804 Test Code: E300 Units: mg/L Analysis Date: 11/18/04 13:59

Client ID: Run ID: IC201\_041118B SeqNo: 577007 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.12   | 0.50 | 10      | 0             | 91.2 | 80-120        | 0             |      |           |      |
| Fluoride                         | 1.93   | 0.10 | 2       | 0             | 96.5 | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.78   | 1.0  | 10      | 0             | 97.8 | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.34   | 0.10 | 5       | 0             | 107  | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-11180 Test Code: E300 Units: mg/L Analysis Date: 11/18/04 14:28

Client ID: Run ID: IC201\_041118B SeqNo: 577010 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 9.19   | 0.50 | 10      | 0             | 91.9 | 80-120        | 9.12          | 0.765 | 20        |      |
| Fluoride                         | 1.92   | 0.10 | 2       | 0             | 96   | 80-120        | 1.93          | 0.519 | 20        |      |
| Sulfate                          | 9.85   | 1.0  | 10      | 0             | 98.5 | 80-120        | 9.78          | 0.713 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.24   | 0.10 | 5       | 0             | 105  | 80-120        | 5.34          | 1.89  | 20        |      |

MS Sample ID: 0411230-03JMS Test Code: E300 Units: mg/L Analysis Date: 11/19/04 9:28

Client ID: Run ID: IC201\_041118B SeqNo: 577051 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 35.95  | 0.50 | 10      | 24.18         | 118  | 75-125        | 0             |      |           |      |
| Fluoride                         | 2.01   | 0.10 | 2       | 0.1           | 95.5 | 75-125        | 0             |      |           |      |
| Sulfate                          | 126.2  | 1.0  | 10      | 114.6         | 117  | 75-125        | 0             |      |           | EO   |
| Surr: Dichloroacetic acid (surr) | 5.4    | 0.10 | 5       | 0             | 108  | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24718 InstrumentID: IC201

MSD Sample ID: 0411230-03JMSD Test Code: E300 Units: mg/L Analysis Date: 11/19/04 9:57

Client ID: Run ID: IC201\_041118B SeqNo: 577053 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 35.69  | 0.50 | 10      | 24.18         | 115  | 75-125        | 35.95         | 0.726 | 20        |      |
| Fluoride                         | 2.02   | 0.10 | 2       | 0.1           | 96   | 75-125        | 2.01          | 0.496 | 20        |      |
| Sulfate                          | 125.8  | 1.0  | 10      | 114.6         | 113  | 75-125        | 126.2         | 0.325 | 20        | EO   |
| Surr: Dichloroacetic acid (surr) | 5.37   | 0.10 | 5       | 0             | 107  | 80-120        | 5.4           | 0.557 | 20        |      |

DUP Sample ID: 0411053-03FDUP Test Code: E300 Units: mg/L Analysis Date: 11/18/04 17:47

Client ID: Run ID: IC201\_041118B SeqNo: 577015 Prep Date: DF: 200

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 2064   | 100 | 0       | 0             | 0    | 0-0           | 2062          | 0.0969 | 20        |      |
| Fluoride                         | ND     | 20  | 0       | 0             | 0    | 0-0           | 0             | 0      | 20        |      |
| Sulfate                          | 5860   | 200 | 0       | 0             | 0    | 0-0           | 5856          | 0.0683 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 1076   | 20  | 1000    | 0             | 108  | 80-120        | 1088          | 1.11   | 20        |      |

DUP Sample ID: 0411230-03JDUP Test Code: E300 Units: mg/L Analysis Date: 11/19/04 10:54

Client ID: Run ID: IC201\_041118B SeqNo: 577032 Prep Date: DF: 5

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 19.7   | 2.5  | 0       | 0             | 0    | 0-0           | 19.7          | 0     | 20        |      |
| Fluoride                         | ND     | 0.50 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Sulfate                          | 92.6   | 5.0  | 0       | 0             | 0    | 0-0           | 93            | 0.431 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 27.8   | 0.50 | 25      | 0             | 111  | 80-120        | 27.85         | 0.18  | 20        |      |

DUP Sample ID: 0411050-06BDUP Test Code: E300 Units: mg/L Analysis Date: 11/19/04 2:49

Client ID: MW-60 Run ID: IC201\_041118B SeqNo: 577034 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 150    | 50  | 0       | 0             | 0    | 0-0           | 146           | 2.7   | 20        |      |
| Fluoride                         | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Sulfate                          | 1819   | 100 | 0       | 0             | 0    | 0-0           | 1829          | 0.548 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 567    | 10  | 500     | 0             | 113  | 80-120        | 560           | 1.24  | 20        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411050  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24718 InstrumentID: IC201

DUP Sample ID: 0411230-03JDUP Test Code: E300 Units: mg/L Analysis Date: 11/19/04 9:00

Client ID: Run ID: IC201\_041118B SeqNo: 577049 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 24.75  | 0.50 | 0       | 0             | 0    | 0-0           | 24.18         | 2.33  | 20        |      |
| Fluoride                         | 0.09   | 0.10 | 0       | 0             | 0    | 0-0           | 0.1           | 0     | 20        | J    |
| Sulfate                          | 114.8  | 1.0  | 0       | 0             | 0    | 0-0           | 114.6         | 0.201 | 20        | E    |
| Surr: Dichloroacetic acid (surr) | 5.25   | 0.10 | 5       | 0             | 105  | 80-120        | 5.17          | 1.54  | 20        |      |

DUP Sample ID: 0411230-03JDUP Test Code: E300 Units: mg/L Analysis Date: 11/19/04 10:54

Client ID: Run ID: IC201\_041118B SeqNo: 577075 Prep Date: DF: 5

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 19.7   | 2.5  | 0       | 0             | 0    | 0-0           | 19.7          | 0     | 20        |      |
| Fluoride                         | ND     | 0.50 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Sulfate                          | 92.6   | 5.0  | 0       | 0             | 0    | 0-0           | 93            | 0.431 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 27.8   | 0.50 | 25      | 0             | 111  | 80-120        | 27.85         | 0.18  | 20        |      |

DUP Sample ID: 0411050-05BDUP Test Code: E300 Units: mg/L Analysis Date: 11/19/04 15:39

Client ID: NCL-34 Run ID: IC201\_041118B SeqNo: 577269 Prep Date: DF: 10

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 379.8  | 5.0 | 0       | 0             | 0    | 0-0           | 377.4         | 0.634 | 20        |      |
| Fluoride                         | 0.4    | 1.0 | 0       | 0             | 0    | 0-0           | 0.5           | 0     | 20        | J    |
| Sulfate                          | 137.6  | 10  | 0       | 0             | 0    | 0-0           | 138.6         | 0.724 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 52.9   | 1.0 | 50      | 0             | 106  | 80-120        | 50.6          | 4.44  | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0411050-02B | 0411050-03B | 0411050-04B |
| 0411050-05B | 0411050-06B | 0411050-07B |
| 0411050-08B |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

**e-Lab, Inc.**  
10450 Stan  
Houston, TX  
(Tel) 281.5  
(Fax) 281.5

# Chain of Custody Form

Page 1 of 1

e-Lab, Inc.  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

[illegible]

e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 11/5/2004 8:30:00 AM

Work Order Number 0441850

Received by: RSZ

Checklist completed by

[Signature]  
Signature

11/5/04  
Date

Reviewed by

[Signature]  
Initials

11/8/04  
Date

Matrix:

W

Carrier name FedEx

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

Temperature(s)/Thermometer(s):

2.7c, 3.1c, 3.4c

002

Water - VOA vials have zero headspace?

Yes ☒

No ☐

No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

N/A ☐

Adjusted? \_\_\_\_\_

Checked by

ARZ

Login Notes:

Received one set of trip blanks (one broken) not on COC; logged in without analysis.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_

Date contacted: \_\_\_\_\_

Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_

Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_



**e-Lab Analytical, Inc.**

10450 Standliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

November 19, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: NCL/TEL

Work Order : **0411079**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 3 samples on 11/8/2004 8:51:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 35.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

**e-Lab Analytical, Inc.**

**Date:** November 19, 2004

**CLIENT:** Navajo Refining Company  
**Project:** NCL/TEL  
**Work Order:** 0411079

**Work Order Sample Summary**

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0411079-01           | TEL-3                   | Liquid        |                   | 11/5/2004 10:00        | 11/8/2004 08:51      | <input type="checkbox"/> |
| 0411079-02           | TEL-2                   | Liquid        |                   | 11/5/2004 10:30        | 11/8/2004 08:51      | <input type="checkbox"/> |
| 0411079-03           | TEL-1                   | Liquid        |                   | 11/5/2004 11:00        | 11/8/2004 08:51      | <input type="checkbox"/> |

**e-Lab Analytical, Inc.**

**Date:** *November 19, 2004*

**CLIENT:** Navajo Refining Company

**Project:** NCL/TEL

**Work Order:** 0411079

**Case Narrative**

Batch 11059 Metals MS/MSD was an unrelated sample.

Batch 11101 Semivolatiles MS/MSD was an unrelated sample.

Batch R24587 Volatiles MS/MSD was an unrelated sample.

Batch R24438 Anions MS/MSD was an unrelated sample.



**e-Lab Analytical, Inc.**

Date: November 19, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411079  
**Project:** NCL/TEL  
**Lab ID:** 0411079-01

**Client Sample ID:** TEL-3  
**Collection Date:** 11/5/2004 10:00:00 AM  
**Matrix:** LIQUID

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 11/16/2004 4:32:23 PM |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Barium                                | 0.0117  | 0.00500      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Boron                                 | 0.493   | 0.0200       |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Calcium                               | 580     | 25.0         |      | mg/L  | 50              | 11/13/2004 2:01:00 PM |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Copper                                | ND      | 0.00200      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Iron                                  | 1.49    | 0.200        |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Magnesium                             | 193     | 2.00         |      | mg/L  | 10              | 11/13/2004 2:14:00 PM |
| Manganese                             | 0.00527 | 0.00500      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Molybdenum                            | ND      | 0.00500      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Nickel                                | ND      | 0.00500      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Potassium                             | 2.69    | 0.200        |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Sodium                                | 72.5    | 2.00         |      | mg/L  | 10              | 11/13/2004 2:14:00 PM |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| Zinc                                  | ND      | 0.00500      |      | mg/L  | 1               | 11/17/2004 7:00:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |
| 3&4-Methylphenol                      | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 11/17/2004 6:02:00 PM |

**Qualifiers:**  
 ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 19, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411079  
**Project:** NCL/TEL  
**Lab ID:** 0411079-01

**Client Sample ID:** TEL-3  
**Collection Date:** 11/5/2004 10:00:00 AM  
**Matrix:** LIQUID

| Analyses                   | Result | Report Limit | Qual | Units         | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|---------------|-----------------|-----------------------|
| Aniline                    | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Phenol                     | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L          | 1               | 11/17/2004 6:02:00 PM |
| Surr: 2,4,6-Tribromophenol | 93.8   | 39-153       |      | %REC          | 1               | 11/17/2004 6:02:00 PM |
| Surr: 2-Fluorobiphenyl     | 80.8   | 40-147       |      | %REC          | 1               | 11/17/2004 6:02:00 PM |
| Surr: 2-Fluorophenol       | 38.8   | 21-110       |      | %REC          | 1               | 11/17/2004 6:02:00 PM |
| Surr: 4-Terphenyl-d14      | 76.3   | 39-141       |      | %REC          | 1               | 11/17/2004 6:02:00 PM |
| Surr: Nitrobenzene-d5      | 83.0   | 37-140       |      | %REC          | 1               | 11/17/2004 6:02:00 PM |
| Surr: Phenol-d6            | 24.1   | 11-100       |      | %REC          | 1               | 11/17/2004 6:02:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        |              |      | <b>SW8260</b> |                 | <b>Analyst: RKG</b>   |
| 1,1,1-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0          |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0          |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| 2-Butanone                 | ND     | 10           |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10           |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| 2-Hexanone                 | ND     | 10           |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10           |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| Acetone                    | ND     | 10           |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| Benzene                    | 78     | 5.0          |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| Bromodichloromethane       | ND     | 5.0          |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| Bromoform                  | ND     | 5.0          |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| Bromomethane               | ND     | 5.0          |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| Carbon disulfide           | ND     | 10           |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |
| Carbon tetrachloride       | ND     | 5.0          |      | µg/L          | 1               | 11/12/2004 9:40:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 19, 2004

CLIENT: Navajo Refining Company  
Work Order: 0411079  
Project: NCL/TEL  
Lab ID: 0411079-01

Client Sample ID: TEL-3  
Collection Date: 11/5/2004 10:00:00 AM  
Matrix: LIQUID

| Analyses                    | Result | Report<br>Limit | Qual | Units | Dilution<br>Factor | Date Analyzed         |
|-----------------------------|--------|-----------------|------|-------|--------------------|-----------------------|
| Chlorobenzene               | ND     | 5.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Chloroethane                | ND     | 5.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Chloroform                  | ND     | 5.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Chloromethane               | ND     | 5.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Dibromochloromethane        | ND     | 5.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Ethylbenzene                | ND     | 5.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| m,p-Xylene                  | 46     | 10              |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Methylene chloride          | ND     | 10              |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Styrene                     | ND     | 5.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Tetrachloroethene           | ND     | 5.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Toluene                     | 6.6    | 5.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Trichloroethene             | ND     | 5.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Vinyl acetate               | ND     | 10              |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Vinyl chloride              | ND     | 2.0             |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Xylenes, Total              | 50     | 15              |      | µg/L  | 1                  | 11/12/2004 9:40:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 92.3   | 71-126          |      | %REC  | 1                  | 11/12/2004 9:40:00 PM |
| Surr: 4-Bromofluorobenzene  | 96.6   | 74-125          |      | %REC  | 1                  | 11/12/2004 9:40:00 PM |
| Surr: Dibromofluoromethane  | 96.1   | 73-126          |      | %REC  | 1                  | 11/12/2004 9:40:00 PM |
| Surr: Toluene-d8            | 97.2   | 75-125          |      | %REC  | 1                  | 11/12/2004 9:40:00 PM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |       |        |  |      |     |                       |
|----------------------------------|-------|--------|--|------|-----|-----------------------|
| Chloride                         | 98.7  | 2.50   |  | mg/L | 5   | 11/10/2004 8:41:00 AM |
| Fluoride                         | 3.23  | 0.100  |  | mg/L | 1   | 11/10/2004 8:12:00 AM |
| Sulfate                          | 1,730 | 100    |  | mg/L | 100 | 11/10/2004 9:09:00 AM |
| Nitrate/Nitrite (as N)           | ND    | 0.100  |  | mg/L | 1   | 11/10/2004 8:12:00 AM |
| Surr: Dichloroacetic acid (surr) | 101   | 80-120 |  | %REC | 1   | 11/10/2004 8:12:00 AM |
| Surr: Dichloroacetic acid (surr) | 104   | 80-120 |  | %REC | 5   | 11/10/2004 8:41:00 AM |
| Surr: Dichloroacetic acid (surr) | 113   | 80-120 |  | %REC | 100 | 11/10/2004 9:09:00 AM |

**CYANIDE, TOTAL****E335.3**Analyst: **LMD**

|         |    |        |  |      |   |            |
|---------|----|--------|--|------|---|------------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 11/15/2004 |
|---------|----|--------|--|------|---|------------|

**Qualifiers:**

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

E - Value above quantitation range

H - Analyzed outside of Hold Time

AR Page 3 of 9

**e-Lab Analytical, Inc.**

Date: November 19, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411079  
**Project:** NCL/TEL  
**Lab ID:** 0411079-02

**Client Sample ID:** TEL-2  
**Collection Date:** 11/5/2004 10:30:00 AM  
**Matrix:** LIQUID

| Analyses                              | Result | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                                               |
|---------------------------------------|--------|---------------|------|-------|-----------------|-------------------------------------------------------------|
| <b>MERCURY, TOTAL</b>                 |        |               |      |       |                 |                                                             |
|                                       |        | <b>SW7470</b> |      |       |                 |                                                             |
| Mercury                               | ND     | 0.000200      |      | mg/L  | 1               | Prep Date: 11/16/2004 Analyst: JCJ<br>11/16/2004 4:33:55 PM |
| <b>ICP METALS, TOTAL</b>              |        |               |      |       |                 |                                                             |
|                                       |        | <b>SW6020</b> |      |       |                 |                                                             |
| Aluminum                              | ND     | 0.0100        |      | mg/L  | 1               | Prep Date: 11/10/2004 Analyst: ALR<br>11/17/2004 7:04:00 PM |
| Arsenic                               | 0.0116 | 0.00500       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Barium                                | 0.120  | 0.00500       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Beryllium                             | ND     | 0.00200       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Boron                                 | 0.584  | 0.0200        |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Cadmium                               | ND     | 0.00100       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Calcium                               | 155    | 5.00          |      | mg/L  | 10              | 11/13/2004 2:33:00 PM                                       |
| Chromium                              | ND     | 0.00200       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Cobalt                                | ND     | 0.00200       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Copper                                | ND     | 0.00200       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Iron                                  | 0.574  | 0.200         |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Lead                                  | ND     | 0.00500       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Magnesium                             | 162    | 2.00          |      | mg/L  | 10              | 11/13/2004 2:33:00 PM                                       |
| Manganese                             | 0.0306 | 0.00500       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Molybdenum                            | ND     | 0.00500       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Nickel                                | ND     | 0.00500       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Potassium                             | 0.800  | 0.200         |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Selenium                              | ND     | 0.00500       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Silver                                | ND     | 0.00500       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Sodium                                | 379    | 10.0          |      | mg/L  | 50              | 11/13/2004 2:05:00 PM                                       |
| Vanadium                              | ND     | 0.00500       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| Zinc                                  | ND     | 0.00500       |      | mg/L  | 1               | 11/17/2004 7:04:00 PM                                       |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |               |      |       |                 |                                                             |
|                                       |        | <b>SW8270</b> |      |       |                 |                                                             |
| 1,2,4-Trichlorobenzene                | ND     | 10            |      | µg/L  | 1               | Prep Date: 11/12/2004 Analyst: HV<br>11/17/2004 6:30:00 PM  |
| 2,4,5-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1               | 11/17/2004 6:30:00 PM                                       |
| 2,4,6-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1               | 11/17/2004 6:30:00 PM                                       |
| 2-Methylnaphthalene                   | ND     | 10            |      | µg/L  | 1               | 11/17/2004 6:30:00 PM                                       |
| 2-Methylphenol                        | ND     | 10            |      | µg/L  | 1               | 11/17/2004 6:30:00 PM                                       |
| 2-Nitroaniline                        | ND     | 10            |      | µg/L  | 1               | 11/17/2004 6:30:00 PM                                       |
| 2-Nitrophenol                         | ND     | 10            |      | µg/L  | 1               | 11/17/2004 6:30:00 PM                                       |
| 3&4-Methylphenol                      | ND     | 10            |      | µg/L  | 1               | 11/17/2004 6:30:00 PM                                       |
| 3-Nitroaniline                        | ND     | 10            |      | µg/L  | 1               | 11/17/2004 6:30:00 PM                                       |
| 4-Nitroaniline                        | ND     | 10            |      | µg/L  | 1               | 11/17/2004 6:30:00 PM                                       |
| 4-Nitrophenol                         | ND     | 10            |      | µg/L  | 1               | 11/17/2004 6:30:00 PM                                       |
| Acenaphthene                          | ND     | 10            |      | µg/L  | 1               | 11/17/2004 6:30:00 PM                                       |
| Acenaphthylene                        | ND     | 10            |      | µg/L  | 1               | 11/17/2004 6:30:00 PM                                       |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

AR Page 4 of 9

**e-Lab Analytical, Inc.**

Date: November 19, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411079  
**Project:** NCL/TEL  
**Lab ID:** 0411079-02

**Client Sample ID:** TEL-2  
**Collection Date:** 11/5/2004 10:30:00 AM  
**Matrix:** LIQUID

| Analyses                   | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed          |
|----------------------------|--------|---------------|------|---------------------|-----------------|------------------------|
| Aniline                    | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Anthracene                 | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Benz(a)anthracene          | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Benzidine                  | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Hexachloroethane           | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Isophorone                 | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Naphthalene                | 17     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Nitrobenzene               | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Pentachlorophenol          | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Phenanthrene               | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Phenol                     | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Pyrene                     | ND     | 10            |      | µg/L                | 1               | 11/17/2004 6:30:00 PM  |
| Surr: 2,4,6-Tribromophenol | 97.7   | 39-153        |      | %REC                | 1               | 11/17/2004 6:30:00 PM  |
| Surr: 2-Fluorobiphenyl     | 84.5   | 40-147        |      | %REC                | 1               | 11/17/2004 6:30:00 PM  |
| Surr: 2-Fluorophenol       | 40.2   | 21-110        |      | %REC                | 1               | 11/17/2004 6:30:00 PM  |
| Surr: 4-Terphenyl-d14      | 76.4   | 39-141        |      | %REC                | 1               | 11/17/2004 6:30:00 PM  |
| Surr: Nitrobenzene-d5      | 82.5   | 37-140        |      | %REC                | 1               | 11/17/2004 6:30:00 PM  |
| Surr: Phenol-d6            | 24.3   | 11-100        |      | %REC                | 1               | 11/17/2004 6:30:00 PM  |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      | <b>Analyst: RKG</b> |                 |                        |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| Acetone                    | ND     | 10            |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| Benzene                    | 1,500  | 120           |      | µg/L                | 25              | 11/12/2004 8:45:00 PM  |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L                | 1               | 11/12/2004 10:07:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 19, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411079  
**Project:** NCL/TEL  
**Lab ID:** 0411079-02

**Client Sample ID:** TEL-2  
**Collection Date:** 11/5/2004 10:30:00 AM  
**Matrix:** LIQUID

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed          |
|-------------------------------------|--------|---------------|------|-------|-----------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Ethylbenzene                        | 39     | 5.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| m,p-Xylene                          | 220    | 10            |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Toluene                             | 96     | 5.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Xylenes, Total                      | 250    | 15            |      | µg/L  | 1               | 11/12/2004 10:07:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 95.8   | 71-126        |      | %REC  | 25              | 11/12/2004 8:45:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 89.7   | 71-126        |      | %REC  | 1               | 11/12/2004 10:07:00 PM |
| Surr: 4-Bromofluorobenzene          | 98.0   | 74-125        |      | %REC  | 1               | 11/12/2004 10:07:00 PM |
| Surr: 4-Bromofluorobenzene          | 97.7   | 74-125        |      | %REC  | 25              | 11/12/2004 8:45:00 PM  |
| Surr: Dibromofluoromethane          | 101    | 73-126        |      | %REC  | 25              | 11/12/2004 8:45:00 PM  |
| Surr: Dibromofluoromethane          | 96.4   | 73-126        |      | %REC  | 1               | 11/12/2004 10:07:00 PM |
| Surr: Toluene-d8                    | 97.3   | 75-125        |      | %REC  | 25              | 11/12/2004 8:45:00 PM  |
| Surr: Toluene-d8                    | 99.9   | 75-125        |      | %REC  | 1               | 11/12/2004 10:07:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       |                 | Analyst: <b>MG</b>     |
| Chloride                            | 242    | 5.00          |      | mg/L  | 10              | 11/10/2004 10:06:00 AM |
| Fluoride                            | 1.09   | 0.100         |      | mg/L  | 1               | 11/10/2004 9:38:00 AM  |
| Sulfate                             | 842    | 20.0          |      | mg/L  | 20              | 11/10/2004 10:35:00 AM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1               | 11/10/2004 9:38:00 AM  |
| Surr: Dichloroacetic acid (surr)    | 101    | 80-120        |      | %REC  | 10              | 11/10/2004 10:06:00 AM |
| Surr: Dichloroacetic acid (surr)    | 104    | 80-120        |      | %REC  | 20              | 11/10/2004 10:35:00 AM |
| Surr: Dichloroacetic acid (surr)    | 97.0   | 80-120        |      | %REC  | 1               | 11/10/2004 9:38:00 AM  |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       |                 | Analyst: <b>LMD</b>    |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1               | 11/15/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 19, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411079  
**Project:** NCL/TEL  
**Lab ID:** 0411079-03

**Client Sample ID:** TEL-1  
**Collection Date:** 11/5/2004 11:00:00 AM  
**Matrix:** LIQUID

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                      |
|---------------------------------------|---------|---------------|------|-------|-----------------|------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                    |
|                                       |         | <b>SW7470</b> |      |       |                 | Prep Date: 11/16/2004 Analyst: JCJ |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | 11/16/2004 4:38:34 PM              |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                    |
|                                       |         | <b>SW6020</b> |      |       |                 | Prep Date: 11/10/2004 Analyst: ALR |
| Aluminum                              | ND      | 0.0100        |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Arsenic                               | ND      | 0.00500       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Barium                                | 0.0130  | 0.00500       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Boron                                 | 0.627   | 0.0200        |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Calcium                               | 310     | 25.0          |      | mg/L  | 50              | 11/13/2004 2:10:00 PM              |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Cobalt                                | ND      | 0.00200       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Copper                                | ND      | 0.00200       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Iron                                  | 1.42    | 0.200         |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Magnesium                             | 102     | 2.00          |      | mg/L  | 10              | 11/13/2004 2:37:00 PM              |
| Manganese                             | 0.0893  | 0.00500       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Molybdenum                            | ND      | 0.00500       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Nickel                                | 0.00571 | 0.00500       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Potassium                             | 0.864   | 0.200         |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Sodium                                | 437     | 10.0          |      | mg/L  | 50              | 11/13/2004 2:10:00 PM              |
| Vanadium                              | ND      | 0.00500       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| Zinc                                  | ND      | 0.00500       |      | mg/L  | 1               | 11/17/2004 2:51:00 AM              |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                    |
|                                       |         | <b>SW8270</b> |      |       |                 | Prep Date: 11/12/2004 Analyst: HV  |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |
| 3&4-Methylphenol                      | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1               | 11/17/2004 6:57:00 PM              |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: November 19, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411079  
**Project:** NCL/TEL  
**Lab ID:** 0411079-03

**Client Sample ID:** TEL-1  
**Collection Date:** 11/5/2004 11:00:00 AM  
**Matrix:** LIQUID

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 11/17/2004 6:57:00 PM |
| Surr: 2,4,6-Tribromophenol | 88.1   | 39-153       |      | %REC  | 1               | 11/17/2004 6:57:00 PM |
| Surr: 2-Fluorobiphenyl     | 80.4   | 40-147       |      | %REC  | 1               | 11/17/2004 6:57:00 PM |
| Surr: 2-Fluorophenol       | 34.7   | 21-110       |      | %REC  | 1               | 11/17/2004 6:57:00 PM |
| Surr: 4-Terphenyl-d14      | 70.7   | 39-141       |      | %REC  | 1               | 11/17/2004 6:57:00 PM |
| Surr: Nitrobenzene-d5      | 81.5   | 37-140       |      | %REC  | 1               | 11/17/2004 6:57:00 PM |
| Surr: Phenol-d6            | 21.2   | 11-100       |      | %REC  | 1               | 11/17/2004 6:57:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                       |
|---------------------------|----|-----|--|------|---|-----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| Benzene                   | 11 | 5.0 |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 11/16/2004 9:52:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 11/16/2004 9:52:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

AR Page 8 of 9



**e-Lab Analytical, Inc.**

Date: November 19, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0411079  
**Project:** NCL/TEL  
**Lab ID:** 0411079-03

**Client Sample ID:** TEL-1  
**Collection Date:** 11/5/2004 11:00:00 AM  
**Matrix:** LIQUID

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed          |
|-------------------------------------|--------|---------------|------|-------|---------------------|------------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L  | 1                   | 11/16/2004 9:52:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 91.3   | 71-126        |      | %REC  | 1                   | 11/16/2004 9:52:00 PM  |
| Surr: 4-Bromofluorobenzene          | 88.2   | 74-125        |      | %REC  | 1                   | 11/16/2004 9:52:00 PM  |
| Surr: Dibromofluoromethane          | 87.0   | 73-126        |      | %REC  | 1                   | 11/16/2004 9:52:00 PM  |
| Surr: Toluene-d8                    | 85.8   | 75-125        |      | %REC  | 1                   | 11/16/2004 9:52:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | <b>Analyst: MG</b>  |                        |
| Chloride                            | 206    | 2.50          |      | mg/L  | 5                   | 11/10/2004 11:32:00 AM |
| Fluoride                            | 2.17   | 0.100         |      | mg/L  | 1                   | 11/10/2004 11:04:00 AM |
| Sulfate                             | 1,120  | 100           |      | mg/L  | 100                 | 11/10/2004 12:01:00 PM |
| Nitrate/Nitrite (as N)              | 0.420  | 0.100         |      | mg/L  | 1                   | 11/10/2004 11:04:00 AM |
| Surr: Dichloroacetic acid (surr)    | 95.2   | 80-120        |      | %REC  | 1                   | 11/10/2004 11:04:00 AM |
| Surr: Dichloroacetic acid (surr)    | 99.6   | 80-120        |      | %REC  | 5                   | 11/10/2004 11:32:00 AM |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC  | 100                 | 11/10/2004 12:01:00 PM |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | <b>Analyst: LMD</b> |                        |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1                   | 11/15/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: Nov 19 2004

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11059 InstrumentID: ICP4500

MBLK Sample ID: MBLKW1-111004 Test Code: SW6020 Units: mg/L Analysis Date: 11/12/04 11:40  
 Client ID: Run ID: ICP4500\_041112A SeqNo: 572510 Prep Date: 11/10/2004 DF: 1

| Analyte   | Result   | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 0.004585 | 0.010  |         |               |      |               |               |      |           | J    |
| Arsenic   | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Barium    | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Cadmium   | ND       | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium   | ND       | 0.50   |         |               |      |               |               |      |           |      |
| Chromium  | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt    | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Copper    | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Iron      | ND       | 0.20   |         |               |      |               |               |      |           |      |
| Lead      | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium | ND       | 0.20   |         |               |      |               |               |      |           |      |
| Manganese | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel    | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium | ND       | 0.20   |         |               |      |               |               |      |           |      |
| Selenium  | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Silver    | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium    | ND       | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium  | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc      | ND       | 0.0050 |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW1-111004 Test Code: SW6020 Units: mg/L Analysis Date: 11/13/04 13:52  
 Client ID: Run ID: ICP4500\_041113A SeqNo: 573147 Prep Date: 11/10/2004 DF: 1

| Analyte   | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | ND     | 0.0020 |         |               |      |               |               |      |           |      |
| Boron     | ND     | 0.020  |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW1-111004 Test Code: SW6020 Units: mg/L Analysis Date: 11/15/04 17:37  
 Client ID: Run ID: ICP4500\_041115A SeqNo: 574214 Prep Date: 11/10/2004 DF: 1

| Analyte    | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Molybdenum | ND     | 0.0050 |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is &gt; 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11059 InstrumentID: ICP4500

LCS Sample ID: MLCSW1-111004 Test Code: SW6020 Units: mg/L Analysis Date: 11/12/04 11:44

Client ID: Run ID: ICP4500\_041112A SeqNo: 572511 Prep Date: 11/10/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 0.05306 | 0.010  | 0.05    | 0             | 106  | 79-126        | 0             |      |           |      |
| Arsenic   | 0.05114 | 0.0050 | 0.05    | 0             | 102  | 80-121        | 0             |      |           |      |
| Barium    | 0.04681 | 0.0050 | 0.05    | 0             | 93.6 | 79.8-119      | 0             |      |           |      |
| Cadmium   | 0.05195 | 0.0020 | 0.05    | 0             | 104  | 79.1-119      | 0             |      |           |      |
| Calcium   | 5.192   | 0.50   | 5       | 0             | 104  | 80-121        | 0             |      |           |      |
| Chromium  | 0.04839 | 0.0050 | 0.05    | 0             | 96.8 | 79.3-121      | 0             |      |           |      |
| Cobalt    | 0.04867 | 0.0050 | 0.05    | 0             | 97.3 | 82-121        | 0             |      |           |      |
| Copper    | 0.04795 | 0.0050 | 0.05    | 0             | 95.9 | 81-120        | 0             |      |           |      |
| Iron      | 5.167   | 0.20   | 5       | 0             | 103  | 80-120        | 0             |      |           |      |
| Lead      | 0.04633 | 0.0050 | 0.05    | 0             | 92.7 | 80-118        | 0             |      |           |      |
| Magnesium | 5.483   | 0.20   | 5       | 0             | 110  | 80-120        | 0             |      |           |      |
| Manganese | 0.04877 | 0.0050 | 0.05    | 0             | 97.5 | 82-119        | 0             |      |           |      |
| Nickel    | 0.04886 | 0.0050 | 0.05    | 0             | 97.7 | 82-120        | 0             |      |           |      |
| Potassium | 5.13    | 0.20   | 5       | 0             | 103  | 80-120        | 0             |      |           |      |
| Selenium  | 0.05169 | 0.0050 | 0.05    | 0             | 103  | 79.2-118      | 0             |      |           |      |
| Silver    | 0.04554 | 0.0050 | 0.05    | 0             | 91.1 | 80-117        | 0             |      |           |      |
| Sodium    | 5.318   | 0.20   | 5       | 0             | 106  | 80.6-119      | 0             |      |           |      |
| Vanadium  | 0.04887 | 0.0050 | 0.05    | 0             | 97.7 | 82.1-119      | 0             |      |           |      |
| Zinc      | 0.04388 | 0.0050 | 0.05    | 0             | 87.8 | 79-118        | 0             |      |           |      |

LCS Sample ID: MLCSW1-111004 Test Code: SW6020 Units: mg/L Analysis Date: 11/13/04 13:56

Client ID: Run ID: ICP4500\_041113A SeqNo: 573148 Prep Date: 11/10/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | 0.04935 | 0.0020 | 0.05    | 0             | 98.7 | 78.9-120      | 0             |      |           |      |
| Boron     | 0.5141  | 0.020  | 0.5     | 0             | 103  | 80-120        | 0             |      |           |      |

LCS Sample ID: MLCSW1-111004 Test Code: SW6020 Units: mg/L Analysis Date: 11/15/04 17:41

Client ID: Run ID: ICP4500\_041115A SeqNo: 574215 Prep Date: 11/10/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Molybdenum | 0.04514 | 0.0050 | 0.05    | 0             | 90.3 | 81-115        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11059 InstrumentID: ICP4500

MS Sample ID: 0411068-07CMS Test Code: SW6020 Units: mg/L Analysis Date: 11/13/04 14:51

Client ID: Run ID: ICP4500\_041113A SeqNo: 573159 Prep Date: 11/10/2004 DF: 10

| Analyte   | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Calcium   | 201.7  | 5.0   | 5       | 194.7         | 140  | 80-121        | 0             |      |           | SO   |
| Magnesium | 88.9   | 2.0   | 5       | 78.4          | 210  | 80-120        | 0             |      |           | SO   |
| Manganese | 0.5355 | 0.050 | 0.05    | 0.4968        | 77.4 | 82-119        | 0             |      |           | SO   |
| Sodium    | 103.7  | 2.0   | 5       | 94.07         | 193  | 80.6-119      | 0             |      |           | SO   |

MS Sample ID: 0411068-07CMS Test Code: SW6020 Units: mg/L Analysis Date: 11/13/04 16:00

Client ID: Run ID: ICP4500\_041113A SeqNo: 573173 Prep Date: 11/10/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 0.124   | 0.010  | 0.05    | 0.08307       | 81.9 | 79-126        | 0             |      |           |      |
| Arsenic   | 0.04793 | 0.0050 | 0.05    | 0             | 95.9 | 80-121        | 0             |      |           |      |
| Barium    | 0.1534  | 0.0050 | 0.05    | 0.1072        | 92.4 | 79.8-119      | 0             |      |           |      |
| Beryllium | 0.04925 | 0.0020 | 0.05    | 0             | 98.5 | 78.9-120      | 0             |      |           |      |
| Boron     | 0.6993  | 0.020  | 0.5     | 0.1537        | 109  | 80-120        | 0             |      |           |      |
| Cadmium   | 0.04361 | 0.0020 | 0.05    | 0             | 87.2 | 79.1-119      | 0             |      |           |      |
| Chromium  | 0.04661 | 0.0050 | 0.05    | 0.0006182     | 92   | 79.3-121      | 0             |      |           |      |
| Cobalt    | 0.044   | 0.0050 | 0.05    | 0.0009945     | 86   | 82-121        | 0             |      |           |      |
| Copper    | 0.03981 | 0.0050 | 0.05    | 0.001288      | 77   | 80-120        | 0             |      |           | S    |
| Iron      | 16.72   | 0.20   | 5       | 12            | 94.4 | 80-120        | 0             |      |           |      |
| Lead      | 0.04536 | 0.0050 | 0.05    | 0.0004856     | 89.7 | 80-118        | 0             |      |           |      |
| Nickel    | 0.05072 | 0.0050 | 0.05    | 0.01064       | 80.2 | 82-120        | 0             |      |           | S    |
| Potassium | 7.85    | 0.20   | 5       | 3.164         | 93.7 | 80-120        | 0             |      |           |      |
| Selenium  | 0.04636 | 0.0050 | 0.05    | 0.001799      | 89.1 | 79.2-118      | 0             |      |           |      |
| Silver    | 0.03689 | 0.0050 | 0.05    | 0             | 73.8 | 80-117        | 0             |      |           | S    |
| Vanadium  | 0.04875 | 0.0050 | 0.05    | 0.001303      | 94.9 | 82.1-119      | 0             |      |           |      |
| Zinc      | 0.06685 | 0.0050 | 0.05    | 0.02912       | 75.5 | 79-118        | 0             |      |           | S    |

MS Sample ID: 0411068-07CMS Test Code: SW6020 Units: mg/L Analysis Date: 11/15/04 18:19

Client ID: Run ID: ICP4500\_041115A SeqNo: 574223 Prep Date: 11/10/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Molybdenum | 0.05397 | 0.0050 | 0.05    | 0.007215      | 93.5 | 81-115        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11059 InstrumentID: ICP4500

MSD Sample ID: 0411068-07CMSD Test Code: SW6020 Units: mg/L Analysis Date: 11/13/04 14:56

Client ID: Run ID: ICP4500\_041113A SeqNo: 573160 Prep Date: 11/10/2004 DF: 10

| Analyte   | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Calcium   | 224.4  | 5.0   | 5       | 194.7         | 594  | 80-121        | 201.7         | 10.7 | 15        | SO   |
| Magnesium | 93.4   | 2.0   | 5       | 78.4          | 300  | 80-120        | 88.9          | 4.94 | 15        | SO   |
| Manganese | 0.5391 | 0.050 | 0.05    | 0.4968        | 84.6 | 82-119        | 0.5355        | 0.67 | 15        | O    |
| Sodium    | 112.2  | 2.0   | 5       | 94.07         | 363  | 80.6-119      | 103.7         | 7.87 | 15        | SO   |

MSD Sample ID: 0411068-07CMSD Test Code: SW6020 Units: mg/L Analysis Date: 11/13/04 16:05

Client ID: Run ID: ICP4500\_041113A SeqNo: 573174 Prep Date: 11/10/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Aluminum  | 0.1223  | 0.010  | 0.05    | 0.08307       | 78.5 | 79-126        | 0.124         | 1.38   | 15        | S    |
| Arsenic   | 0.04672 | 0.0050 | 0.05    | 0             | 93.4 | 80-121        | 0.04793       | 2.56   | 15        |      |
| Barium    | 0.1508  | 0.0050 | 0.05    | 0.1072        | 87.2 | 79.8-119      | 0.1534        | 1.71   | 15        |      |
| Beryllium | 0.05006 | 0.0020 | 0.05    | 0             | 100  | 78.9-120      | 0.04925       | 1.63   | 15        |      |
| Boron     | 0.6875  | 0.020  | 0.5     | 0.1537        | 107  | 80-120        | 0.6993        | 1.7    | 15        |      |
| Cadmium   | 0.0436  | 0.0020 | 0.05    | 0             | 87.2 | 79.1-119      | 0.04361       | 0.0229 | 15        |      |
| Chromium  | 0.04722 | 0.0050 | 0.05    | 0.0006182     | 93.2 | 79.3-121      | 0.04661       | 1.3    | 15        |      |
| Cobalt    | 0.04316 | 0.0050 | 0.05    | 0.0009945     | 84.3 | 82-121        | 0.044         | 1.93   | 15        |      |
| Copper    | 0.0399  | 0.0050 | 0.05    | 0.001288      | 77.2 | 81-120        | 0.03981       | 0.226  | 15        | S    |
| Iron      | 16.5    | 0.20   | 5       | 12            | 90   | 80-120        | 16.72         | 1.32   | 15        |      |
| Lead      | 0.04559 | 0.0050 | 0.05    | 0.0004856     | 90.2 | 80-118        | 0.04536       | 0.506  | 15        |      |
| Nickel    | 0.05019 | 0.0050 | 0.05    | 0.01064       | 79.1 | 82-120        | 0.05072       | 1.05   | 15        | S    |
| Potassium | 7.79    | 0.20   | 5       | 3.164         | 92.5 | 80-120        | 7.85          | 0.767  | 15        |      |
| Selenium  | 0.04578 | 0.0050 | 0.05    | 0.001799      | 88   | 79.2-118      | 0.04636       | 1.26   | 15        |      |
| Silver    | 0.0367  | 0.0050 | 0.05    | 0             | 73.4 | 80-117        | 0.03689       | 0.516  | 15        | S    |
| Vanadium  | 0.04929 | 0.0050 | 0.05    | 0.001303      | 96   | 82.1-119      | 0.04875       | 1.1    | 15        |      |
| Zinc      | 0.06726 | 0.0050 | 0.05    | 0.02912       | 76.3 | 79-118        | 0.06685       | 0.611  | 15        | S    |

MSD Sample ID: 0411068-07CMSD Test Code: SW6020 Units: mg/L Analysis Date: 11/15/04 18:23

Client ID: Run ID: ICP4500\_041115A SeqNo: 574224 Prep Date: 11/10/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Molybdenum | 0.05362 | 0.0050 | 0.05    | 0.007215      | 92.8 | 81-115        | 0.05397       | 0.651 | 15        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11059 InstrumentID: ICP4500

DUP Sample ID: 0411068-07CDUP Test Code: SW6020 Units: mg/L Analysis Date: 11/13/04 14:46

Client ID: Run ID: ICP4500\_041113A SeqNo: 573158 Prep Date: 11/10/2004 DF: 10

| Analyte   | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Calcium   | 199.8  | 5.0   | 0       | 0             | 0    | 0-0           | 194.7         | 2.59 | 25        |      |
| Magnesium | 84.86  | 2.0   | 0       | 0             | 0    | 0-0           | 78.4          | 7.91 | 25        |      |
| Manganese | 0.5121 | 0.050 | 0       | 0             | 0    | 0-0           | 0.4968        | 3.03 | 25        |      |
| Sodium    | 98.93  | 2.0   | 0       | 0             | 0    | 0-0           | 94.07         | 5.04 | 25        |      |

DUP Sample ID: 0411068-07CDUP Test Code: SW6020 Units: mg/L Analysis Date: 11/13/04 15:55

Client ID: Run ID: ICP4500\_041113A SeqNo: 573172 Prep Date: 11/10/2004 DF: 1

| Analyte   | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------|-----------|--------|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Aluminum  | 0.083     | 0.010  | 0       | 0             | 0    | 0-0           | 0.08307       | 0.0843 | 25        |      |
| Arsenic   | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0006896     | 0      | 25        |      |
| Barium    | 0.1066    | 0.0050 | 0       | 0             | 0    | 0-0           | 0.1072        | 0.561  | 25        |      |
| Beryllium | ND        | 0.0020 | 0       | 0             | 0    | 0-0           | 0.00001444    | 0      | 25        |      |
| Boron     | 0.1508    | 0.020  | 0       | 0             | 0    | 0-0           | 0.1537        | 1.9    | 25        |      |
| Cadmium   | ND        | 0.0020 | 0       | 0             | 0    | 0-0           | 0.00004056    | 0      | 25        |      |
| Chromium  | 0.0005579 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0006182     | 0      | 25        | J    |
| Cobalt    | 0.0009407 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0009945     | 0      | 25        | J    |
| Copper    | 0.001094  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.001288      | 0      | 25        | J    |
| Iron      | 11.84     | 0.20   | 0       | 0             | 0    | 0-0           | 12            | 1.34   | 25        |      |
| Lead      | 0.000479  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0004856     | 0      | 25        | J    |
| Nickel    | 0.009953  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.01064       | 6.67   | 25        |      |
| Potassium | 3.085     | 0.20   | 0       | 0             | 0    | 0-0           | 3.164         | 2.53   | 25        |      |
| Selenium  | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.001799      | 0      | 25        |      |
| Silver    | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00003755    | 0      | 25        |      |
| Vanadium  | 0.0007862 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.001303      | 0      | 25        | J    |
| Zinc      | 0.02831   | 0.0050 | 0       | 0             | 0    | 0-0           | 0.02912       | 2.82   | 25        |      |

DUP Sample ID: 0411068-07CDUP Test Code: SW6020 Units: mg/L Analysis Date: 11/15/04 18:14

Client ID: Run ID: ICP4500\_041115A SeqNo: 574222 Prep Date: 11/10/2004 DF: 1

| Analyte    | Result   | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|------------|----------|--------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Molybdenum | 0.007188 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.007215      | 0.375 | 25        |      |

The following samples were analyzed in this batch: 0411079-01C 0411079-02C 0411079-03C

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0411079  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11123 InstrumentID: Mercury

MBLK Sample ID: GBLKW2-111604 Test Code: SW7470 Units: mg/L Analysis Date: 11/16/04 15:52

Client ID: Run ID: MERCURY\_041116B SeqNo: 574787 Prep Date: 11/16/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW2-111604 Test Code: SW7470 Units: mg/L Analysis Date: 11/16/04 15:53

Client ID: Run ID: MERCURY\_041116B SeqNo: 574788 Prep Date: 11/16/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00518 | 0.00020 | 0.005   | 0             | 104  | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW2-111604 Test Code: SW7470 Units: mg/L Analysis Date: 11/16/04 16:00

Client ID: Run ID: MERCURY\_041116B SeqNo: 574789 Prep Date: 11/16/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00512 | 0.00020 | 0.005   | 0             | 102  | 83-115        | 0             |      |           |      |

MS Sample ID: 0411068-22CMS Test Code: SW7470 Units: mg/L Analysis Date: 11/16/04 16:06

Client ID: Run ID: MERCURY\_041116B SeqNo: 574792 Prep Date: 11/16/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.0051 | 0.00020 | 0.005   | -0.000016     | 102  | 83-115        | 0             |      |           |      |

MSD Sample ID: 0411068-22CMSD Test Code: SW7470 Units: mg/L Analysis Date: 11/16/04 16:08

Client ID: Run ID: MERCURY\_041116B SeqNo: 574793 Prep Date: 11/16/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.0052 | 0.00020 | 0.005   | -0.000016     | 104  | 83-115        | 0.0051        | 1.94 | 20        |      |

DUP Sample ID: 0411068-22CDUP Test Code: SW7470 Units: mg/L Analysis Date: 11/16/04 16:05

Client ID: Run ID: MERCURY\_041116B SeqNo: 574791 Prep Date: 11/16/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | -0.000016     | 0    | 20        |      |

The following samples were analyzed in this batch:

0411079-01C 0411079-02C 0411079-03C

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11101 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-041112 Test Code: SW8270 Units: µg/L Analysis Date: 11/15/04 11:51

Client ID: Run ID: SV-3\_041113A SeqNo: 573834 Prep Date: 11/12/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3&4-Methylphenol           | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 70.34  | 10  | 100     | 0             | 70.3 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 72.58  | 10  | 100     | 0             | 72.6 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 35.92  | 10  | 100     | 0             | 35.9 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 71.43  | 10  | 100     | 0             | 71.4 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 62.9   | 10  | 100     | 0             | 62.9 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 19.84  | 10  | 100     | 0             | 19.8 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11101 InstrumentID: SV-3

LCS Sample ID: SLCSW1-041112 Test Code: SW8270 Units: µg/L Analysis Date: 11/15/04 12:16

Client ID: Run ID: SV-3\_041113A SeqNo: 573835 Prep Date: 11/12/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 39.89  | 10  | 50      | 0             | 79.8 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 82.25  | 10  | 100     | 0             | 82.3 | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 79.92  | 10  | 100     | 0             | 79.9 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 40.73  | 10  | 50      | 0             | 81.5 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 58.24  | 10  | 100     | 0             | 58.2 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 36.74  | 10  | 50      | 0             | 73.5 | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 78.12  | 10  | 100     | 0             | 78.1 | 60-119        | 0             |      |           |      |
| 3&4-Methylphenol           | 81.48  | 10  | 150     | 0             | 54.3 | 44-115        | 0             |      |           |      |
| 3-Nitroaniline             | 34.28  | 10  | 50      | 0             | 68.6 | 61-118        | 0             |      |           |      |
| 4-Nitroaniline             | 34.53  | 10  | 50      | 0             | 69.1 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 27.64  | 10  | 100     | 0             | 27.6 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 41.22  | 10  | 50      | 0             | 82.4 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 40.88  | 10  | 50      | 0             | 81.8 | 67-116        | 0             |      |           |      |
| Aniline                    | 25.09  | 10  | 50      | 0             | 50.2 | 40-130        | 0             |      |           |      |
| Anthracene                 | 43.27  | 10  | 50      | 0             | 86.5 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 38.06  | 10  | 50      | 0             | 76.1 | 55-131        | 0             |      |           |      |
| Benzidine                  | 7.609  | 10  | 50      | 0             | 15.2 | 10-115        | 0             |      |           | J    |
| Hexachloroethane           | 37.63  | 10  | 50      | 0             | 75.3 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 40.77  | 10  | 50      | 0             | 81.5 | 42-123        | 0             |      |           |      |
| Isophorone                 | 39.54  | 10  | 50      | 0             | 79.1 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 36.54  | 10  | 50      | 0             | 73.1 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 20.03  | 10  | 50      | 0             | 40.1 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 43.01  | 10  | 50      | 0             | 86   | 72-144        | 0             |      |           |      |
| Naphthalene                | 39.53  | 10  | 50      | 0             | 79.1 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 37.64  | 10  | 50      | 0             | 75.3 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 66.28  | 10  | 100     | 0             | 66.3 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 42.56  | 10  | 50      | 0             | 85.1 | 69-119        | 0             |      |           |      |
| Phenol                     | 25.22  | 10  | 100     | 0             | 25.2 | 16-115        | 0             |      |           |      |
| Pyrene                     | 43.47  | 10  | 50      | 0             | 86.9 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 87.93  | 10  | 100     | 0             | 87.9 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 81.78  | 10  | 100     | 0             | 81.8 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 41.95  | 10  | 100     | 0             | 41.9 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 85.53  | 10  | 100     | 0             | 85.5 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 73.08  | 10  | 100     | 0             | 73.1 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 25.53  | 10  | 100     | 0             | 25.5 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11101 InstrumentID: SV-3

MS Sample ID: 0411068-22DMS Test Code: SW8270 Units: µg/L Analysis Date: 11/15/04 13:08

Client ID: Run ID: SV-3\_041113A SeqNo: 573837 Prep Date: 11/12/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 40.25  | 10  | 50      | 0             | 80.5 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 82.63  | 10  | 100     | 0             | 82.6 | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 81.15  | 10  | 100     | 0             | 81.2 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 149.1  | 10  | 50      | 112.9         | 72.3 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 104.3  | 10  | 100     | 43.18         | 61.1 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 36.05  | 10  | 50      | 0             | 72.1 | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 74.67  | 10  | 100     | 0             | 74.7 | 60-119        | 0             |      |           |      |
| 3&4-Methylphenol           | 191.8  | 10  | 150     | 106.9         | 56.6 | 44-115        | 0             |      |           | E    |
| 3-Nitroaniline             | 21.4   | 10  | 50      | 0             | 42.8 | 61-118        | 0             |      |           | S    |
| 4-Nitroaniline             | 33.07  | 10  | 50      | 0             | 66.1 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 28.49  | 10  | 100     | 0             | 28.5 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 42.16  | 10  | 50      | 0             | 84.3 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 41.15  | 10  | 50      | 0             | 82.3 | 67-116        | 0             |      |           |      |
| Aniline                    | 24.29  | 10  | 50      | 0             | 48.6 | 40-130        | 0             |      |           |      |
| Anthracene                 | 42.96  | 10  | 50      | 0             | 85.9 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 38.74  | 10  | 50      | 0             | 77.5 | 55-131        | 0             |      |           |      |
| Benzidine                  | 1.706  | 10  | 50      | 0             | 3.41 | 10-115        | 0             |      |           | JS   |
| Hexachloroethane           | 56.4   | 10  | 50      | 0             | 113  | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 40.35  | 10  | 50      | 0             | 80.7 | 42-123        | 0             |      |           |      |
| Isophorone                 | 35.91  | 10  | 50      | 0             | 71.8 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 36.33  | 10  | 50      | 0             | 72.7 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 21.4   | 10  | 50      | 0             | 42.8 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 43.66  | 10  | 50      | 0             | 87.3 | 72-144        | 0             |      |           |      |
| Naphthalene                | 437.6  | 10  | 50      | 410.4         | 54.5 | 52-115        | 0             |      |           | EO   |
| Nitrobenzene               | 38.9   | 10  | 50      | 0             | 77.8 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 69.27  | 10  | 100     | 0             | 69.3 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 42.52  | 10  | 50      | 0             | 85   | 69-119        | 0             |      |           |      |
| Phenol                     | 54.39  | 10  | 100     | 25.62         | 28.8 | 16-115        | 0             |      |           |      |
| Pyrene                     | 44.34  | 10  | 50      | 0             | 88.7 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 85.13  | 10  | 100     | 0             | 85.1 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 81.46  | 10  | 100     | 0             | 81.5 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 28.44  | 10  | 100     | 0             | 28.4 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 84.18  | 10  | 100     | 0             | 84.2 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 70.13  | 10  | 100     | 0             | 70.1 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 22.68  | 10  | 100     | 0             | 22.7 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 11101 InstrumentID: SV-3

MSD Sample ID: 0411068-22DMSD Test Code: SW8270 Units: µg/L Analysis Date: 11/15/04 13:34

Client ID: Run ID: SV-3\_041113A SeqNo: 573838 Prep Date: 11/12/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,2,4-Trichlorobenzene     | 38.39  | 10  | 50      | 0             | 76.8 | 50-115        | 40.25         | 4.73  | 30        |      |
| 2,4,5-Trichlorophenol      | 78.66  | 10  | 100     | 0             | 78.7 | 68-128        | 82.63         | 4.93  | 30        |      |
| 2,4,6-Trichlorophenol      | 78.91  | 10  | 100     | 0             | 78.9 | 66-125        | 81.15         | 2.8   | 30        |      |
| 2-Methylnaphthalene        | 142.7  | 10  | 50      | 112.9         | 59.6 | 47-122        | 149.1         | 4.36  | 30        |      |
| 2-Methylphenol             | 98.34  | 10  | 100     | 43.18         | 55.2 | 51-115        | 104.3         | 5.9   | 30        |      |
| 2-Nitroaniline             | 34.94  | 10  | 50      | 0             | 69.9 | 64-128        | 36.05         | 3.11  | 30        |      |
| 2-Nitrophenol              | 73.66  | 10  | 100     | 0             | 73.7 | 60-119        | 74.67         | 1.37  | 30        |      |
| 3&4-Methylphenol           | 184.4  | 10  | 150     | 106.9         | 51.7 | 44-115        | 191.8         | 3.93  | 30        | E    |
| 3-Nitroaniline             | 20.58  | 10  | 50      | 0             | 41.2 | 61-118        | 21.4          | 3.9   | 30        | S    |
| 4-Nitroaniline             | 33.16  | 10  | 50      | 0             | 66.3 | 61-123        | 33.07         | 0.269 | 30        |      |
| 4-Nitrophenol              | 25.78  | 10  | 100     | 0             | 25.8 | 17-100        | 28.49         | 9.99  | 30        |      |
| Acenaphthene               | 40.32  | 10  | 50      | 0             | 80.6 | 68-115        | 42.16         | 4.44  | 30        |      |
| Acenaphthylene             | 39.52  | 10  | 50      | 0             | 79   | 67-116        | 41.15         | 4.04  | 30        |      |
| Aniline                    | 21.62  | 10  | 50      | 0             | 43.2 | 40-130        | 24.29         | 11.6  | 30        |      |
| Anthracene                 | 41.4   | 10  | 50      | 0             | 82.8 | 70-129        | 42.96         | 3.69  | 30        |      |
| Benz(a)anthracene          | 37.13  | 10  | 50      | 0             | 74.3 | 55-131        | 38.74         | 4.24  | 30        |      |
| Benzidine                  | 1.64   | 10  | 50      | 0             | 3.28 | 10-115        | 1.706         | 0     | 30        | JS   |
| Hexachloroethane           | 55.53  | 10  | 50      | 0             | 111  | 46-115        | 56.4          | 1.55  | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 39.89  | 10  | 50      | 0             | 79.8 | 42-123        | 40.35         | 1.14  | 30        |      |
| Isophorone                 | 35.44  | 10  | 50      | 0             | 70.9 | 63-117        | 35.91         | 1.33  | 30        |      |
| N-Nitrosodi-n-propylamine  | 36.38  | 10  | 50      | 0             | 72.8 | 67-115        | 36.33         | 0.127 | 30        |      |
| N-Nitrosodimethylamine     | 20.35  | 10  | 50      | 0             | 40.7 | 28-115        | 21.4          | 5.01  | 30        |      |
| N-Nitrosodiphenylamine     | 43.02  | 10  | 50      | 0             | 86   | 72-144        | 43.66         | 1.47  | 30        |      |
| Naphthalene                | 435.8  | 10  | 50      | 410.4         | 50.8 | 52-115        | 437.6         | 0.416 | 30        | SEO  |
| Nitrobenzene               | 37.84  | 10  | 50      | 0             | 75.7 | 65-115        | 38.9          | 2.75  | 30        |      |
| Pentachlorophenol          | 71.07  | 10  | 100     | 0             | 71.1 | 65-123        | 69.27         | 2.57  | 30        |      |
| Phenanthrene               | 41.89  | 10  | 50      | 0             | 83.8 | 69-119        | 42.52         | 1.52  | 30        |      |
| Phenol                     | 53.37  | 10  | 100     | 25.62         | 27.7 | 16-115        | 54.39         | 1.89  | 30        |      |
| Pyrene                     | 43.5   | 10  | 50      | 0             | 87   | 51-130        | 44.34         | 1.92  | 30        |      |
| Surr: 2,4,6-Tribromophenol | 84.79  | 10  | 100     | 0             | 84.8 | 39-153        | 85.13         | 0.401 | 30        |      |
| Surr: 2-Fluorobiphenyl     | 78.79  | 10  | 100     | 0             | 78.8 | 40-147        | 81.46         | 3.33  | 30        |      |
| Surr: 2-Fluorophenol       | 26.64  | 10  | 100     | 0             | 26.6 | 21-110        | 28.44         | 6.53  | 30        |      |
| Surr: 4-Terphenyl-d14      | 83.67  | 10  | 100     | 0             | 83.7 | 39-141        | 84.18         | 0.609 | 30        |      |
| Surr: Nitrobenzene-d5      | 68.76  | 10  | 100     | 0             | 68.8 | 37-140        | 70.13         | 1.97  | 30        |      |
| Surr: Phenol-d6            | 22.4   | 10  | 100     | 0             | 22.4 | 11-100        | 22.68         | 1.21  | 30        |      |

The following samples were analyzed in this batch:

0411079-01E 0411079-02E 0411079-03E

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24587 InstrumentID: VOA1

MBLK Sample ID: VBLKW-1112 Test Code: SW8260 Units: µg/L Analysis Date: 11/12/04 13:27

Client ID: Run ID: VOA1\_041112A SeqNo: 573890 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.85  | 5.0 | 50      | 0             | 91.7 | 71-126        |               | 0    |           |      |
| Surr: 4-Bromofluorobenzene  | 47.84  | 5.0 | 50      | 0             | 95.7 | 74-125        |               | 0    |           |      |
| Surr: Dibromofluoromethane  | 48.23  | 5.0 | 50      | 0             | 96.5 | 73-126        |               | 0    |           |      |
| Surr: Toluene-d8            | 49.18  | 5.0 | 50      | 0             | 98.4 | 75-125        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24587 InstrumentID: VOA1

LCS Sample ID: VLCSW-1112 Test Code: SW8260 Units: µg/L Analysis Date: 11/12/04 12:09

Client ID: Run ID: VOA1\_041112A SeqNo: 573889 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 50.34  | 5.0 | 50      | 0             | 101  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 55.63  | 5.0 | 50      | 0             | 111  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 47.39  | 5.0 | 50      | 0             | 94.8 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 48.04  | 5.0 | 50      | 0             | 96.1 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 48.44  | 5.0 | 50      | 0             | 96.9 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 46.28  | 5.0 | 50      | 0             | 92.6 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 108.5  | 10  | 100     | 0             | 108  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 94.19  | 10  | 100     | 0             | 94.2 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 105.2  | 10  | 100     | 0             | 105  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 100.5  | 10  | 100     | 0             | 100  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 109.7  | 10  | 100     | 0             | 110  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 49.28  | 5.0 | 50      | 0             | 98.6 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 50.67  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Bromoform                   | 46.24  | 5.0 | 50      | 0             | 92.5 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 46.02  | 5.0 | 50      | 0             | 92   | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 101.3  | 10  | 100     | 0             | 101  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 43.13  | 5.0 | 50      | 0             | 86.3 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 47.99  | 5.0 | 50      | 0             | 96   | 80-120        | 0             |      |           |      |
| Chloroethane                | 50.66  | 5.0 | 50      | 0             | 101  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 49.29  | 5.0 | 50      | 0             | 98.6 | 80-120        | 0             |      |           |      |
| Chloromethane               | 52.04  | 5.0 | 50      | 0             | 104  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 51.72  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 44.46  | 5.0 | 50      | 0             | 88.9 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 48.59  | 5.0 | 50      | 0             | 97.2 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 100.5  | 10  | 100     | 0             | 101  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 48.86  | 10  | 50      | 0             | 97.7 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.79  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 45.11  | 5.0 | 50      | 0             | 90.2 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 47.71  | 5.0 | 50      | 0             | 95.4 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 46.19  | 5.0 | 50      | 0             | 92.4 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 46.24  | 5.0 | 50      | 0             | 92.5 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 114.2  | 10  | 100     | 0             | 114  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 54.54  | 2.0 | 50      | 0             | 109  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 151.8  | 15  | 150     | 0             | 101  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.14  | 5.0 | 50      | 0             | 90.3 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.83  | 5.0 | 50      | 0             | 97.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.02  | 5.0 | 50      | 0             | 96   | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 48.31  | 5.0 | 50      | 0             | 96.6 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24587 InstrumentID: VOA1

MS Sample ID: 0411050-08AMS Test Code: SW8260 Units: µg/L Analysis Date: 11/12/04 17:00

Client ID: Run ID: VOA1\_041112A SeqNo: 573893 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC  | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|-------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 1304   | 120 | 1250    | 0             | 104   | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 1288   | 120 | 1250    | 0             | 103   | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 1282   | 120 | 1250    | 0             | 103   | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 1253   | 120 | 1250    | 0             | 100   | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 1284   | 120 | 1250    | 0             | 103   | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 1241   | 120 | 1250    | 0             | 99.2  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 2594   | 250 | 2500    | 52.59         | 102   | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 1671   | 250 | 2500    | 0             | 66.9  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 2572   | 250 | 2500    | 0             | 103   | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 2659   | 250 | 2500    | 0             | 106   | 67.4-121      | 0             |      |           |      |
| Acetone                     | 2743   | 250 | 2500    | 3559          | -32.7 | 64.4-140      | 0             |      |           | S    |
| Benzene                     | 1765   | 120 | 1250    | 531.5         | 98.7  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 1301   | 120 | 1250    | 0             | 104   | 80-120        | 0             |      |           |      |
| Bromoform                   | 1150   | 120 | 1250    | 0             | 92    | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 642.1  | 120 | 1250    | 0             | 51.4  | 63.3-137      | 0             |      |           | S    |
| Carbon disulfide            | 2668   | 250 | 2500    | 0             | 107   | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 1151   | 120 | 1250    | 0             | 92.1  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 1203   | 120 | 1250    | 0             | 96.2  | 80-120        | 0             |      |           |      |
| Chloroethane                | 1330   | 120 | 1250    | 0             | 106   | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 1270   | 120 | 1250    | 0             | 102   | 80-120        | 0             |      |           |      |
| Chloromethane               | 1272   | 120 | 1250    | 0             | 102   | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 1326   | 120 | 1250    | 0             | 106   | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 1191   | 120 | 1250    | 0             | 95.2  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 1424   | 120 | 1250    | 101.5         | 106   | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 2744   | 250 | 2500    | 211.5         | 101   | 80-120        | 0             |      |           |      |
| Methylene chloride          | 1249   | 250 | 1250    | 0             | 100   | 76.2-120      | 0             |      |           |      |
| Styrene                     | 1270   | 120 | 1250    | 0             | 102   | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 1230   | 120 | 1250    | 0             | 98.4  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 1308   | 120 | 1250    | 0             | 105   | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 1228   | 120 | 1250    | 0             | 98.3  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 1197   | 120 | 1250    | 0             | 95.7  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 3025   | 250 | 2500    | 0             | 121   | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 1319   | 50  | 1250    | 0             | 106   | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 4021   | 380 | 3750    | 211.5         | 102   | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 1158   | 120 | 1250    | 0             | 92.6  | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 1253   | 120 | 1250    | 0             | 100   | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 1224   | 120 | 1250    | 0             | 97.9  | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 1259   | 120 | 1250    | 0             | 101   | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24587 InstrumentID: VOA1

MSD Sample ID: 0411050-08AMSD Test Code: SW8260 Units: µg/L Analysis Date: 11/12/04 17:36

Client ID: Run ID: VOA1\_041112A SeqNo: 573894 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC  | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|-------|---------------|---------------|-------|-----------|------|
| 1,1,1-Trichloroethane       | 1293   | 120 | 1250    | 0             | 103   | 75.2-120      | 1304          | 0.866 | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 1320   | 120 | 1250    | 0             | 106   | 72.4-121      | 1288          | 2.51  | 20        |      |
| 1,1,2-Trichloroethane       | 1299   | 120 | 1250    | 0             | 104   | 80-120        | 1282          | 1.36  | 20        |      |
| 1,1-Dichloroethane          | 1281   | 120 | 1250    | 0             | 102   | 76.9-120      | 1253          | 2.23  | 20        |      |
| 1,1-Dichloroethene          | 1273   | 120 | 1250    | 0             | 102   | 72.6-123      | 1284          | 0.866 | 20        |      |
| 1,2-Dichloroethane          | 1234   | 120 | 1250    | 0             | 98.7  | 80-120        | 1241          | 0.53  | 20        |      |
| 2-Butanone                  | 2709   | 250 | 2500    | 52.59         | 106   | 69-131        | 2594          | 4.35  | 20        |      |
| 2-Chloroethyl vinyl ether   | 1316   | 250 | 2500    | 0             | 52.6  | 60-135        | 1671          | 23.8  | 20        | SR   |
| 2-Hexanone                  | 2583   | 250 | 2500    | 0             | 103   | 55.6-126      | 2572          | 0.461 | 20        |      |
| 4-Methyl-2-pentanone        | 2672   | 250 | 2500    | 0             | 107   | 67.4-121      | 2659          | 0.452 | 20        |      |
| Acetone                     | 2543   | 250 | 2500    | 3559          | -40.7 | 64.4-140      | 2743          | 7.56  | 20        | S    |
| Benzene                     | 1762   | 120 | 1250    | 531.5         | 98.5  | 80-120        | 1765          | 0.177 | 20        |      |
| Bromodichloromethane        | 1328   | 120 | 1250    | 0             | 106   | 80-120        | 1301          | 2.02  | 20        |      |
| Bromoform                   | 1196   | 120 | 1250    | 0             | 95.7  | 77.9-121      | 1150          | 3.91  | 20        |      |
| Bromomethane                | 699.3  | 120 | 1250    | 0             | 55.9  | 63.3-137      | 642.1         | 8.53  | 20        | S    |
| Carbon disulfide            | 2648   | 250 | 2500    | 0             | 106   | 74.1-123      | 2668          | 0.741 | 20        |      |
| Carbon tetrachloride        | 1158   | 120 | 1250    | 0             | 92.6  | 74.7-120      | 1151          | 0.594 | 20        |      |
| Chlorobenzene               | 1228   | 120 | 1250    | 0             | 98.2  | 80-120        | 1203          | 2.02  | 20        |      |
| Chloroethane                | 1356   | 120 | 1250    | 0             | 108   | 74.7-126      | 1330          | 1.92  | 20        |      |
| Chloroform                  | 1228   | 120 | 1250    | 0             | 98.2  | 80-120        | 1270          | 3.4   | 20        |      |
| Chloromethane               | 1287   | 120 | 1250    | 0             | 103   | 64.5-132      | 1272          | 1.14  | 20        |      |
| cis-1,3-Dichloropropene     | 1332   | 120 | 1250    | 0             | 107   | 80-120        | 1326          | 0.459 | 20        |      |
| Dibromochloromethane        | 1165   | 120 | 1250    | 0             | 93.2  | 80-120        | 1191          | 2.18  | 20        |      |
| Ethylbenzene                | 1443   | 120 | 1250    | 101.5         | 107   | 80-120        | 1424          | 1.28  | 20        |      |
| m,p-Xylene                  | 2815   | 250 | 2500    | 211.5         | 104   | 80-120        | 2744          | 2.56  | 20        |      |
| Methylene chloride          | 1245   | 250 | 1250    | 0             | 99.6  | 76.2-120      | 1249          | 0.359 | 20        |      |
| Styrene                     | 1329   | 120 | 1250    | 0             | 106   | 80-120        | 1270          | 4.58  | 20        |      |
| Tetrachloroethene           | 1264   | 120 | 1250    | 0             | 101   | 68.5-130      | 1230          | 2.76  | 20        |      |
| Toluene                     | 1297   | 120 | 1250    | 0             | 104   | 80-120        | 1308          | 0.887 | 20        |      |
| trans-1,3-Dichloropropene   | 1247   | 120 | 1250    | 0             | 99.8  | 80-120        | 1228          | 1.53  | 20        |      |
| Trichloroethene             | 1220   | 120 | 1250    | 0             | 97.6  | 78.9-120      | 1197          | 1.95  | 20        |      |
| Vinyl acetate               | 2988   | 250 | 2500    | 0             | 120   | 62.4-133      | 3025          | 1.24  | 20        |      |
| Vinyl chloride              | 1324   | 50  | 1250    | 0             | 106   | 72.7-128      | 1319          | 0.396 | 20        |      |
| Xylenes, Total              | 4124   | 380 | 3750    | 211.5         | 104   | 80-120        | 4021          | 2.54  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 1116   | 120 | 1250    | 0             | 89.3  | 71-126        | 1158          | 3.73  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 1257   | 120 | 1250    | 0             | 101   | 74-125        | 1253          | 0.327 | 20        |      |
| Surr: Dibromofluoromethane  | 1198   | 120 | 1250    | 0             | 95.8  | 73-126        | 1224          | 2.15  | 20        |      |
| Surr: Toluene-d8            | 1209   | 120 | 1250    | 0             | 96.7  | 75-125        | 1259          | 4.03  | 20        |      |

The following samples were analyzed in this batch:

0411079-01A 0411079-02A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24633 InstrumentID: VOA2

MBLK Sample ID: VBLKW-1116 Test Code: SW8260 Units: µg/L Analysis Date: 11/16/04 17:14

Client ID: Run ID: VOA2\_041116A SeqNo: 575153 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 49.08  | 5.0 | 50      | 0             | 98.2 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 39.04  | 5.0 | 50      | 0             | 78.1 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.51  | 5.0 | 50      | 0             | 93   | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 43.49  | 5.0 | 50      | 0             | 87   | 75-125        | 0             |      |           |      |

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P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24633 InstrumentID: VOA2

LCS Sample ID: VLCSW-1116 Test Code: SW8260 Units: µg/L Analysis Date: 11/16/04 15:58

Client ID: Run ID: VOA2\_041116A SeqNo: 575152 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 47.15  | 5.0 | 50      | 0             | 94.3 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 48.26  | 5.0 | 50      | 0             | 96.5 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 49.63  | 5.0 | 50      | 0             | 99.3 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 48.15  | 5.0 | 50      | 0             | 96.3 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 49.31  | 5.0 | 50      | 0             | 98.6 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 47.02  | 5.0 | 50      | 0             | 94   | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 96.49  | 10  | 100     | 0             | 96.5 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 132.8  | 10  | 100     | 0             | 133  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 104.2  | 10  | 100     | 0             | 104  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 99.7   | 10  | 100     | 0             | 99.7 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 85.5   | 10  | 100     | 0             | 85.5 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 51     | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 48.81  | 5.0 | 50      | 0             | 97.6 | 80-120        | 0             |      |           |      |
| Bromoform                   | 51.65  | 5.0 | 50      | 0             | 103  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 55.57  | 5.0 | 50      | 0             | 111  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 95.3   | 10  | 100     | 0             | 95.3 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 47.96  | 5.0 | 50      | 0             | 95.9 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 49.13  | 5.0 | 50      | 0             | 98.3 | 80-120        | 0             |      |           |      |
| Chloroethane                | 49.04  | 5.0 | 50      | 0             | 98.1 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 46.88  | 5.0 | 50      | 0             | 93.8 | 80-120        | 0             |      |           |      |
| Chloromethane               | 53.25  | 5.0 | 50      | 0             | 107  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 52.81  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 50.88  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 50.65  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 101.3  | 10  | 100     | 0             | 101  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 46.29  | 10  | 50      | 0             | 92.6 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 53.05  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 48.74  | 5.0 | 50      | 0             | 97.5 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 50.76  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 51.33  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 48.89  | 5.0 | 50      | 0             | 97.8 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 99.18  | 10  | 100     | 0             | 99.2 | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 50.16  | 2.0 | 50      | 0             | 100  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 154.2  | 15  | 150     | 0             | 103  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 41.96  | 5.0 | 50      | 0             | 83.9 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 44.39  | 5.0 | 50      | 0             | 88.8 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 41.07  | 5.0 | 50      | 0             | 82.1 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 45.24  | 5.0 | 50      | 0             | 90.5 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24633 InstrumentID: VOA2

MS Sample ID: 0411167-01AMS Test Code: SW8260 Units: µg/L Analysis Date: 11/16/04 18:55

Client ID: Run ID: VOA2\_041116A SeqNo: 575156 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 1191   | 120 | 1250    | 0             | 95.3 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 1305   | 120 | 1250    | 0             | 104  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 1310   | 120 | 1250    | 0             | 105  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 1220   | 120 | 1250    | 0             | 97.6 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 1192   | 120 | 1250    | 0             | 95.4 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 1287   | 120 | 1250    | 0             | 103  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 2570   | 250 | 2500    | 0             | 103  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 3094   | 250 | 2500    | 0             | 124  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 2737   | 250 | 2500    | 0             | 109  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 2791   | 250 | 2500    | 0             | 112  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 2151   | 250 | 2500    | 0             | 86.1 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 1333   | 120 | 1250    | 0             | 107  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 1331   | 120 | 1250    | 0             | 107  | 80-120        | 0             |      |           |      |
| Bromoform                   | 1413   | 120 | 1250    | 0             | 113  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 1271   | 120 | 1250    | 0             | 102  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 2410   | 250 | 2500    | 0             | 96.4 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 1250   | 120 | 1250    | 0             | 100  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 1277   | 120 | 1250    | 0             | 102  | 80-120        | 0             |      |           |      |
| Chloroethane                | 1185   | 120 | 1250    | 0             | 94.8 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 1259   | 120 | 1250    | 55.66         | 96.3 | 80-120        | 0             |      |           |      |
| Chloromethane               | 1297   | 120 | 1250    | 0             | 104  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 1383   | 120 | 1250    | 0             | 111  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 1336   | 120 | 1250    | 0             | 107  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 1325   | 120 | 1250    | 0             | 106  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 2679   | 250 | 2500    | 0             | 107  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 1184   | 250 | 1250    | 0             | 94.7 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 1394   | 120 | 1250    | 0             | 112  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 1256   | 120 | 1250    | 0             | 100  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 1299   | 120 | 1250    | 0             | 104  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 1366   | 120 | 1250    | 0             | 109  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 1259   | 120 | 1250    | 0             | 101  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 2551   | 250 | 2500    | 0             | 102  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 1171   | 50  | 1250    | 0             | 93.7 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 4072   | 380 | 3750    | 0             | 109  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 1122   | 120 | 1250    | 0             | 89.8 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 1136   | 120 | 1250    | 0             | 90.9 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 1085   | 120 | 1250    | 0             | 86.8 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 1168   | 120 | 1250    | 0             | 93.4 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24633 InstrumentID: VOA2

MSD Sample ID: 0411167-01AMSD Test Code: SW8260 Units: µg/L Analysis Date: 11/16/04 19:20

Client ID: Run ID: VOA2\_041116A SeqNo: 575157 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,1,1-Trichloroethane       | 1163   | 120 | 1250    | 0             | 93.1 | 75.2-120      | 1191          | 2.41  | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 1283   | 120 | 1250    | 0             | 103  | 72.4-121      | 1305          | 1.74  | 20        |      |
| 1,1,2-Trichloroethane       | 1339   | 120 | 1250    | 0             | 107  | 80-120        | 1310          | 2.2   | 20        |      |
| 1,1-Dichloroethane          | 1190   | 120 | 1250    | 0             | 95.2 | 76.9-120      | 1220          | 2.5   | 20        |      |
| 1,1-Dichloroethene          | 1199   | 120 | 1250    | 0             | 95.9 | 72.6-123      | 1192          | 0.575 | 20        |      |
| 1,2-Dichloroethane          | 1232   | 120 | 1250    | 0             | 98.6 | 80-120        | 1287          | 4.37  | 20        |      |
| 2-Butanone                  | 2606   | 250 | 2500    | 0             | 104  | 69-131        | 2570          | 1.36  | 20        |      |
| 2-Chloroethyl vinyl ether   | 3194   | 250 | 2500    | 0             | 128  | 60-135        | 3094          | 3.19  | 20        |      |
| 2-Hexanone                  | 2790   | 250 | 2500    | 0             | 112  | 55.6-126      | 2737          | 1.92  | 20        |      |
| 4-Methyl-2-pentanone        | 2777   | 250 | 2500    | 0             | 111  | 67.4-121      | 2791          | 0.477 | 20        |      |
| Acetone                     | 2229   | 250 | 2500    | 0             | 89.2 | 64.4-140      | 2151          | 3.54  | 20        |      |
| Benzene                     | 1281   | 120 | 1250    | 0             | 102  | 80-120        | 1333          | 4.03  | 20        |      |
| Bromodichloromethane        | 1248   | 120 | 1250    | 0             | 99.8 | 80-120        | 1331          | 6.46  | 20        |      |
| Bromoform                   | 1369   | 120 | 1250    | 0             | 110  | 77.9-121      | 1413          | 3.17  | 20        |      |
| Bromomethane                | 1384   | 120 | 1250    | 0             | 111  | 63.3-137      | 1271          | 8.51  | 20        |      |
| Carbon disulfide            | 2354   | 250 | 2500    | 0             | 94.1 | 74.1-123      | 2410          | 2.36  | 20        |      |
| Carbon tetrachloride        | 1210   | 120 | 1250    | 0             | 96.8 | 74.7-120      | 1250          | 3.24  | 20        |      |
| Chlorobenzene               | 1232   | 120 | 1250    | 0             | 98.6 | 80-120        | 1277          | 3.56  | 20        |      |
| Chloroethane                | 1220   | 120 | 1250    | 0             | 97.6 | 74.7-126      | 1185          | 2.96  | 20        |      |
| Chloroform                  | 1205   | 120 | 1250    | 55.66         | 91.9 | 80-120        | 1259          | 4.41  | 20        |      |
| Chloromethane               | 1348   | 120 | 1250    | 0             | 108  | 64.5-132      | 1297          | 3.88  | 20        |      |
| cis-1,3-Dichloropropene     | 1337   | 120 | 1250    | 0             | 107  | 80-120        | 1383          | 3.39  | 20        |      |
| Dibromochloromethane        | 1311   | 120 | 1250    | 0             | 105  | 80-120        | 1336          | 1.93  | 20        |      |
| Ethylbenzene                | 1282   | 120 | 1250    | 0             | 103  | 80-120        | 1325          | 3.27  | 20        |      |
| m,p-Xylene                  | 2580   | 250 | 2500    | 0             | 103  | 80-120        | 2679          | 3.75  | 20        |      |
| Methylene chloride          | 1147   | 250 | 1250    | 0             | 91.7 | 76.2-120      | 1184          | 3.21  | 20        |      |
| Styrene                     | 1337   | 120 | 1250    | 0             | 107  | 80-120        | 1394          | 4.18  | 20        |      |
| Tetrachloroethene           | 1227   | 120 | 1250    | 0             | 98.1 | 68.5-130      | 1256          | 2.36  | 20        |      |
| Toluene                     | 1261   | 120 | 1250    | 0             | 101  | 80-120        | 1299          | 2.98  | 20        |      |
| trans-1,3-Dichloropropene   | 1310   | 120 | 1250    | 0             | 105  | 80-120        | 1366          | 4.18  | 20        |      |
| Trichloroethene             | 1204   | 120 | 1250    | 0             | 96.3 | 78.9-120      | 1259          | 4.48  | 20        |      |
| Vinyl acetate               | 2537   | 250 | 2500    | 0             | 101  | 62.4-133      | 2551          | 0.542 | 20        |      |
| Vinyl chloride              | 1235   | 50  | 1250    | 0             | 98.8 | 72.7-128      | 1171          | 5.3   | 20        |      |
| Xylenes, Total              | 3911   | 380 | 3750    | 0             | 104  | 80-120        | 4072          | 4.03  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 1084   | 120 | 1250    | 0             | 86.7 | 71-126        | 1122          | 3.41  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 1100   | 120 | 1250    | 0             | 88   | 74-125        | 1136          | 3.14  | 20        |      |
| Surr: Dibromofluoromethane  | 1021   | 120 | 1250    | 0             | 81.7 | 73-126        | 1085          | 6.05  | 20        |      |
| Surr: Toluene-d8            | 1120   | 120 | 1250    | 0             | 89.6 | 75-125        | 1168          | 4.23  | 20        |      |

The following samples were analyzed in this batch:

0411079-03A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

# QC BATCH REPORT

Batch ID: R24438 InstrumentID: IC201

MBLK Sample ID: WBLKW1-110904 Test Code: E300 Units: mg/L Analysis Date: 11/10/04 2:02

Client ID: Run ID: IC201\_041109A SeqNo: 570552 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.29   | 0.10 | 5       | 0             | 106  | 80-120        | 0             |      |           |      |

LCS Sample ID: WLCSW1-110904 Test Code: E300 Units: mg/L Analysis Date: 11/10/04 2:30

Client ID: Run ID: IC201\_041109A SeqNo: 570553 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.03   | 0.50 | 10      | 0             | 90.3 | 80-120        | 0             |      |           |      |
| Fluoride                         | 1.97   | 0.10 | 2       | 0             | 98.5 | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.66   | 1.0  | 10      | 0             | 96.6 | 80-120        | 0             |      |           |      |
| Nitrate/Nitrite (as N)           | 3.8    | 0.10 | 0       | 0             | 0    | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.44   | 0.10 | 5       | 0             | 109  | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-11090 Test Code: E300 Units: mg/L Analysis Date: 11/10/04 2:59

Client ID: Run ID: IC201\_041109A SeqNo: 570554 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 8.88   | 0.50 | 10      | 0             | 88.8 | 80-120        | 9.03          | 1.68  | 20        |      |
| Fluoride                         | 1.98   | 0.10 | 2       | 0             | 99   | 80-120        | 1.97          | 0.506 | 20        |      |
| Sulfate                          | 9.66   | 1.0  | 10      | 0             | 96.6 | 80-120        | 9.66          | 0     | 20        |      |
| Nitrate/Nitrite (as N)           | 3.77   | 0.10 | 0       | 0             | 0    | 80-120        | 3.8           | 0.793 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.22   | 0.10 | 5       | 0             | 104  | 80-120        | 5.44          | 4.13  | 20        |      |

MS Sample ID: 0410298-01EMS Test Code: E300 Units: mg/L Analysis Date: 11/10/04 4:24

Client ID: Run ID: IC201\_041109A SeqNo: 570557 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 1313   | 0.50 | 10      | 1326          | -128 | 75-125        | 0             |      |           | SEO  |
| Fluoride                         | 2.68   | 0.10 | 2       | 0.71          | 98.5 | 75-125        | 0             |      |           |      |
| Sulfate                          | 47.13  | 1.0  | 10      | 34.62         | 125  | 75-125        | 0             |      |           | S    |
| Nitrate/Nitrite (as N)           | 3.78   | 0.10 | 4       | 0             | 94.5 | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.4    | 0.10 | 5       | 0             | 108  | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0411079  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24438 InstrumentID: IC201

MSD Sample ID: 0410298-01EMSD Test Code: E300 Units: mg/L Analysis Date: 11/10/04 4:53

Client ID: Run ID: IC201\_041109A SeqNo: 570558 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 1325   | 0.50 | 10      | 1326          | -6.1 | 75-125        | 1313          | 0.926 | 20        | SEO  |
| Fluoride                         | 2.58   | 0.10 | 2       | 0.71          | 93.5 | 75-125        | 2.68          | 3.8   | 20        |      |
| Sulfate                          | 46.52  | 1.0  | 10      | 34.62         | 119  | 75-125        | 47.13         | 1.3   | 20        |      |
| Nitrate/Nitrite (as N)           | 3.56   | 0.10 | 4       | 0             | 89   | 75-125        | 3.78          | 5.99  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.52   | 0.10 | 5       | 0             | 110  | 80-120        | 5.4           | 2.2   | 20        |      |

DUP Sample ID: 0410298-01EDUP Test Code: E300 Units: mg/L Analysis Date: 11/10/04 3:56

Client ID: Run ID: IC201\_041109A SeqNo: 570556 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 1344   | 0.50 | 0       | 0             | 0    | 0-0           | 1326          | 1.37  | 20        | E    |
| Fluoride                         | 0.7    | 0.10 | 0       | 0             | 0    | 0-0           | 0.71          | 1.42  | 20        |      |
| Sulfate                          | 34.67  | 1.0  | 0       | 0             | 0    | 0-0           | 34.62         | 0.144 | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 4.25   | 0.10 | 5       | 0             | 85   | 80-120        | 4.27          | 0.469 | 20        |      |

DUP Sample ID: 0410327-01BDUP Test Code: E300 Units: mg/L Analysis Date: 11/10/04 13:26

Client ID: Run ID: IC201\_041109A SeqNo: 571432 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 2339   | 50  | 0       | 0             | 0    | 0-0           | 2346          | 0.299 | 20        |      |
| Fluoride                         | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Sulfate                          | ND     | 100 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 506    | 10  | 500     | 0             | 101  | 80-120        | 525           | 3.69  | 20        |      |

The following samples were analyzed in this batch:

0411079-01B 0411079-02B 0411079-03B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0411079  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R24595 InstrumentID: UV-2101PC

MBLK Sample ID: WBLKW1-111404 Test Code: E335.3 Units: mg/L Analysis Date: 11/15/04 0:00

Client ID: Run ID: UV-2101PC\_041115A SeqNo: 574162 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCW1-111404 Test Code: E335.3 Units: mg/L Analysis Date: 11/15/04 0:00

Client ID: Run ID: UV-2101PC\_041115A SeqNo: 574163 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.191  | 0.020 | 0.2     | 0             | 95.5 | 80-120        | 0             |      |           |      |

MS Sample ID: 0411068-22BMS Test Code: E335.3 Units: mg/L Analysis Date: 11/15/04 0:00

Client ID: Run ID: UV-2101PC\_041115A SeqNo: 574175 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2003 | 0.020 | 0.2     | 0.0078        | 96.2 | 75-125        | 0             |      |           |      |

MSD Sample ID: 0411068-22BMSD Test Code: E335.3 Units: mg/L Analysis Date: 11/15/04 0:00

Client ID: Run ID: UV-2101PC\_041115A SeqNo: 574176 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.198  | 0.020 | 0.2     | 0.0078        | 95.1 | 75-125        | 0.2003        | 1.15 | 25        |      |

DUP Sample ID: 0411068-22BDUP Test Code: E335.3 Units: mg/L Analysis Date: 11/15/04 0:00

Client ID: Run ID: UV-2101PC\_041115A SeqNo: 574186 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.0078 | 0.020 | 0       | 0             | 0    | 0-0           | 0.0078        | 0    | 20        | J    |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0411079-01D | 0411079-02D | 0411079-03D |
|-------------|-------------|-------------|

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



☐ e-Lab, Inc.  
10450 Stanchiff Rd. #210  
Houston, Texas 77099  
(Tel) 281.530.5656  
(Fax) 281.530.5887

## Chain of Custody Form

Page 1 of 1

☐ e-Lab, Inc.  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

| Customer Information                                                                                                                                    |                    |                |                         | Project Information               |         |                |       | e-Lab Project Manager: <u>Anna Sampling</u> e-Lab Work Order #: <u>0111079</u>                                                               |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------|-------------------------|-----------------------------------|---------|----------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------|------|------|----------------------------------|-------|-----------|---|---|------|---|---|---|---|---|---|---|------|
| Purchase Order                                                                                                                                          | Project Name       | Project Number | Bill To Company         | Invoice Attn                      | Address | City/State/Zip | Phone | Fax                                                                                                                                          | e-Mail/Address | Date | Time | Matrix                           | Pres. | # Bottles | A | B | C    | D | E | F | G | H | I | J | Hold |
| Work Order                                                                                                                                              |                    |                | Navajo Refining Company |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| Company Name                                                                                                                                            |                    |                | Navajo Refining Company |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| Send Report To                                                                                                                                          |                    |                | Jeff Byrd               |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| Address                                                                                                                                                 |                    |                | PO Box 159              |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| City/State/Zip                                                                                                                                          |                    |                | Artesia, NM 88211       |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| Phone                                                                                                                                                   |                    |                | (505) 748-3311          |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| Fax                                                                                                                                                     |                    |                | (505) 746-5421          |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| e-Mail/Address                                                                                                                                          |                    |                |                         |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| No.                                                                                                                                                     | Sample Description | Date           | Time                    | Matrix                            | Pres.   | # Bottles      | A     | B                                                                                                                                            | C              | D    | E    | F                                | G     | H         | I | J | Hold |   |   |   |   |   |   |   |      |
| 1                                                                                                                                                       | TEL-3              | 11/5/04        | 1000                    | L                                 |         | 8              |       |                                                                                                                                              |                |      |      |                                  | X     |           |   |   |      |   |   |   |   |   |   |   |      |
| 2                                                                                                                                                       | TEL-2              | 11/5/04        | 1030                    | L                                 |         | 8              |       |                                                                                                                                              |                |      |      |                                  | X     |           |   |   |      |   |   |   |   |   |   |   |      |
| 3                                                                                                                                                       | TEL-1              | 11/5/04        | 1100                    | L                                 |         | 8              |       |                                                                                                                                              |                |      |      |                                  | X     |           |   |   |      |   |   |   |   |   |   |   |      |
| 4                                                                                                                                                       |                    |                |                         |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| 5                                                                                                                                                       |                    |                |                         |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| 6                                                                                                                                                       |                    |                |                         |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| 7                                                                                                                                                       |                    |                |                         |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| 8                                                                                                                                                       |                    |                |                         |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| 9                                                                                                                                                       |                    |                |                         |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| 10                                                                                                                                                      |                    |                |                         |                                   |         |                |       |                                                                                                                                              |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| Sampler(s) Please Print & Sign                                                                                                                          |                    |                |                         | Shipment Method                   |         |                |       | Required Turnaround Time: (Check Box)                                                                                                        |                |      |      | Results Due Date:                |       |           |   |   |      |   |   |   |   |   |   |   |      |
| <u>B</u>                                                                                                                                                |                    |                |                         | <u>FedEx</u>                      |         |                |       | <input type="checkbox"/> STD 10 WK Days <input type="checkbox"/> 5 WK Days <input type="checkbox"/> 2 WK Days <input type="checkbox"/> Other |                |      |      | <input type="checkbox"/> 24 Hour |       |           |   |   |      |   |   |   |   |   |   |   |      |
| Relinquished by: <u>Byrd</u>                                                                                                                            |                    |                |                         | Received by: <u>Byrd</u>          |         |                |       | Notes:                                                                                                                                       |                |      |      |                                  |       |           |   |   |      |   |   |   |   |   |   |   |      |
| Relinquished by: <u>Byrd</u>                                                                                                                            |                    |                |                         | Received by: <u>Byrd</u>          |         |                |       | e-Lab Cooler ID                                                                                                                              |                |      |      | Cooler Temp                      |       |           |   |   |      |   |   |   |   |   |   |   |      |
| Logged by (Laboratory):                                                                                                                                 |                    |                |                         | Checked by (Laboratory):          |         |                |       | Level III Std QC                                                                                                                             |                |      |      | Level IV SW 848/CLP              |       |           |   |   |      |   |   |   |   |   |   |   |      |
| Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> SO <sub>3</sub> 6-NaHSO <sub>3</sub> 7-Other 8-4°C |                    |                |                         | OC Package: (Check One Box Below) |         |                |       | Level III Std QC                                                                                                                             |                |      |      | Level IV SW 848/CLP              |       |           |   |   |      |   |   |   |   |   |   |   |      |

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 11/8/2004 8:51:00 AM

Work Order Number 0411079

Received by: RSZ

Checklist completed by

DICHARDSON7R2

11-9-04

Signature

Date

Reviewed by

PP

Initials

11/10/04

Date

Matrix:

W

Carrier name FedEx

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☐

No ☒

Container/Temp Blank temperature in compliance?

Yes ☐

No ☒

Temperature(s)/Thermometer(s):

10.3c

002

Water - VOA vials have zero headspace?

Yes ☒

No ☐ No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐ N/A ☐

Adjusted?

NO

Checked by

RS

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted

Date contacted:

Person contacted

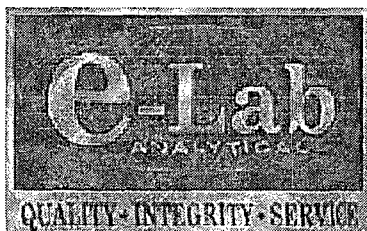
Contacted by:

Regarding:

Comments:

Corrective Action





**e-Lab Analytical, Inc.**

10450 Standcliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

August 18, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: NCL/TEL

Work Order : **0408060**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 3 samples on 8/5/2004 8:30:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 36.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

*Jeffrey L Croston*

Electronically approved by: Jeffrey L Croston

Jeffrey L Croston

**e-Lab Analytical, Inc.**

**Date:** August 18, 2004

**CLIENT:** Navajo Refining Company  
**Project:** NCL/TEL  
**Work Order:** 0408060

## Work Order Sample Summary

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0408060-01           | TEL-2                   | Liquid        |                   | 8/4/2004 09:00         | 8/5/2004 08:30       | <input type="checkbox"/> |
| 0408060-02           | TEL-1                   | Liquid        |                   | 8/4/2004 09:30         | 8/5/2004 08:30       | <input type="checkbox"/> |
| 0408060-03           | TEL-3                   | Liquid        |                   | 8/4/2004 10:00         | 8/5/2004 08:30       | <input type="checkbox"/> |

**CLIENT:** Navajo Refining Company

**Project:** NCL/TEL

**Work Order:** 0408060

**Case Narrative**

Batch 9904 Metals MS/MSD was an unrelated sample.

Batch 9873 Semivolatile LCS/LCSD RPD recoveries were outside of control limits for Benzidine (43.1%). Individual QC criteria was within control limits in the LCS/LCSD.

Batch R22337 Volatiles (sample TEL-2) MS/MSD recoveries were outside of control limits for Vinyl acetate (137% and 135%) and 2-Chloroethyl vinyl ether (57.3% MSD only). Recoveries were acceptable in the LCS.

Batch R22337 Volatiles (sample TEL-2) MS/MSD RPD recoveries were outside of control limits for 2-Chloroethyl vinyl ether (28.5%).

Batch R22339 Volatiles MS/MSD was an unrelated sample.

Batch R22302 Anions (sample TEL-2) MS/MSD recoveries were outside of control limits for Chloride and Sulfate, in which both were E and O flagged.

**e-Lab Analytical, Inc.**

Date: August 18, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0408060  
**Project:** NCL/TEL  
**Lab ID:** 0408060-01

**Client Sample ID:** TEL-2  
**Collection Date:** 8/4/2004 9:00:00 AM  
**Matrix:** LIQUID

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 8/11/2004 11:33:24 AM |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Arsenic                               | 0.0118  | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Barium                                | 0.0943  | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Boron                                 | 0.611   | 0.200        |      | mg/L  | 10              | 8/10/2004 7:10:00 PM  |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Calcium                               | 164     | 25.0         |      | mg/L  | 50              | 8/10/2004 6:20:00 PM  |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Copper                                | 0.00224 | 0.00200      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Iron                                  | 0.436   | 0.200        |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 8/12/2004 3:48:00 PM  |
| Magnesium                             | 167     | 10.0         |      | mg/L  | 50              | 8/10/2004 6:20:00 PM  |
| Manganese                             | 0.0264  | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Molybdenum                            | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Nickel                                | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Potassium                             | 0.882   | 0.200        |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Sodium                                | 375     | 10.0         |      | mg/L  | 50              | 8/10/2004 6:20:00 PM  |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| Zinc                                  | 0.00735 | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:32:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |
| 2,4,5-Trichlorophenol                 | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |
| 2,4,6-Trichlorophenol                 | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |
| 2-Methylnaphthalene                   | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |
| 2-Methylphenol                        | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |
| 2-Nitroaniline                        | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |
| 2-Nitrophenol                         | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |
| 3-Nitroaniline                        | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |
| 4-Methylphenol                        | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |
| 4-Nitroaniline                        | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |
| 4-Nitrophenol                         | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |
| Acenaphthene                          | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |
| Acenaphthylene                        | ND      | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM   |

**Qualifiers:**

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

E - Value above quantitation range

H - Analyzed outside of Hold Time

AR Page 1 of 9

**e-Lab Analytical, Inc.**

Date: August 18, 2004

CLIENT: Navajo Refining Company

Client Sample ID: TEL-2

Work Order: 0408060

Collection Date: 8/4/2004 9:00:00 AM

Project: NCL/TEL

Lab ID: 0408060-01

Matrix: LIQUID

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed       |
|----------------------------|--------|--------------|------|-------|-----------------|---------------------|
| Aniline                    | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Anthracene                 | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Benz(a)anthracene          | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Benzidine                  | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Hexachloroethane           | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Isophorone                 | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| N-Nitrosodimethylamine     | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| N-Nitrosodiphenylamine     | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Naphthalene                | 23     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Nitrobenzene               | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Pentachlorophenol          | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Phenanthrene               | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Phenol                     | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Pyrene                     | ND     | 11           |      | µg/L  | 1               | 8/9/2004 5:38:00 PM |
| Surr: 2,4,6-Tribromophenol | 106    | 39-153       |      | %REC  | 1               | 8/9/2004 5:38:00 PM |
| Surr: 2-Fluorobiphenyl     | 95.3   | 40-147       |      | %REC  | 1               | 8/9/2004 5:38:00 PM |
| Surr: 2-Fluorophenol       | 37.1   | 21-110       |      | %REC  | 1               | 8/9/2004 5:38:00 PM |
| Surr: 4-Terphenyl-d14      | 89.5   | 39-141       |      | %REC  | 1               | 8/9/2004 5:38:00 PM |
| Surr: Nitrobenzene-d5      | 88.7   | 37-140       |      | %REC  | 1               | 8/9/2004 5:38:00 PM |
| Surr: Phenol-d6            | 24.8   | 11-100       |      | %REC  | 1               | 8/9/2004 5:38:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |       |     |  |      |    |                      |
|---------------------------|-------|-----|--|------|----|----------------------|
| 1,1,1-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| 1,1,2,2-Tetrachloroethane | ND    | 5.0 |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| 1,1,2-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| 1,1-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| 1,1-Dichloroethene        | ND    | 5.0 |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| 1,2-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| 2-Butanone                | ND    | 10  |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| 2-Chloroethyl vinyl ether | ND    | 10  |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| 2-Hexanone                | ND    | 10  |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| 4-Methyl-2-pentanone      | ND    | 10  |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| Acetone                   | ND    | 10  |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| Benzene                   | 1,400 | 120 |  | µg/L | 25 | 8/12/2004 2:10:00 PM |
| Bromodichloromethane      | ND    | 5.0 |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| Bromoform                 | ND    | 5.0 |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| Bromomethane              | ND    | 5.0 |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| Carbon disulfide          | ND    | 10  |  | µg/L | 1  | 8/11/2004 8:22:00 PM |
| Carbon tetrachloride      | ND    | 5.0 |  | µg/L | 1  | 8/11/2004 8:22:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

\* - Value exceeds Maximum Contaminant Level

H - Analyzed outside of Hold Time

AR Page 2 of 9

**e-Lab Analytical, Inc.**

Date: August 18, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0408060  
**Project:** NCL/TEL  
**Lab ID:** 0408060-01

**Client Sample ID:** TEL-2  
**Collection Date:** 8/4/2004 9:00:00 AM  
**Matrix:** LIQUID

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed        |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Ethylbenzene                        | 40     | 5.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| m,p-Xylene                          | 230    | 10            |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Toluene                             | 110    | 5.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Xylenes, Total                      | 250    | 15            |      | µg/L                | 1               | 8/11/2004 8:22:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 84.7   | 71-126        |      | %REC                | 1               | 8/11/2004 8:22:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 86.0   | 71-126        |      | %REC                | 25              | 8/12/2004 2:10:00 PM |
| Surr: 4-Bromofluorobenzene          | 93.8   | 74-125        |      | %REC                | 1               | 8/11/2004 8:22:00 PM |
| Surr: 4-Bromofluorobenzene          | 97.3   | 74-125        |      | %REC                | 25              | 8/12/2004 2:10:00 PM |
| Surr: Dibromofluoromethane          | 94.2   | 73-126        |      | %REC                | 25              | 8/12/2004 2:10:00 PM |
| Surr: Dibromofluoromethane          | 87.5   | 73-126        |      | %REC                | 1               | 8/11/2004 8:22:00 PM |
| Surr: Toluene-d8                    | 95.4   | 75-125        |      | %REC                | 1               | 8/11/2004 8:22:00 PM |
| Surr: Toluene-d8                    | 97.0   | 75-125        |      | %REC                | 25              | 8/12/2004 2:10:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                      |
| Chloride                            | 208    | 5.00          |      | mg/L                | 10              | 8/10/2004 5:32:00 PM |
| Fluoride                            | 1.33   | 0.100         |      | mg/L                | 1               | 8/10/2004 3:38:00 PM |
| Sulfate                             | 730    | 20.0          |      | mg/L                | 20              | 8/10/2004 6:00:00 PM |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC                | 1               | 8/10/2004 3:38:00 PM |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC                | 10              | 8/10/2004 5:32:00 PM |
| Surr: Dichloroacetic acid (surr)    | 107    | 80-120        |      | %REC                | 20              | 8/10/2004 6:00:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>MG</b>  |                 |                      |
| Alkalinity, Bicarbonate (As CaCO3)  | 845    | 5.00          |      | mg/L                | 1               | 8/13/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 8/13/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 8/13/2004            |
| Alkalinity, Total (As CaCO3)        | 845    | 5.00          |      | mg/L                | 1               | 8/13/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                      |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 8/9/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: August 18, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL  
 Lab ID: 0408060-02

Client Sample ID: TEL-1  
 Collection Date: 8/4/2004 9:30:00 AM  
 Matrix: LIQUID

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 8/11/2004 11:44:52 AM |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Barium                                | 0.0112  | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Boron                                 | 0.569   | 0.200        |      | mg/L  | 10              | 8/10/2004 7:14:00 PM  |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Calcium                               | 344     | 25.0         |      | mg/L  | 50              | 8/10/2004 6:25:00 PM  |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Copper                                | ND      | 0.00200      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Iron                                  | 0.818   | 0.200        |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 8/12/2004 3:54:00 PM  |
| Magnesium                             | 120     | 10.0         |      | mg/L  | 50              | 8/10/2004 6:25:00 PM  |
| Manganese                             | 0.106   | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Molybdenum                            | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Nickel                                | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Potassium                             | 0.946   | 0.200        |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Sodium                                | 355     | 10.0         |      | mg/L  | 50              | 8/10/2004 6:25:00 PM  |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| Zinc                                  | 0.00581 | 0.00500      |      | mg/L  | 1               | 8/11/2004 4:59:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM   |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: August 18, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0408060  
**Project:** NCL/TEL  
**Lab ID:** 0408060-02

**Client Sample ID:** TEL-1  
**Collection Date:** 8/4/2004 9:30:00 AM  
**Matrix:** LIQUID

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed       |
|----------------------------|--------|--------------|------|-------|-----------------|---------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:03:00 PM |
| Surr: 2,4,6-Tribromophenol | 101    | 39-153       |      | %REC  | 1               | 8/9/2004 6:03:00 PM |
| Surr: 2-Fluorobiphenyl     | 89.5   | 40-147       |      | %REC  | 1               | 8/9/2004 6:03:00 PM |
| Surr: 2-Fluorophenol       | 37.3   | 21-110       |      | %REC  | 1               | 8/9/2004 6:03:00 PM |
| Surr: 4-Terphenyl-d14      | 91.2   | 39-141       |      | %REC  | 1               | 8/9/2004 6:03:00 PM |
| Surr: Nitrobenzene-d5      | 88.0   | 37-140       |      | %REC  | 1               | 8/9/2004 6:03:00 PM |
| Surr: Phenol-d6            | 23.3   | 11-100       |      | %REC  | 1               | 8/9/2004 6:03:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| Benzene                   | 19 | 5.0 |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 8/11/2004 8:50:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 8/11/2004 8:50:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: August 18, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0408060  
**Project:** NCL/TEL  
**Lab ID:** 0408060-02

**Client Sample ID:** TEL-1  
**Collection Date:** 8/4/2004 9:30:00 AM  
**Matrix:** LIQUID

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|-----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 8/11/2004 8:50:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 86.4   | 71-126       |      | %REC  | 1               | 8/11/2004 8:50:00 PM |
| Surr: 4-Bromofluorobenzene  | 94.5   | 74-125       |      | %REC  | 1               | 8/11/2004 8:50:00 PM |
| Surr: Dibromofluoromethane  | 91.2   | 73-126       |      | %REC  | 1               | 8/11/2004 8:50:00 PM |
| Surr: Toluene-d8            | 100    | 75-125       |      | %REC  | 1               | 8/11/2004 8:50:00 PM |

**ANIONS BY ION CHROMATOGRAPHY**
**E300**

 Analyst: **MG**

|                                  |       |        |  |      |     |                      |
|----------------------------------|-------|--------|--|------|-----|----------------------|
| Chloride                         | 193   | 2.50   |  | mg/L | 5   | 8/10/2004 7:26:00 PM |
| Fluoride                         | 2.30  | 0.100  |  | mg/L | 1   | 8/10/2004 6:57:00 PM |
| Sulfate                          | 1,310 | 100    |  | mg/L | 100 | 8/10/2004 7:54:00 PM |
| Surr: Dichloroacetic acid (surr) | 104   | 80-120 |  | %REC | 1   | 8/10/2004 6:57:00 PM |
| Surr: Dichloroacetic acid (surr) | 105   | 80-120 |  | %REC | 5   | 8/10/2004 7:26:00 PM |
| Surr: Dichloroacetic acid (surr) | 108   | 80-120 |  | %REC | 100 | 8/10/2004 7:54:00 PM |

**ALKALINITY**
**E310.1**

 Analyst: **MG**

|                                    |     |      |  |      |   |           |
|------------------------------------|-----|------|--|------|---|-----------|
| Alkalinity, Bicarbonate (As CaCO3) | 470 | 5.00 |  | mg/L | 1 | 8/13/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 8/13/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 8/13/2004 |
| Alkalinity, Total (As CaCO3)       | 470 | 5.00 |  | mg/L | 1 | 8/13/2004 |

**CYANIDE, TOTAL**
**E335.3**

 Analyst: **LMD**

|         |    |        |  |      |   |          |
|---------|----|--------|--|------|---|----------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 8/9/2004 |
|---------|----|--------|--|------|---|----------|

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL  
 Lab ID: 0408060-03

Client Sample ID: TEL-3  
 Collection Date: 8/4/2004 10:00:00 AM  
 Matrix: LIQUID

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 8/11/2004 11:46:23 AM |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Barium                                | 0.0113  | 0.00500      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Boron                                 | 0.578   | 0.200        |      | mg/L  | 10              | 8/10/2004 7:19:00 PM  |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Calcium                               | 644     | 25.0         |      | mg/L  | 50              | 8/10/2004 6:29:00 PM  |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Copper                                | 0.00271 | 0.00200      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Iron                                  | 1.49    | 0.200        |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 8/12/2004 4:05:00 PM  |
| Magnesium                             | 210     | 10.0         |      | mg/L  | 50              | 8/10/2004 6:29:00 PM  |
| Manganese                             | 0.00992 | 0.00500      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Molybdenum                            | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Nickel                                | 0.00795 | 0.00500      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Potassium                             | 3.61    | 0.200        |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Selenium                              | 0.00552 | 0.00500      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Sodium                                | 73.2    | 10.0         |      | mg/L  | 50              | 8/10/2004 6:29:00 PM  |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| Zinc                                  | 0.00811 | 0.00500      |      | mg/L  | 1               | 8/11/2004 5:04:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM   |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: August 18, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL  
 Lab ID: 0408060-03

Client Sample ID: TEL-3  
 Collection Date: 8/4/2004 10:00:00 AM  
 Matrix: LIQUID

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed       |
|----------------------------|--------|--------------|------|-------|-----------------|---------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 8/9/2004 6:28:00 PM |
| Surr: 2,4,6-Tribromophenol | 93.8   | 39-153       |      | %REC  | 1               | 8/9/2004 6:28:00 PM |
| Surr: 2-Fluorobiphenyl     | 85.3   | 40-147       |      | %REC  | 1               | 8/9/2004 6:28:00 PM |
| Surr: 2-Fluorophenol       | 32.6   | 21-110       |      | %REC  | 1               | 8/9/2004 6:28:00 PM |
| Surr: 4-Terphenyl-d14      | 88.9   | 39-141       |      | %REC  | 1               | 8/9/2004 6:28:00 PM |
| Surr: Nitrobenzene-d5      | 79.6   | 37-140       |      | %REC  | 1               | 8/9/2004 6:28:00 PM |
| Surr: Phenol-d6            | 20.4   | 11-100       |      | %REC  | 1               | 8/9/2004 6:28:00 PM |

## VOLATILES BY GC/MS

SW8260

Analyst: PC

|                           |    |     |  |      |   |                       |
|---------------------------|----|-----|--|------|---|-----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| Benzene                   | 80 | 5.0 |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 8/12/2004 12:48:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 8/12/2004 12:48:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

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**e-Lab Analytical, Inc.**

Date: August 18, 2004

CLIENT: Navajo Refining Company  
Work Order: 0408060  
Project: NCL/TEL  
Lab ID: 0408060-03

Client Sample ID: TEL-3  
Collection Date: 8/4/2004 10:00:00 AM  
Matrix: LIQUID

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|-----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| m,p-Xylene                  | 56     | 10           |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Toluene                     | 8.7    | 5.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Xylenes, Total              | 60     | 15           |      | µg/L  | 1               | 8/12/2004 12:48:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 86.1   | 71-126       |      | %REC  | 1               | 8/12/2004 12:48:00 PM |
| Surr: 4-Bromofluorobenzene  | 98.0   | 74-125       |      | %REC  | 1               | 8/12/2004 12:48:00 PM |
| Surr: Dibromofluoromethane  | 85.8   | 73-126       |      | %REC  | 1               | 8/12/2004 12:48:00 PM |
| Surr: Toluene-d8            | 101    | 75-125       |      | %REC  | 1               | 8/12/2004 12:48:00 PM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |       |        |      |     |                       |
|----------------------------------|-------|--------|------|-----|-----------------------|
| Chloride                         | 80.8  | 2.50   | mg/L | 5   | 8/10/2004 9:48:00 PM  |
| Fluoride                         | 3.32  | 0.100  | mg/L | 1   | 8/10/2004 9:20:00 PM  |
| Sulfate                          | 1,670 | 100    | mg/L | 100 | 8/10/2004 10:17:00 PM |
| Surr: Dichloroacetic acid (surr) | 104   | 80-120 | %REC | 1   | 8/10/2004 9:20:00 PM  |
| Surr: Dichloroacetic acid (surr) | 107   | 80-120 | %REC | 5   | 8/10/2004 9:48:00 PM  |
| Surr: Dichloroacetic acid (surr) | 109   | 80-120 | %REC | 100 | 8/10/2004 10:17:00 PM |

**ALKALINITY****E310.1**Analyst: **MG**

|                                    |     |      |      |   |           |
|------------------------------------|-----|------|------|---|-----------|
| Alkalinity, Bicarbonate (As CaCO3) | 450 | 5.00 | mg/L | 1 | 8/13/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 | mg/L | 1 | 8/13/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 | mg/L | 1 | 8/13/2004 |
| Alkalinity, Total (As CaCO3)       | 450 | 5.00 | mg/L | 1 | 8/13/2004 |

**CYANIDE, TOTAL****E335.3**Analyst: **LMD**

|         |    |        |      |   |          |
|---------|----|--------|------|---|----------|
| Cyanide | ND | 0.0200 | mg/L | 1 | 8/9/2004 |
|---------|----|--------|------|---|----------|

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: Aug 18 2004

CLIENT: Navajo Refining Company

## QC BATCH REPORT

Work Order: 0408060

Project: NCL/TEL

Batch ID: 9904 InstrumentID: ICP4500

MBLK Sample ID: MBLKW2-081004 Test Code: SW6020 Units: mg/L Analysis Date: 08/10/04 18:02

Client ID: Run ID: ICP4500\_040810A SeqNo: 521548 Prep Date: 8/10/2004 DF: 1

| Analyte    | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|-----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | ND        | 0.010  |         |               |      |               |               |      |           |      |
| Barium     | 0.0008843 | 0.0050 |         |               |      |               |               |      |           | J    |
| Beryllium  | ND        | 0.0020 |         |               |      |               |               |      |           |      |
| Boron      | ND        | 0.020  |         |               |      |               |               |      |           |      |
| Cadmium    | ND        | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium    | ND        | 0.50   |         |               |      |               |               |      |           |      |
| Cobalt     | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Copper     | 0.0008465 | 0.0050 |         |               |      |               |               |      |           | J    |
| Iron       | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Magnesium  | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Manganese  | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Molybdenum | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium  | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Selenium   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Silver     | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium     | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc       | 0.001517  | 0.0050 |         |               |      |               |               |      |           | J    |

MBLK Sample ID: MBLKW2-081004 Test Code: SW6020 Units: mg/L Analysis Date: 08/12/04 14:37

Client ID: Run ID: ICP4500\_040812A SeqNo: 522782 Prep Date: 8/10/2004 DF: 1

| Analyte  | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chromium | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel   | ND     | 0.0050 |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW2-081004 Test Code: SW6020 Units: mg/L Analysis Date: 08/11/04 20:11

Client ID: Run ID: ICP4500\_040811A SeqNo: 524080 Prep Date: 8/10/2004 DF: 1

| Analyte | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Arsenic | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Lead    | ND     | 0.0050 |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in assoc. Method Blank

I - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

U - Analyzed for but not detected

J - Referenced analyte value is &gt; 4 times amount spiked

P - Dual Column results percent difference &gt; 40%

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9904 InstrumentID: ICP4500

LCS Sample ID: MLCSW2-081004 Test Code: SW6020 Units: mg/L Analysis Date: 08/10/04 18:07

Client ID: Run ID: ICP4500\_040810A SeqNo: 521549 Prep Date: 8/10/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.04382 | 0.010  | 0.05    | 0             | 87.6 | 79-126        | 0             |      |           |      |
| Barium     | 0.0464  | 0.0050 | 0.05    | 0             | 92.8 | 79.8-119      | 0             |      |           |      |
| Beryllium  | 0.05186 | 0.0020 | 0.05    | 0             | 104  | 78.9-120      | 0             |      |           |      |
| Boron      | 0.5054  | 0.020  | 0.5     | 0             | 101  | 80-120        | 0             |      |           |      |
| Cadmium    | 0.05259 | 0.0020 | 0.05    | 0             | 105  | 79.1-119      | 0             |      |           |      |
| Calcium    | 4.788   | 0.50   | 5       | 0             | 95.8 | 80-121        | 0             |      |           |      |
| Chromium   | 0.04599 | 0.0050 | 0.05    | 0             | 92   | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04661 | 0.0050 | 0.05    | 0             | 93.2 | 82-121        | 0             |      |           |      |
| Copper     | 0.04689 | 0.0050 | 0.05    | 0             | 93.8 | 83-121        | 0             |      |           |      |
| Iron       | 4.827   | 0.20   | 5       | 0             | 96.5 | 80-120        | 0             |      |           |      |
| Magnesium  | 4.864   | 0.20   | 5       | 0             | 97.3 | 80-120        | 0             |      |           |      |
| Manganese  | 0.04819 | 0.0050 | 0.05    | 0             | 96.4 | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04491 | 0.0050 | 0.05    | 0             | 89.8 | 84.6-115      | 0             |      |           |      |
| Nickel     | 0.04846 | 0.0050 | 0.05    | 0             | 96.9 | 85-120        | 0             |      |           |      |
| Potassium  | 4.878   | 0.20   | 5       | 0             | 97.6 | 80-120        | 0             |      |           |      |
| Selenium   | 0.0533  | 0.0050 | 0.05    | 0             | 107  | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04833 | 0.0050 | 0.05    | 0             | 96.7 | 83-117        | 0             |      |           |      |
| Sodium     | 4.69    | 0.20   | 5       | 0             | 93.8 | 82.4-120      | 0             |      |           |      |
| Strontium  | 0.04688 | 0.0050 | 0.05    | 0             | 93.8 | 82.1-119      | 0             |      |           |      |
| Vanadium   | 0.05307 | 0.0050 | 0.05    | 0             | 106  | 83-118        | 0             |      |           |      |

LCS Sample ID: MLCSW2-081004 Test Code: SW6020 Units: mg/L Analysis Date: 08/11/04 20:16

Client ID: Run ID: ICP4500\_040811A SeqNo: 524081 Prep Date: 8/10/2004 DF: 1

| Analyte | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Arsenic | 0.05039 | 0.0050 | 0.05    | 0             | 101  | 80-121        | 0             |      |           |      |
| Lead    | 0.0431  | 0.0050 | 0.05    | 0             | 86.2 | 80-118        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

Q - Analyte detected below quantitation limits

S - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9904 InstrumentID: ICP4500

MS Sample ID: 0408092-02CMS Test Code: SW6020 Units: mg/L Analysis Date: 08/11/04 19:48

Client ID: Run ID: ICP4500\_040811A SeqNo: 522216 Prep Date: 8/10/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.05217 | 0.010  | 0.05    | 0.01352       | 77.3 | 79-126        | 0             |      |           | S    |
| Arsenic    | 0.05011 | 0.0050 | 0.05    | 0.001335      | 97.6 | 80-121        | 0             |      |           |      |
| Barium     | 0.1172  | 0.0050 | 0.05    | 0.07998       | 74.4 | 79.8-119      | 0             |      |           | S    |
| Beryllium  | 0.05131 | 0.0020 | 0.05    | 0.00004934    | 103  | 78.9-120      | 0             |      |           |      |
| Boron      | 0.7363  | 0.020  | 0.5     | 0.1914        | 109  | 80-120        | 0             |      |           |      |
| Cadmium    | 0.0472  | 0.0020 | 0.05    | 0.00008581    | 94.2 | 79.1-119      | 0             |      |           |      |
| Calcium    | 107.1   | 0.50   | 5       | 105.7         | 28   | 80-121        | 0             |      |           | SEO  |
| Chromium   | 0.04428 | 0.0050 | 0.05    | 0.001494      | 85.6 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04302 | 0.0050 | 0.05    | 0.0003783     | 85.3 | 82-121        | 0             |      |           |      |
| Copper     | 0.04159 | 0.0050 | 0.05    | 0.0007875     | 81.6 | 83-121        | 0             |      |           | S    |
| Iron       | 4.928   | 0.20   | 5       | 0.3668        | 91.2 | 80-120        | 0             |      |           |      |
| Lead       | 0.04197 | 0.0050 | 0.05    | 0.0001027     | 83.7 | 80-118        | 0             |      |           |      |
| Magnesium  | 7.222   | 0.20   | 5       | 2.889         | 86.7 | 80-120        | 0             |      |           |      |
| Manganese  | 0.05603 | 0.0050 | 0.05    | 0.01314       | 85.8 | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04409 | 0.0050 | 0.05    | 0.003146      | 81.9 | 84.6-115      | 0             |      |           | S    |
| Nickel     | 0.04548 | 0.0050 | 0.05    | 0.003907      | 83.1 | 85-120        | 0             |      |           | S    |
| Potassium  | 10.53   | 0.20   | 5       | 5.98          | 91   | 80-120        | 0             |      |           |      |
| Selenium   | 0.05084 | 0.0050 | 0.05    | 0.002637      | 96.4 | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04079 | 0.0050 | 0.05    | 0.00002997    | 81.5 | 83-117        | 0             |      |           | S    |
| Sodium     | 26.27   | 0.20   | 5       | 22.94         | 66.6 | 82.4-120      | 0             |      |           | SO   |
| Vanadium   | 0.04812 | 0.0050 | 0.05    | 0.003261      | 89.7 | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.05588 | 0.0050 | 0.05    | 0.01259       | 86.6 | 83-118        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

- Analyte detected below quantitation limits

- Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9904 InstrumentID: ICP4500

MSD Sample ID: 0408092-02CMSD Test Code: SW6020 Units: mg/L Analysis Date: 08/11/04 19:53

Client ID: Run ID: ICP4500\_040811A SeqNo: 522217 Prep Date: 8/10/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Aluminum   | 0.05455 | 0.010  | 0.05    | 0.01352       | 82.1 | 79-126        | 0.05217       | 4.46  | 15        |      |
| Arsenic    | 0.05023 | 0.0050 | 0.05    | 0.001335      | 97.8 | 80-121        | 0.05011       | 0.239 | 15        |      |
| Barium     | 0.1182  | 0.0050 | 0.05    | 0.07998       | 76.4 | 79.8-119      | 0.1172        | 0.85  | 15        | S    |
| Beryllium  | 0.04963 | 0.0020 | 0.05    | 0.00004934    | 99.2 | 78.9-120      | 0.05131       | 3.33  | 15        |      |
| Boron      | 0.6872  | 0.020  | 0.5     | 0.1914        | 99.2 | 80-120        | 0.7363        | 6.9   | 15        |      |
| Cadmium    | 0.04759 | 0.0020 | 0.05    | 0.00008581    | 95   | 79.1-119      | 0.0472        | 0.823 | 15        |      |
| Calcium    | 107.1   | 0.50   | 5       | 105.7         | 28   | 80-121        | 107.1         | 0     | 15        | SEO  |
| Chromium   | 0.04493 | 0.0050 | 0.05    | 0.001494      | 86.9 | 79.3-121      | 0.04428       | 1.46  | 15        |      |
| Cobalt     | 0.04391 | 0.0050 | 0.05    | 0.0003783     | 87.1 | 82-121        | 0.04302       | 2.05  | 15        |      |
| Copper     | 0.04223 | 0.0050 | 0.05    | 0.0007875     | 82.9 | 83-121        | 0.04159       | 1.53  | 15        | S    |
| Iron       | 5.003   | 0.20   | 5       | 0.3668        | 92.7 | 80-120        | 4.928         | 1.51  | 15        |      |
| Lead       | 0.04197 | 0.0050 | 0.05    | 0.0001027     | 83.7 | 80-118        | 0.04197       | 0     | 15        |      |
| Magnesium  | 7.308   | 0.20   | 5       | 2.889         | 88.4 | 80-120        | 7.222         | 1.18  | 15        |      |
| Manganese  | 0.05655 | 0.0050 | 0.05    | 0.01314       | 86.8 | 82-119        | 0.05603       | 0.924 | 15        |      |
| Molybdenum | 0.04484 | 0.0050 | 0.05    | 0.003146      | 83.4 | 84.6-115      | 0.04409       | 1.69  | 15        | S    |
| Nickel     | 0.04648 | 0.0050 | 0.05    | 0.003907      | 85.1 | 85-120        | 0.04548       | 2.17  | 15        |      |
| Potassium  | 10.83   | 0.20   | 5       | 5.98          | 97   | 80-120        | 10.53         | 2.81  | 15        |      |
| Selenium   | 0.04984 | 0.0050 | 0.05    | 0.002637      | 94.4 | 79.2-118      | 0.05084       | 1.99  | 15        |      |
| Silver     | 0.04124 | 0.0050 | 0.05    | 0.00002997    | 82.4 | 83-117        | 0.04079       | 1.1   | 15        | S    |
| Sodium     | 26.47   | 0.20   | 5       | 22.94         | 70.6 | 82.4-120      | 26.27         | 0.758 | 15        | SO   |
| Vanadium   | 0.04862 | 0.0050 | 0.05    | 0.003261      | 90.7 | 82.1-119      | 0.04812       | 1.03  | 15        |      |
| Zinc       | 0.05541 | 0.0050 | 0.05    | 0.01259       | 85.6 | 83-118        | 0.05588       | 0.845 | 15        |      |

ND - Not Detected at the Reporting Limit

L - Analyte detected below quantitation limits

R - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9904 InstrumentID: ICP4500

DUP Sample ID: 0408092-02CDUP Test Code: SW6020 Units: mg/L Analysis Date: 08/11/04 19:43

Client ID: Run ID: ICP4500\_040811A SeqNo: 522215 Prep Date: 8/10/2004 DF: 1

| Analyte    | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|------------|-----------|--------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Aluminum   | 0.01242   | 0.010  | 0       | 0             | 0    | 0-0           | 0.01352       | 8.48  | 25        |      |
| Arsenic    | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.001335      | 0     | 25        |      |
| Barium     | 0.07516   | 0.0050 | 0       | 0             | 0    | 0-0           | 0.07998       | 6.21  | 25        |      |
| Beryllium  | ND        | 0.0020 | 0       | 0             | 0    | 0-0           | 0.00004934    | 0     | 25        |      |
| Boron      | 0.1872    | 0.020  | 0       | 0             | 0    | 0-0           | 0.1914        | 2.22  | 25        |      |
| Cadmium    | ND        | 0.0020 | 0       | 0             | 0    | 0-0           | 0.00008581    | 0     | 25        |      |
| Chromium   | 0.0009325 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.001494      | 0     | 25        | J    |
| Cobalt     | 0.0003565 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0003783     | 0     | 25        | J    |
| Copper     | 0.0007176 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0007875     | 0     | 25        | J    |
| Iron       | 0.3224    | 0.20   | 0       | 0             | 0    | 0-0           | 0.3668        | 12.9  | 25        |      |
| Lead       | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0001027     | 0     | 25        |      |
| Magnesium  | 2.867     | 0.20   | 0       | 0             | 0    | 0-0           | 2.889         | 0.764 | 25        |      |
| Manganese  | 0.01244   | 0.0050 | 0       | 0             | 0    | 0-0           | 0.01314       | 5.47  | 25        |      |
| Molybdenum | 0.002996  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.003146      | 0     | 25        | J    |
| Nickel     | 0.003649  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.003907      | 0     | 25        | J    |
| Potassium  | 5.964     | 0.20   | 0       | 0             | 0    | 0-0           | 5.98          | 0.268 | 25        |      |
| Selenium   | 0.002591  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.002637      | 0     | 25        | J    |
| Silver     | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00002997    | 0     | 25        |      |
| Vanadium   | 0.003238  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.003261      | 0     | 25        | J    |
| Zinc       | 0.01075   | 0.0050 | 0       | 0             | 0    | 0-0           | 0.01259       | 15.8  | 25        |      |

DUP Sample ID: 0408092-02CDUP Test Code: SW6020 Units: mg/L Analysis Date: 08/12/04 13:38

Client ID: Run ID: ICP4500\_040812A SeqNo: 522665 Prep Date: 8/10/2004 DF: 10

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Calcium | 98.92  | 5.0 | 0       | 0             | 0    | 0-0           | 98.23         | 0.7  | 25        |      |
| Sodium  | 22.55  | 2.0 | 0       | 0             | 0    | 0-0           | 22.27         | 1.25 | 25        |      |

The following samples were analyzed in this batch:

0408060-01C 0408060-02C 0408060-03C

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0408060  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9920 InstrumentID: Mercury

MBLK Sample ID: GBLKW1-081004 Test Code: SW7470 Units: mg/L Analysis Date: 08/11/04 11:26

Client ID: Run ID: MERCURY\_040811A SeqNo: 521869 Prep Date: 8/10/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW1-081004 Test Code: SW7470 Units: mg/L Analysis Date: 08/11/04 11:28

Client ID: Run ID: MERCURY\_040811A SeqNo: 521870 Prep Date: 8/10/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00524 | 0.00020 | 0.005   | 0             | 105  | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW1-081004 Test Code: SW7470 Units: mg/L Analysis Date: 08/11/04 11:29

Client ID: Run ID: MERCURY\_040811A SeqNo: 521871 Prep Date: 8/10/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00528 | 0.00020 | 0.005   | 0             | 106  | 83-115        | 0.00524       | 0.76 | 20        |      |

MS Sample ID: 0408060-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 08/11/04 11:36

Client ID: TEL-2 Run ID: MERCURY\_040811A SeqNo: 521874 Prep Date: 8/10/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00497 | 0.00020 | 0.005   | -0.00001      | 99.6 | 83-115        | 0             |      |           |      |

MSD Sample ID: 0408060-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 08/11/04 11:38

Client ID: TEL-2 Run ID: MERCURY\_040811A SeqNo: 521875 Prep Date: 8/10/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Mercury | 0.005  | 0.00020 | 0.005   | -0.00001      | 100  | 83-115        | 0.00497       | 0.602 | 20        |      |

DUP Sample ID: 0408060-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 08/11/04 11:34

Client ID: TEL-2 Run ID: MERCURY\_040811A SeqNo: 521873 Prep Date: 8/10/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | -0.00001      | 0    | 20        |      |

The following samples were analyzed in this batch:

0408060-01C 0408060-02C 0408060-03C

ND - Not Detected at the Reporting Limit

Analyte detected below quantitation limits

Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9873 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-040806 Test Code: SW8270 Units: µg/L Analysis Date: 08/09/04 12:17  
 Client ID: Run ID: SV-3\_040809B SeqNo: 521379 Prep Date: 8/6/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 91.01  | 10  | 100     | 0             | 91   | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 89.76  | 10  | 100     | 0             | 89.8 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 38.44  | 10  | 100     | 0             | 38.4 | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 96.71  | 10  | 100     | 0             | 96.7 | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 90.5   | 10  | 100     | 0             | 90.5 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 22.89  | 10  | 100     | 0             | 22.9 | 11-100        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

- Analyte detected below quantitation limits

- Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9873 InstrumentID: SV-3

LCS Sample ID: SLCSW1-040806 Test Code: SW8270 Units: µg/L Analysis Date: 08/09/04 12:42  
 Client ID: Run ID: SV-3\_040809B SeqNo: 521380 Prep Date: 8/6/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 52.19  | 10  | 50      | 0             | 104  | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 102.9  | 10  | 100     | 0             | 103  | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 101    | 10  | 100     | 0             | 101  | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 48.92  | 10  | 50      | 0             | 97.8 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 71.61  | 10  | 100     | 0             | 71.6 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 53.19  | 10  | 50      | 0             | 106  | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 99.1   | 10  | 100     | 0             | 99.1 | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 45.77  | 10  | 50      | 0             | 91.5 | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 93.11  | 10  | 150     | 0             | 62.1 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 50.87  | 10  | 50      | 0             | 102  | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 32.36  | 10  | 100     | 0             | 32.4 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 52.03  | 10  | 50      | 0             | 104  | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 52.35  | 10  | 50      | 0             | 105  | 67-116        | 0             |      |           |      |
| Aniline                    | 40.99  | 10  | 50      | 0             | 82   | 40-130        | 0             |      |           |      |
| Anthracene                 | 55.9   | 10  | 50      | 0             | 112  | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 53.4   | 10  | 50      | 0             | 107  | 55-131        | 0             |      |           |      |
| Benzidine                  | 26.98  | 10  | 50      | 0             | 54   | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 47.89  | 10  | 50      | 0             | 95.8 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 57.92  | 10  | 50      | 0             | 116  | 42-123        | 0             |      |           |      |
| Isophorone                 | 55.06  | 10  | 50      | 0             | 110  | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 51.27  | 10  | 50      | 0             | 103  | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 22.84  | 10  | 50      | 0             | 45.7 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 58.72  | 10  | 50      | 0             | 117  | 72-144        | 0             |      |           |      |
| Naphthalene                | 51.59  | 10  | 50      | 0             | 103  | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 51.96  | 10  | 50      | 0             | 104  | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 80.78  | 10  | 100     | 0             | 80.8 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 53.3   | 10  | 50      | 0             | 107  | 69-119        | 0             |      |           |      |
| Phenol                     | 32.29  | 10  | 100     | 0             | 32.3 | 16-115        | 0             |      |           |      |
| Pyrene                     | 53.8   | 10  | 50      | 0             | 108  | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 97.34  | 10  | 100     | 0             | 97.3 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 91.74  | 10  | 100     | 0             | 91.7 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 47.63  | 10  | 100     | 0             | 47.6 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 100.9  | 10  | 100     | 0             | 101  | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 99.96  | 10  | 100     | 0             | 100  | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 28.37  | 10  | 100     | 0             | 28.4 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9873 InstrumentID: SV-3

LCSD Sample ID: SLCSDW1-040806 Test Code: SW8270 Units: µg/L Analysis Date: 08/09/04 13:06

Client ID: Run ID: SV-3\_040809B SeqNo: 521381 Prep Date: 8/6/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,2,4-Trichlorobenzene     | 50.83  | 10  | 50      | 0             | 102  | 50-115        | 52.19         | 2.65  | 30        |      |
| 2,4,5-Trichlorophenol      | 103.6  | 10  | 100     | 0             | 104  | 68-128        | 102.9         | 0.626 | 30        |      |
| 2,4,6-Trichlorophenol      | 102.5  | 10  | 100     | 0             | 103  | 66-125        | 101           | 1.47  | 30        |      |
| 2-Methylnaphthalene        | 49.66  | 10  | 50      | 0             | 99.3 | 47-122        | 48.92         | 1.51  | 30        |      |
| 2-Methylphenol             | 76     | 10  | 100     | 0             | 76   | 51-115        | 71.61         | 5.96  | 30        |      |
| 2-Nitroaniline             | 55     | 10  | 50      | 0             | 110  | 64-128        | 53.19         | 3.34  | 30        |      |
| 2-Nitrophenol              | 100.9  | 10  | 100     | 0             | 101  | 60-119        | 99.1          | 1.77  | 30        |      |
| 3-Nitroaniline             | 45.92  | 10  | 50      | 0             | 91.8 | 61-118        | 45.77         | 0.335 | 30        |      |
| 4-Methylphenol             | 99.51  | 10  | 150     | 0             | 66.3 | 44-115        | 93.11         | 6.64  | 30        |      |
| 4-Nitroaniline             | 51.3   | 10  | 50      | 0             | 103  | 61-123        | 50.87         | 0.835 | 30        |      |
| 4-Nitrophenol              | 31.4   | 10  | 100     | 0             | 31.4 | 17-100        | 32.36         | 3.02  | 30        |      |
| Acenaphthene               | 52.62  | 10  | 50      | 0             | 105  | 68-115        | 52.03         | 1.13  | 30        |      |
| Acenaphthylene             | 52.57  | 10  | 50      | 0             | 105  | 67-116        | 52.35         | 0.435 | 30        |      |
| Aniline                    | 47.02  | 10  | 50      | 0             | 94   | 40-130        | 40.99         | 13.7  | 30        |      |
| Anthracene                 | 54.8   | 10  | 50      | 0             | 110  | 70-129        | 55.9          | 1.99  | 30        |      |
| Benz(a)anthracene          | 53.93  | 10  | 50      | 0             | 108  | 55-131        | 53.4          | 0.989 | 30        |      |
| Benzidine                  | 41.82  | 10  | 50      | 0             | 83.6 | 10-115        | 26.98         | 43.1  | 30        | R    |
| Hexachloroethane           | 48.29  | 10  | 50      | 0             | 96.6 | 46-115        | 47.89         | 0.827 | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 56.02  | 10  | 50      | 0             | 112  | 42-123        | 57.92         | 3.34  | 30        |      |
| Isophorone                 | 56.34  | 10  | 50      | 0             | 113  | 63-117        | 55.06         | 2.31  | 30        |      |
| N-Nitrosodi-n-propylamine  | 57.38  | 10  | 50      | 0             | 115  | 67-115        | 51.27         | 11.3  | 30        |      |
| N-Nitrosodimethylamine     | 23.26  | 10  | 50      | 0             | 46.5 | 28-115        | 22.84         | 1.83  | 30        |      |
| N-Nitrosodiphenylamine     | 58.53  | 10  | 50      | 0             | 117  | 72-144        | 58.72         | 0.318 | 30        |      |
| Naphthalene                | 51.1   | 10  | 50      | 0             | 102  | 52-115        | 51.59         | 0.951 | 30        |      |
| Nitrobenzene               | 51.91  | 10  | 50      | 0             | 104  | 65-115        | 51.96         | 0.106 | 30        |      |
| Pentachlorophenol          | 87.12  | 10  | 100     | 0             | 87.1 | 65-123        | 80.78         | 7.55  | 30        |      |
| Phenanthrene               | 52.29  | 10  | 50      | 0             | 105  | 69-119        | 53.3          | 1.9   | 30        |      |
| Phenol                     | 30.12  | 10  | 100     | 0             | 30.1 | 16-115        | 32.29         | 6.96  | 30        |      |
| Pyrene                     | 53.3   | 10  | 50      | 0             | 107  | 51-130        | 53.8          | 0.917 | 30        |      |
| Surr: 2,4,6-Tribromophenol | 97.01  | 10  | 100     | 0             | 97   | 39-153        | 97.34         | 0.34  | 30        |      |
| Surr: 2-Fluorobiphenyl     | 91.42  | 10  | 100     | 0             | 91.4 | 40-147        | 91.74         | 0.354 | 30        |      |
| Surr: 2-Fluorophenol       | 46.33  | 10  | 100     | 0             | 46.3 | 21-110        | 47.63         | 2.76  | 30        |      |
| Surr: 4-Terphenyl-d14      | 101.4  | 10  | 100     | 0             | 101  | 39-141        | 100.9         | 0.49  | 30        |      |
| Surr: Nitrobenzene-d5      | 99.03  | 10  | 100     | 0             | 99   | 37-140        | 99.96         | 0.932 | 30        |      |
| Surr: Phenol-d6            | 27.91  | 10  | 100     | 0             | 27.9 | 11-100        | 28.37         | 1.64  | 30        |      |

The following samples were analyzed in this batch:

0408060-01E 0408060-02E 0408060-03E

ND - Not Detected at the Reporting Limit

Analyte detected below quantitation limits

- Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22337 InstrumentID: VOA1

MBLK Sample ID: VBLKW-0812 Test Code: SW8260 Units: µg/L Analysis Date: 08/12/04 11:26

Client ID: Run ID: VOA1\_040812A SeqNo: 523137 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.49  | 5.0 | 50      | 0             | 93   | 71-126        |               | 0    |           |      |
| Surr: 4-Bromofluorobenzene  | 48.22  | 5.0 | 50      | 0             | 96.4 | 74-125        |               | 0    |           |      |
| Surr: Dibromofluoromethane  | 47.65  | 5.0 | 50      | 0             | 95.3 | 73-126        |               | 0    |           |      |
| Surr: Toluene-d8            | 49.39  | 5.0 | 50      | 0             | 98.8 | 75-125        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22337 InstrumentID: VOA1

LCS Sample ID: VLCSW-0812 Test Code: SW8260 Units: µg/L Analysis Date: 08/12/04 10:59

Client ID: Run ID: VOA1\_040812A SeqNo: 523136 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 52.18  | 5.0 | 50      | 0             | 104  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 50.14  | 5.0 | 50      | 0             | 100  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 53.13  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 53.43  | 5.0 | 50      | 0             | 107  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 53.92  | 5.0 | 50      | 0             | 108  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 51.02  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 120.5  | 10  | 100     | 0             | 120  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 105.9  | 10  | 100     | 0             | 106  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 99.24  | 10  | 100     | 0             | 99.2 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 97.84  | 10  | 100     | 0             | 97.8 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 102.3  | 10  | 100     | 0             | 102  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 54.4   | 5.0 | 50      | 0             | 109  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 48.97  | 5.0 | 50      | 0             | 97.9 | 80-120        | 0             |      |           |      |
| Bromoform                   | 48.22  | 5.0 | 50      | 0             | 96.4 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 51.01  | 5.0 | 50      | 0             | 102  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 104.2  | 10  | 100     | 0             | 104  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 50.58  | 5.0 | 50      | 0             | 101  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 50.97  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Chloroethane                | 51.69  | 5.0 | 50      | 0             | 103  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 53.03  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Chloromethane               | 46.48  | 5.0 | 50      | 0             | 93   | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 52.77  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 51.75  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 51.74  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 102.9  | 10  | 100     | 0             | 103  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 50.57  | 10  | 50      | 0             | 101  | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.38  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 50.9   | 5.0 | 50      | 0             | 102  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 55.33  | 5.0 | 50      | 0             | 111  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 51.75  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 48.77  | 5.0 | 50      | 0             | 97.5 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 130.7  | 10  | 100     | 0             | 131  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 50.25  | 2.0 | 50      | 0             | 100  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 153.8  | 15  | 150     | 0             | 103  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.67  | 5.0 | 50      | 0             | 93.3 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 50.68  | 5.0 | 50      | 0             | 101  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 47.71  | 5.0 | 50      | 0             | 95.4 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 50.14  | 5.0 | 50      | 0             | 100  | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22337 InstrumentID: VOA1

MS Sample ID: 0408060-01AMS Test Code: SW8260 Units: µg/L Analysis Date: 08/12/04 14:37

Client ID: TEL-2 Run ID: VOA1\_040812A SeqNo: 523140 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 1191   | 120 | 1250    | 0             | 95.3 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 1316   | 120 | 1250    | 0             | 105  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 1363   | 120 | 1250    | 0             | 109  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 1327   | 120 | 1250    | 0             | 106  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 1245   | 120 | 1250    | 0             | 99.6 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 1292   | 120 | 1250    | 0             | 103  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 2979   | 250 | 2500    | 0             | 119  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 1911   | 250 | 2500    | 0             | 76.4 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 2573   | 250 | 2500    | 0             | 103  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 2624   | 250 | 2500    | 0             | 105  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 2266   | 250 | 2500    | 0             | 90.6 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 2761   | 120 | 1250    | 1420          | 107  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 1217   | 120 | 1250    | 0             | 97.3 | 80-120        | 0             |      |           |      |
| Bromoform                   | 1258   | 120 | 1250    | 0             | 101  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 839.7  | 120 | 1250    | 0             | 67.2 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 2382   | 250 | 2500    | 151.9         | 89.2 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 1118   | 120 | 1250    | 0             | 89.4 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 1196   | 120 | 1250    | 0             | 95.7 | 80-120        | 0             |      |           |      |
| Chloroethane                | 1253   | 120 | 1250    | 0             | 100  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 1321   | 120 | 1250    | 0             | 106  | 80-120        | 0             |      |           |      |
| Chloromethane               | 1085   | 120 | 1250    | 0             | 86.8 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 1305   | 120 | 1250    | 0             | 104  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 1288   | 120 | 1250    | 0             | 103  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 1280   | 120 | 1250    | 0             | 102  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 2618   | 250 | 2500    | 157.4         | 98.4 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 1174   | 250 | 1250    | 0             | 93.9 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 1265   | 120 | 1250    | 0             | 101  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 1183   | 120 | 1250    | 0             | 94.6 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 1431   | 120 | 1250    | 89.34         | 107  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 1283   | 120 | 1250    | 0             | 103  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 1154   | 120 | 1250    | 0             | 92.3 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 3424   | 250 | 2500    | 0             | 137  | 62.4-133      | 0             |      |           | S    |
| Vinyl chloride              | 1164   | 50  | 1250    | 0             | 93.1 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 3889   | 380 | 3750    | 157.4         | 99.5 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 1159   | 120 | 1250    | 0             | 92.7 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 1263   | 120 | 1250    | 0             | 101  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 1220   | 120 | 1250    | 0             | 97.6 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 1227   | 120 | 1250    | 0             | 98.1 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22337 InstrumentID: VOA1

| MSD                         | Sample ID: 0408060-01AMSD |     |         | Test Code: SW8260 |      | Units: µg/L   |               | Analysis Date: 08/12/04 15:04 |           |      |
|-----------------------------|---------------------------|-----|---------|-------------------|------|---------------|---------------|-------------------------------|-----------|------|
| Client ID: TEL-2            | Run ID: VOA1_040812A      |     |         | SeqNo: 523141     |      | Prep Date:    |               | DF: 25                        |           |      |
| Analyte                     | Result                    | PQL | SPK Val | SPK Ref Value     | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 1125                      | 120 | 1250    | 0                 | 90   | 75.2-120      | 1191          | 5.67                          | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 1252                      | 120 | 1250    | 0                 | 100  | 72.4-121      | 1316          | 4.99                          | 20        |      |
| 1,1,2-Trichloroethane       | 1303                      | 120 | 1250    | 0                 | 104  | 80-120        | 1363          | 4.51                          | 20        |      |
| 1,1-Dichloroethane          | 1295                      | 120 | 1250    | 0                 | 104  | 76.9-120      | 1327          | 2.45                          | 20        |      |
| 1,1-Dichloroethene          | 1141                      | 120 | 1250    | 0                 | 91.3 | 72.6-123      | 1245          | 8.71                          | 20        |      |
| 1,2-Dichloroethane          | 1261                      | 120 | 1250    | 0                 | 101  | 80-120        | 1292          | 2.46                          | 20        |      |
| 2-Butanone                  | 2916                      | 250 | 2500    | 0                 | 117  | 69-131        | 2979          | 2.13                          | 20        |      |
| 2-Chloroethyl vinyl ether   | 1434                      | 250 | 2500    | 0                 | 57.3 | 60-135        | 1911          | 28.5                          | 20        | SR   |
| 2-Hexanone                  | 2529                      | 250 | 2500    | 0                 | 101  | 55.6-126      | 2573          | 1.74                          | 20        |      |
| 4-Methyl-2-pentanone        | 2576                      | 250 | 2500    | 0                 | 103  | 67.4-121      | 2624          | 1.83                          | 20        |      |
| Acetone                     | 2169                      | 250 | 2500    | 0                 | 86.8 | 64.4-140      | 2266          | 4.35                          | 20        |      |
| Benzene                     | 2730                      | 120 | 1250    | 1420              | 105  | 80-120        | 2761          | 1.13                          | 20        |      |
| Bromodichloromethane        | 1187                      | 120 | 1250    | 0                 | 95   | 80-120        | 1217          | 2.42                          | 20        |      |
| Bromoform                   | 1243                      | 120 | 1250    | 0                 | 99.5 | 77.9-121      | 1258          | 1.18                          | 20        |      |
| Bromomethane                | 937.3                     | 120 | 1250    | 0                 | 75   | 63.3-137      | 839.7         | 11                            | 20        |      |
| Carbon disulfide            | 2277                      | 250 | 2500    | 151.9             | 85   | 74.1-123      | 2382          | 4.51                          | 20        |      |
| Carbon tetrachloride        | 1033                      | 120 | 1250    | 0                 | 82.7 | 74.7-120      | 1118          | 7.87                          | 20        |      |
| Chlorobenzene               | 1234                      | 120 | 1250    | 0                 | 98.7 | 80-120        | 1196          | 3.09                          | 20        |      |
| Chloroethane                | 1222                      | 120 | 1250    | 0                 | 97.7 | 74.7-126      | 1253          | 2.57                          | 20        |      |
| Chloroform                  | 1280                      | 120 | 1250    | 0                 | 102  | 80-120        | 1321          | 3.19                          | 20        |      |
| Chloromethane               | 1098                      | 120 | 1250    | 0                 | 87.8 | 64.5-132      | 1085          | 1.14                          | 20        |      |
| cis-1,3-Dichloropropene     | 1299                      | 120 | 1250    | 0                 | 104  | 80-120        | 1305          | 0.463                         | 20        |      |
| Dibromochloromethane        | 1285                      | 120 | 1250    | 0                 | 103  | 80-120        | 1288          | 0.178                         | 20        |      |
| Ethylbenzene                | 1221                      | 120 | 1250    | 0                 | 97.7 | 80-120        | 1280          | 4.71                          | 20        |      |
| m,p-Xylene                  | 2603                      | 250 | 2500    | 157.4             | 97.8 | 80-120        | 2618          | 0.596                         | 20        |      |
| Methylene chloride          | 1228                      | 250 | 1250    | 0                 | 98.3 | 76.2-120      | 1174          | 4.51                          | 20        |      |
| Styrene                     | 1339                      | 120 | 1250    | 0                 | 107  | 80-120        | 1265          | 5.72                          | 20        |      |
| Tetrachloroethene           | 1083                      | 120 | 1250    | 0                 | 86.7 | 68.5-130      | 1183          | 8.8                           | 20        |      |
| Toluene                     | 1378                      | 120 | 1250    | 89.34             | 103  | 80-120        | 1431          | 3.76                          | 20        |      |
| trans-1,3-Dichloropropene   | 1283                      | 120 | 1250    | 0                 | 103  | 80-120        | 1283          | 0.00763                       | 20        |      |
| Trichloroethene             | 1113                      | 120 | 1250    | 0                 | 89.1 | 78.9-120      | 1154          | 3.55                          | 20        |      |
| Vinyl acetate               | 3371                      | 250 | 2500    | 0                 | 135  | 62.4-133      | 3424          | 1.56                          | 20        | S    |
| Vinyl chloride              | 1100                      | 50  | 1250    | 0                 | 88   | 72.7-128      | 1164          | 5.71                          | 20        |      |
| Xylenes, Total              | 3879                      | 380 | 3750    | 157.4             | 99.2 | 80-120        | 3889          | 0.265                         | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 1166                      | 120 | 1250    | 0                 | 93.3 | 71-126        | 1159          | 0.618                         | 20        |      |
| Surr: 4-Bromofluorobenzene  | 1267                      | 120 | 1250    | 0                 | 101  | 74-125        | 1263          | 0.293                         | 20        |      |
| Surr: Dibromofluoromethane  | 1201                      | 120 | 1250    | 0                 | 96   | 73-126        | 1220          | 1.58                          | 20        |      |
| Surr: Toluene-d8            | 1270                      | 120 | 1250    | 0                 | 102  | 75-125        | 1227          | 3.47                          | 20        |      |

The following samples were analyzed in this batch:

0408060-01A 0408060-03A

ND - Not Detected at the Reporting Limit

I - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22339 InstrumentID: VOA1

MBLK Sample ID: VBLKW-0811 Test Code: SW8260 Units: µg/L Analysis Date: 08/11/04 11:33

Client ID: Run ID: VOA1\_040811A SeqNo: 522379 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 48.78  | 5.0 | 50      | 0             | 97.6 | 71-126        |               | 0    |           |      |
| Surr: 4-Bromofluorobenzene  | 46.88  | 5.0 | 50      | 0             | 93.8 | 74-125        |               | 0    |           |      |
| Surr: Dibromofluoromethane  | 48.35  | 5.0 | 50      | 0             | 96.7 | 73-126        |               | 0    |           |      |
| Surr: Toluene-d8            | 47.27  | 5.0 | 50      | 0             | 94.5 | 75-125        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

- Analyte detected below quantitation limits

- Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22339 InstrumentID: VOA1

LCS Sample ID: VLCSW-0811 Test Code: SW8260 Units: µg/L Analysis Date: 08/11/04 12:01

Client ID: Run ID: VOA1\_040811A SeqNo: 522380 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 49.72  | 5.0 | 50      | 0             | 99.4 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 48.93  | 5.0 | 50      | 0             | 97.9 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 52     | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 49.67  | 5.0 | 50      | 0             | 99.3 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 50.43  | 5.0 | 50      | 0             | 101  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 51.28  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 109.9  | 10  | 100     | 0             | 110  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 104.6  | 10  | 100     | 0             | 105  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 106.5  | 10  | 100     | 0             | 107  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 101.1  | 10  | 100     | 0             | 101  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 106.9  | 10  | 100     | 0             | 107  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 51.96  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 49.93  | 5.0 | 50      | 0             | 99.9 | 80-120        | 0             |      |           |      |
| Bromoform                   | 51.26  | 5.0 | 50      | 0             | 103  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 50.28  | 5.0 | 50      | 0             | 101  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 98.9   | 10  | 100     | 0             | 98.9 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 51.29  | 5.0 | 50      | 0             | 103  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 49.47  | 5.0 | 50      | 0             | 98.9 | 80-120        | 0             |      |           |      |
| Chloroethane                | 49.13  | 5.0 | 50      | 0             | 98.3 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 47.29  | 5.0 | 50      | 0             | 94.6 | 80-120        | 0             |      |           |      |
| Chloromethane               | 45.79  | 5.0 | 50      | 0             | 91.6 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 52.38  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 51.64  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 50.75  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 100.4  | 10  | 100     | 0             | 100  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 46.07  | 10  | 50      | 0             | 92.1 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 53.21  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 50.69  | 5.0 | 50      | 0             | 101  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 52.21  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 53.39  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 50.19  | 5.0 | 50      | 0             | 100  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 122.6  | 10  | 100     | 0             | 123  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 47.5   | 2.0 | 50      | 0             | 95   | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 154.1  | 15  | 150     | 0             | 103  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.06  | 5.0 | 50      | 0             | 92.1 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.06  | 5.0 | 50      | 0             | 96.1 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 44.34  | 5.0 | 50      | 0             | 88.7 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 48.91  | 5.0 | 50      | 0             | 97.8 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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R - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22339 InstrumentID: VOA1

| MS                          | Sample ID: 0408067-03AMS |              |         | Test Code: SW8260 |        | Units: µg/L   | Analysis Date: 08/11/04 14:19 |        |           |      |
|-----------------------------|--------------------------|--------------|---------|-------------------|--------|---------------|-------------------------------|--------|-----------|------|
| Client ID:                  | Run ID:                  | VOA1_040811A |         | SeqNo:            | 522382 |               | Prep Date:                    | DF: 20 |           |      |
| Analyte                     | Result                   | PQL          | SPK Val | SPK Ref Value     | %REC   | Control Limit | RPD Ref Value                 | %RPD   | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 919.6                    | 100          | 1000    | 0                 | 92     | 75.2-120      | 0                             |        |           |      |
| 1,1,2,2-Tetrachloroethane   | 1135                     | 100          | 1000    | 0                 | 114    | 72.4-121      | 0                             |        |           |      |
| 1,1,2-Trichloroethane       | 1092                     | 100          | 1000    | 0                 | 109    | 80-120        | 0                             |        |           |      |
| 1,1-Dichloroethane          | 1003                     | 100          | 1000    | 0                 | 100    | 76.9-120      | 0                             |        |           |      |
| 1,1-Dichloroethene          | 977.3                    | 100          | 1000    | 0                 | 97.7   | 72.6-123      | 0                             |        |           |      |
| 1,2-Dichloroethane          | 1029                     | 100          | 1000    | 0                 | 103    | 80-120        | 0                             |        |           |      |
| 2-Butanone                  | 2598                     | 200          | 2000    | 0                 | 130    | 69-131        | 0                             |        |           |      |
| 2-Chloroethyl vinyl ether   | 1812                     | 200          | 2000    | 0                 | 90.6   | 60-135        | 0                             |        |           |      |
| 2-Hexanone                  | 2567                     | 200          | 2000    | 0                 | 128    | 55.6-126      | 0                             |        |           | S    |
| 4-Methyl-2-pentanone        | 2681                     | 200          | 2000    | 0                 | 134    | 67.4-121      | 0                             |        |           | S    |
| Acetone                     | 2363                     | 200          | 2000    | 477.1             | 94.3   | 64.4-140      | 0                             |        |           |      |
| Benzene                     | 1314                     | 100          | 1000    | 293               | 102    | 80-120        | 0                             |        |           |      |
| Bromodichloromethane        | 970.9                    | 100          | 1000    | 0                 | 97.1   | 80-120        | 0                             |        |           |      |
| Bromoform                   | 1096                     | 100          | 1000    | 0                 | 110    | 77.9-121      | 0                             |        |           |      |
| Bromomethane                | 976.9                    | 100          | 1000    | 0                 | 97.7   | 63.3-137      | 0                             |        |           |      |
| Carbon disulfide            | 1868                     | 200          | 2000    | 0                 | 93.4   | 74.1-123      | 0                             |        |           |      |
| Carbon tetrachloride        | 891.8                    | 100          | 1000    | 0                 | 89.2   | 74.7-120      | 0                             |        |           |      |
| Chlorobenzene               | 976                      | 100          | 1000    | 0                 | 97.6   | 80-120        | 0                             |        |           |      |
| Chloroethane                | 878.2                    | 100          | 1000    | 0                 | 87.8   | 74.7-126      | 0                             |        |           |      |
| Chloroform                  | 975                      | 100          | 1000    | 0                 | 97.5   | 80-120        | 0                             |        |           |      |
| Chloromethane               | 805.8                    | 100          | 1000    | 0                 | 80.6   | 64.5-132      | 0                             |        |           |      |
| cis-1,3-Dichloropropene     | 1001                     | 100          | 1000    | 0                 | 100    | 80-120        | 0                             |        |           |      |
| Dibromochloromethane        | 1056                     | 100          | 1000    | 0                 | 106    | 80-120        | 0                             |        |           |      |
| Ethylbenzene                | 1874                     | 100          | 1000    | 817.9             | 106    | 80-120        | 0                             |        |           |      |
| m,p-Xylene                  | 6457                     | 200          | 2000    | 4215              | 112    | 80-120        | 0                             |        |           |      |
| Methylene chloride          | 939.8                    | 200          | 1000    | 0                 | 94     | 76.2-120      | 0                             |        |           |      |
| Styrene                     | 1139                     | 100          | 1000    | 0                 | 114    | 80-120        | 0                             |        |           |      |
| Tetrachloroethene           | 959.9                    | 100          | 1000    | 0                 | 96     | 68.5-130      | 0                             |        |           |      |
| Toluene                     | 5832                     | 100          | 1000    | 4698              | 113    | 80-120        | 0                             |        |           | EO   |
| trans-1,3-Dichloropropene   | 1056                     | 100          | 1000    | 0                 | 106    | 80-120        | 0                             |        |           |      |
| Trichloroethene             | 938.3                    | 100          | 1000    | 0                 | 93.8   | 78.9-120      | 0                             |        |           |      |
| Vinyl acetate               | 2743                     | 200          | 2000    | 0                 | 137    | 62.4-133      | 0                             |        |           | S    |
| Vinyl chloride              | 853.6                    | 40           | 1000    | 0                 | 85.4   | 72.7-128      | 0                             |        |           |      |
| Xylenes, Total              | 9609                     | 300          | 3000    | 6283              | 111    | 80-120        | 0                             |        |           |      |
| Surr: 1,2-Dichloroethane-d4 | 908.2                    | 100          | 1000    | 0                 | 90.8   | 71-126        | 0                             |        |           |      |
| Surr: 4-Bromofluorobenzene  | 990.4                    | 100          | 1000    | 0                 | 99     | 74-125        | 0                             |        |           |      |
| Surr: Dibromofluoromethane  | 912.7                    | 100          | 1000    | 0                 | 91.3   | 73-126        | 0                             |        |           |      |
| Surr: Toluene-d8            | 959.7                    | 100          | 1000    | 0                 | 96     | 75-125        | 0                             |        |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22339 InstrumentID: VOA1

MSD Sample ID: 0408067-03AMSD Test Code: SW8260 Units: µg/L Analysis Date: 08/11/04 14:47

Client ID: Run ID: VOA1\_040811A SeqNo: 522383 Prep Date: DF: 20

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 915.4  | 100 | 1000    | 0             | 91.5 | 75.2-120      | 919.6         | 0.461  | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 1171   | 100 | 1000    | 0             | 117  | 72.4-121      | 1135          | 3.05   | 20        |      |
| 1,1,2-Trichloroethane       | 1128   | 100 | 1000    | 0             | 113  | 80-120        | 1092          | 3.25   | 20        |      |
| 1,1-Dichloroethane          | 959    | 100 | 1000    | 0             | 95.9 | 76.9-120      | 1003          | 4.52   | 20        |      |
| 1,1-Dichloroethene          | 978.2  | 100 | 1000    | 0             | 97.8 | 72.6-123      | 977.3         | 0.0931 | 20        |      |
| 1,2-Dichloroethane          | 1058   | 100 | 1000    | 0             | 106  | 80-120        | 1029          | 2.87   | 20        |      |
| 2-Butanone                  | 2617   | 200 | 2000    | 0             | 131  | 69-131        | 2598          | 0.703  | 20        |      |
| 2-Chloroethyl vinyl ether   | 1519   | 200 | 2000    | 0             | 76   | 60-135        | 1812          | 17.6   | 20        |      |
| 2-Hexanone                  | 2615   | 200 | 2000    | 0             | 131  | 55.6-126      | 2567          | 1.83   | 20        | S    |
| 4-Methyl-2-pentanone        | 2801   | 200 | 2000    | 0             | 140  | 67.4-121      | 2681          | 4.37   | 20        | S    |
| Acetone                     | 2241   | 200 | 2000    | 477.1         | 88.2 | 64.4-140      | 2363          | 5.32   | 20        |      |
| Benzene                     | 1385   | 100 | 1000    | 293           | 109  | 80-120        | 1314          | 5.26   | 20        |      |
| Bromodichloromethane        | 986.4  | 100 | 1000    | 0             | 98.6 | 80-120        | 970.9         | 1.59   | 20        |      |
| Bromoform                   | 1101   | 100 | 1000    | 0             | 110  | 77.9-121      | 1096          | 0.435  | 20        |      |
| Bromomethane                | 924.2  | 100 | 1000    | 0             | 92.4 | 63.3-137      | 976.9         | 5.54   | 20        |      |
| Carbon disulfide            | 1861   | 200 | 2000    | 0             | 93.1 | 74.1-123      | 1868          | 0.348  | 20        |      |
| Carbon tetrachloride        | 968.7  | 100 | 1000    | 0             | 96.9 | 74.7-120      | 891.8         | 8.26   | 20        |      |
| Chlorobenzene               | 972.2  | 100 | 1000    | 0             | 97.2 | 80-120        | 976           | 0.39   | 20        |      |
| Chloroethane                | 921.7  | 100 | 1000    | 0             | 92.2 | 74.7-126      | 878.2         | 4.83   | 20        |      |
| Chloroform                  | 977.3  | 100 | 1000    | 0             | 97.7 | 80-120        | 975           | 0.238  | 20        |      |
| Chloromethane               | 806.4  | 100 | 1000    | 0             | 80.6 | 64.5-132      | 805.8         | 0.0742 | 20        |      |
| cis-1,3-Dichloropropene     | 1060   | 100 | 1000    | 0             | 106  | 80-120        | 1001          | 5.7    | 20        |      |
| Dibromochloromethane        | 1071   | 100 | 1000    | 0             | 107  | 80-120        | 1056          | 1.43   | 20        |      |
| Ethylbenzene                | 1917   | 100 | 1000    | 817.9         | 110  | 80-120        | 1874          | 2.28   | 20        |      |
| m,p-Xylene                  | 6525   | 200 | 2000    | 4215          | 115  | 80-120        | 6457          | 1.05   | 20        |      |
| Methylene chloride          | 884.2  | 200 | 1000    | 0             | 88.4 | 76.2-120      | 939.8         | 6.09   | 20        |      |
| Styrene                     | 1167   | 100 | 1000    | 0             | 117  | 80-120        | 1139          | 2.42   | 20        |      |
| Tetrachloroethene           | 987.9  | 100 | 1000    | 0             | 98.8 | 68.5-130      | 959.9         | 2.87   | 20        |      |
| Toluene                     | 5920   | 100 | 1000    | 4698          | 122  | 80-120        | 5832          | 1.5    | 20        | SEO  |
| trans-1,3-Dichloropropene   | 1055   | 100 | 1000    | 0             | 105  | 80-120        | 1056          | 0.111  | 20        |      |
| Trichloroethene             | 976.1  | 100 | 1000    | 0             | 97.6 | 78.9-120      | 938.3         | 3.95   | 20        |      |
| Vinyl acetate               | 2668   | 200 | 2000    | 0             | 133  | 62.4-133      | 2743          | 2.8    | 20        | S    |
| Vinyl chloride              | 866.9  | 40  | 1000    | 0             | 86.7 | 72.7-128      | 853.6         | 1.55   | 20        |      |
| Xylenes, Total              | 9730   | 300 | 3000    | 6283          | 115  | 80-120        | 9609          | 1.26   | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 881    | 100 | 1000    | 0             | 88.1 | 71-126        | 908.2         | 3.03   | 20        |      |
| Surr: 4-Bromofluorobenzene  | 1019   | 100 | 1000    | 0             | 102  | 74-125        | 990.4         | 2.86   | 20        |      |
| Surr: Dibromofluoromethane  | 895.9  | 100 | 1000    | 0             | 89.6 | 73-126        | 912.7         | 1.86   | 20        |      |
| Surr: Toluene-d8            | 1005   | 100 | 1000    | 0             | 100  | 75-125        | 959.7         | 4.57   | 20        |      |

The following samples were analyzed in this batch:

0408060-01A 0408060-02A

ND - Not Detected at the Reporting Limit

L - Analyte detected below quantitation limits

R - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22263 InstrumentID: UV-2101PC

MBLK Sample ID: WBLKW1-080704 Test Code: E335.3 Units: mg/L Analysis Date: 08/09/04 0:00

Client ID: Run ID: UV-2101PC\_040809A SeqNo: 520697 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-080704 Test Code: E335.3 Units: mg/L Analysis Date: 08/09/04 0:00

Client ID: Run ID: UV-2101PC\_040809A SeqNo: 520698 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2003 | 0.020 | 0.2     | 0             | 100  | 80-120        | 0             |      |           |      |

MS Sample ID: 0408018-01DMS Test Code: E335.3 Units: mg/L Analysis Date: 08/09/04 0:00

Client ID: Run ID: UV-2101PC\_040809A SeqNo: 520711 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1996 | 0.020 | 0.2     | -0.00033      | 100  | 75-125        | 0             |      |           |      |

MSD Sample ID: 0408018-01DMSD Test Code: E335.3 Units: mg/L Analysis Date: 08/09/04 0:00

Client ID: Run ID: UV-2101PC\_040809A SeqNo: 520712 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2048 | 0.020 | 0.2     | -0.00033      | 103  | 75-125        | 0.1996        | 2.57 | 25        |      |

DUP Sample ID: 0408018-01DDUP Test Code: E335.3 Units: mg/L Analysis Date: 08/09/04 0:00

Client ID: Run ID: UV-2101PC\_040809A SeqNo: 520710 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 | 0       | 0             | 0    | 0-0           | -0.00033      | 0    | 20        |      |

The following samples were analyzed in this batch:

0408060-01D 0408060-02D 0408060-03D

ND - Not Detected at the Reporting Limit

L - Analyte detected below quantitation limits

- Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22302 InstrumentID: IC201

MBLK Sample ID: WBLKW1-080904 Test Code: E300 Units: mg/L Analysis Date: 08/09/04 18:40

Client ID: Run ID: IC201\_040809A SeqNo: 521498 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.24   | 0.10 | 5       | 0             | 105  | 80-120        | 0             |      |           |      |

LCS Sample ID: WLCSW1-080904 Test Code: E300 Units: mg/L Analysis Date: 08/09/04 19:08

Client ID: Run ID: IC201\_040809A SeqNo: 521500 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.15   | 0.50 | 10      | 0             | 91.5 | 80-120        | 0             |      |           |      |
| Fluoride                         | 1.9    | 0.10 | 2       | 0             | 95   | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.73   | 1.0  | 10      | 0             | 97.3 | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.59   | 0.10 | 5       | 0             | 112  | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-08090 Test Code: E300 Units: mg/L Analysis Date: 08/09/04 19:37

Client ID: Run ID: IC201\_040809A SeqNo: 521502 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 9.14   | 0.50 | 10      | 0             | 91.4 | 80-120        | 9.15          | 0.109 | 20        |      |
| Fluoride                         | 1.91   | 0.10 | 2       | 0             | 95.5 | 80-120        | 1.9           | 0.525 | 20        |      |
| Sulfate                          | 9.73   | 1.0  | 10      | 0             | 97.3 | 80-120        | 9.73          | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.59   | 0.10 | 5       | 0             | 112  | 80-120        | 5.59          | 0     | 20        |      |

MS Sample ID: 0408060-01BMS Test Code: E300 Units: mg/L Analysis Date: 08/10/04 16:35

Client ID: TEL-2 Run ID: IC201\_040809A SeqNo: 521634 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC  | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|-------|---------------|---------------|------|-----------|------|
| Chloride                         | 269    | 0.50 | 10      | 262           | 69.1  | 75-125        | 0             |      |           | SEO  |
| Fluoride                         | 3.15   | 0.10 | 2       | 1.33          | 91    | 75-125        | 0             |      |           |      |
| Sulfate                          | 926.4  | 1.0  | 10      | 930.8         | -44.1 | 75-125        | 0             |      |           | SEO  |
| Surr: Dichloroacetic acid (surr) | 5.32   | 0.10 | 5       | 0             | 106   | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

- Analyte detected below quantitation limits

- Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22302 InstrumentID: IC201

MSD Sample ID: 0408060-01BMSD Test Code: E300 Units: mg/L Analysis Date: 08/10/04 17:03

Client ID: TEL-2 Run ID: IC201\_040809A SeqNo: 521635 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 268.3  | 0.50 | 10      | 262           | 62.3 | 75-125        | 269           | 0.253 | 20        | SEO  |
| Fluoride                         | 3.15   | 0.10 | 2       | 1.33          | 91   | 75-125        | 3.15          | 0     | 20        |      |
| Sulfate                          | 931.2  | 1.0  | 10      | 930.8         | 3.9  | 75-125        | 926.4         | 0.517 | 20        | SEO  |
| Surr: Dichloroacetic acid (surr) | 5.13   | 0.10 | 5       | 0             | 103  | 80-120        | 5.32          | 3.64  | 20        |      |

DUP Sample ID: 0407349-28CDUP Test Code: E300 Units: mg/L Analysis Date: 08/09/04 21:31

Client ID: Run ID: IC201\_040809A SeqNo: 521509 Prep Date: DF: 1000

| Analyte                          | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|-------|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 28060  | 500   | 0       | 0             | 0    | 0-0           | 28040         | 0.0713 | 20        |      |
| Fluoride                         | ND     | 100   | 0       | 0             | 0    | 0-0           | 0             | 0      | 20        |      |
| Sulfate                          | 2560   | 1,000 | 0       | 0             | 0    | 0-0           | 2580          | 0.778  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5480   | 100   | 5000    | 0             | 110  | 80-120        | 5440          | 0.733  | 20        |      |

DUP Sample ID: 0408060-01BDUP Test Code: E300 Units: mg/L Analysis Date: 08/10/04 16:06

Client ID: TEL-2 Run ID: IC201\_040809A SeqNo: 521633 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Fluoride                         | 1.38   | 0.10 | 0       | 0             | 0    | 0-0           | 1.33          | 3.69 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.14   | 0.10 | 5       | 0             | 103  | 80-120        | 5.31          | 3.25 | 20        |      |

DUP Sample ID: 0408060-01BDUP Test Code: E300 Units: mg/L Analysis Date: 08/10/04 18:29

Client ID: TEL-2 Run ID: IC201\_040809A SeqNo: 521638 Prep Date: DF: 20

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 211.4  | 10  | 0       | 0             | 0    | 0-0           | 211.4         | 0     | 20        |      |
| Fluoride                         | 3.6    | 2.0 | 0       | 0             | 0    | 0-0           | 3.6           | 0     | 20        |      |
| Sulfate                          | 733.4  | 20  | 0       | 0             | 0    | 0-0           | 730           | 0.465 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 106.8  | 2.0 | 100     | 0             | 107  | 80-120        | 107.2         | 0.374 | 20        |      |

DUP Sample ID: 0408060-03BDUP Test Code: E300 Units: mg/L Analysis Date: 08/10/04 22:45

Client ID: TEL-3 Run ID: IC201\_040809A SeqNo: 521647 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 175    | 50  | 0       | 0             | 0    | 0-0           | 175           | 0      | 20        |      |
| Fluoride                         | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0      | 20        |      |
| Sulfate                          | 1671   | 100 | 0       | 0             | 0    | 0-0           | 1670          | 0.0599 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 553    | 10  | 500     | 0             | 111  | 80-120        | 545           | 1.46   | 20        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
Work Order: 0408060  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22302 InstrumentID: IC201

The following samples were analyzed in this batch:

0408060-01B

0408060-02B

0408060-03B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0408060  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22375 InstrumentID: WetChem

MBLK Sample ID: WBLKW1-081304 Test Code: E310.1 Units: mg/L Analysis Date: 08/13/04 0:00

Client ID: Run ID: WETCHEM\_040813B SeqNo: 523247 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-081304 Test Code: E310.1 Units: mg/L Analysis Date: 08/13/04 0:00

Client ID: Run ID: WETCHEM\_040813B SeqNo: 523248 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 1000   | 5.0 | 0       | 1             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Total (As CaCO3)       | 1000   | 5.0 | 1000    | 0             | 100  | 80-120        | 0             |      |           |      |

DUP Sample ID: 0408033-01BDUP Test Code: E310.1 Units: mg/L Analysis Date: 08/13/04 0:00

Client ID: Run ID: WETCHEM\_040813B SeqNo: 523254 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 180    | 5.0 | 0       | 0             | 0    | 0-0           | 180           | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 180    | 5.0 | 0       | 0             | 0    | 0-0           | 180           | 0    | 20        |      |

The following samples were analyzed in this batch:

0408060-01B 0408060-02B 0408060-03B

ND - Not Detected at the Reporting Limit

- Analyte detected below quantitation limits

- Referenced analyte value is > 4 times amount spiked

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P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

| Customer Information                                                                                                                                                  |                    |                |              | Project Information                   |                   |                |              | e-Lab Project Manager                                                                                                                                                         |              |                |              | e-Lab Work Order #                                                                          |              |                |              | Parameter/Method Request for Analysis |              |                |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------|--------------|---------------------------------------|-------------------|----------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------|--------------|---------------------------------------------------------------------------------------------|--------------|----------------|--------------|---------------------------------------|--------------|----------------|--|
| Purchase Order                                                                                                                                                        | Project Name       | Project Number | Project Name | Project Number                        | Project Name      | Project Number | Project Name | Project Number                                                                                                                                                                | Project Name | Project Number | Project Name | Project Number                                                                              | Project Name | Project Number | Project Name | Project Number                        | Project Name | Project Number |  |
| Work Order                                                                                                                                                            |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| Company Name                                                                                                                                                          | Alamo              |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| Send Report To                                                                                                                                                        | Jeff Byrd          |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| Address                                                                                                                                                               |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| City/State/Zip                                                                                                                                                        |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| Phone                                                                                                                                                                 |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| Fax                                                                                                                                                                   |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| e-Mail Address                                                                                                                                                        |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| No.                                                                                                                                                                   | Sample Description | Date           | Time         | Matrix                                | Pres. Key Numbers | # Bottles      | A            | B                                                                                                                                                                             | C            | D              | E            | F                                                                                           | G            | H              | I            | J                                     | Hold         |                |  |
| 1                                                                                                                                                                     | TEL-2              | 8/4/04         | 0900         | L                                     |                   | 8              | X            |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| 2                                                                                                                                                                     | TEL-1              | 1              | 0930         | 1                                     |                   | 1              | X            |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| 3                                                                                                                                                                     | TEL-3              | 1              | 1000         |                                       |                   |                | X            |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| 4                                                                                                                                                                     |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| 5                                                                                                                                                                     |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| 6                                                                                                                                                                     |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| 7                                                                                                                                                                     |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| 8                                                                                                                                                                     |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| 9                                                                                                                                                                     |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| 10                                                                                                                                                                    |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| Sampler(s): Please Print & Sign                                                                                                                                       |                    |                |              | Shipment Method: Fed Ex               |                   |                |              | Required Turnaround Time: (Check Box)                                                                                                                                         |              |                |              | Results Due Date:                                                                           |              |                |              |                                       |              |                |  |
|                                                                                                                                                                       |                    |                |              |                                       |                   |                |              | <input type="checkbox"/> 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 3 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| Relinquished by: [Signature]                                                                                                                                          |                    |                |              | Received by: [Signature]              |                   |                |              | Date: 8/4 Time: 1615                                                                                                                                                          |              |                |              | Notes:                                                                                      |              |                |              |                                       |              |                |  |
| Relinquished by: [Signature]                                                                                                                                          |                    |                |              | Received by (Laboratory): [Signature] |                   |                |              | Date: 8-5-04 Time: 0830                                                                                                                                                       |              |                |              | QC Package: (Check Box Below)                                                               |              |                |              |                                       |              |                |  |
|                                                                                                                                                                       |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              | <input type="checkbox"/> Level II: Standard QC <input type="checkbox"/> Level III: Raw Data |              |                |              |                                       |              |                |  |
|                                                                                                                                                                       |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              | <input type="checkbox"/> TRRP LRC <input type="checkbox"/> TRRP Level IV                    |              |                |              |                                       |              |                |  |
|                                                                                                                                                                       |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              | <input type="checkbox"/> Level IV: SW846 Methods/CLP like <input type="checkbox"/> Other:   |              |                |              |                                       |              |                |  |
| Logged by (Laboratory):                                                                                                                                               |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              |                                                                                             |              |                |              |                                       |              |                |  |
| Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>4</sub> 7-Other 8-4°C |                    |                |              |                                       |                   |                |              |                                                                                                                                                                               |              |                |              | Note: Any changes must be made in writing once samples                                      |              |                |              |                                       |              |                |  |

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 8/5/2004 8:30:00 AM

Work Order Number 0408060

Received by: RSZ

Checklist completed by

DIGIARD SANCHEZ 8-5-04

Reviewed by

8/6/04

Matrix:

W

Carrier name FedEx

- |                                                         |                                         |                             |                                                 |
|---------------------------------------------------------|-----------------------------------------|-----------------------------|-------------------------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| Custody seals intact on shipping container/cooler?      | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Temperature(s)/Thermometer(s):                          | <u>4.3c</u>                             | <u>002</u>                  |                                                 |
| Water - VOA vials have zero headspace?                  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input type="checkbox"/> |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/>                    |

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_



**e-Lab Analytical, Inc.**

10450 Standcliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

August 06, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: NCL/TEL

Work Order : **0407269**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 1 sample on 7/23/2004 8:30:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 30.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

**e-Lab Analytical, Inc.**

**Date:** August 06, 2004

**CLIENT:** Navajo Refining Company

**Project:** NCL/TEL

**Work Order:** 0407269

**Work Order Sample Summary**

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0407269-01           | TEL-4                   | Water         |                   | 7/22/2004 09:30        | 7/23/2004 08:30      | <input type="checkbox"/> |

**e-Lab Analytical, Inc.****Date:** *August 06, 2004***CLIENT:** Navajo Refining Company**Project:** NCL/TEL**Work Order:** 0407269**Case Narrative**

Batch 9760 Metals MS/MSD was an unrelated sample.

BatchR22126 Volatiles MS/MSD was an unrelated sample.

Batch R22159 Volatiles MS/MSD was an unrelated sample.

**e-Lab Analytical, Inc.**

Date: August 06, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407269  
Project: NCL/TEL  
Lab ID: 0407269-01

Client Sample ID: TEL-4  
Collection Date: 7/22/2004 9:30:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|---------------------------------------|---------|--------------|------|-------|-----------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                      |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 8/3/2004 3:23:59 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                      |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Arsenic                               | 0.0116  | 0.00500      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Barium                                | 0.100   | 0.00500      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Boron                                 | 0.568   | 0.0200       |      | mg/L  | 1               | 8/4/2004 12:57:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Calcium                               | 232     | 25.0         |      | mg/L  | 50              | 7/31/2004 6:18:00 PM |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Copper                                | 0.00287 | 0.00200      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Iron                                  | 0.871   | 0.200        |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Magnesium                             | 193     | 2.00         |      | mg/L  | 10              | 7/31/2004 7:25:00 PM |
| Manganese                             | 0.390   | 0.0500       |      | mg/L  | 10              | 7/31/2004 7:25:00 PM |
| Molybdenum                            | ND      | 0.00500      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Nickel                                | 0.00996 | 0.00500      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Potassium                             | 0.328   | 0.200        |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Selenium                              | 0.00629 | 0.00500      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Sodium                                | 251     | 2.00         |      | mg/L  | 10              | 7/31/2004 7:25:00 PM |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| Zinc                                  | 0.00806 | 0.00500      |      | mg/L  | 1               | 7/31/2004 7:39:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                      |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: August 06, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407269  
Project: NCL/TEL  
Lab ID: 0407269-01

Client Sample ID: TEL-4  
Collection Date: 7/22/2004 9:30:00 AM  
Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Naphthalene                | 13     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 7/26/2004 9:37:00 PM |
| Surr: 2,4,6-Tribromophenol | 88.1   | 39-153       |      | %REC  | 1               | 7/26/2004 9:37:00 PM |
| Surr: 2-Fluorobiphenyl     | 81.7   | 40-147       |      | %REC  | 1               | 7/26/2004 9:37:00 PM |
| Surr: 2-Fluorophenol       | 37.1   | 21-110       |      | %REC  | 1               | 7/26/2004 9:37:00 PM |
| Surr: 4-Terphenyl-d14      | 82.6   | 39-141       |      | %REC  | 1               | 7/26/2004 9:37:00 PM |
| Surr: Nitrobenzene-d5      | 72.4   | 37-140       |      | %REC  | 1               | 7/26/2004 9:37:00 PM |
| Surr: Phenol-d6            | 24.2   | 11-100       |      | %REC  | 1               | 7/26/2004 9:37:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |     |     |  |      |    |                      |
|---------------------------|-----|-----|--|------|----|----------------------|
| 1,1,1-Trichloroethane     | ND  | 5.0 |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| 1,1,2,2-Tetrachloroethane | ND  | 5.0 |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| 1,1,2-Trichloroethane     | ND  | 5.0 |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| 1,1-Dichloroethane        | ND  | 5.0 |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| 1,1-Dichloroethene        | ND  | 5.0 |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| 1,2-Dichloroethane        | ND  | 5.0 |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| 2-Butanone                | ND  | 10  |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| 2-Chloroethyl vinyl ether | ND  | 10  |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| 2-Hexanone                | ND  | 10  |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| 4-Methyl-2-pentanone      | ND  | 10  |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| Acetone                   | ND  | 10  |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| Benzene                   | 820 | 50  |  | µg/L | 10 | 8/3/2004 7:32:00 AM  |
| Bromodichloromethane      | ND  | 5.0 |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| Bromoform                 | ND  | 5.0 |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| Bromomethane              | ND  | 5.0 |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| Carbon disulfide          | ND  | 10  |  | µg/L | 1  | 7/31/2004 8:54:00 AM |
| Carbon tetrachloride      | ND  | 5.0 |  | µg/L | 1  | 7/31/2004 8:54:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

AR Page 2 of 3

**e-Lab Analytical, Inc.**

Date: August 06, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407269  
Project: NCL/TEL  
Lab ID: 0407269-01

Client Sample ID: TEL-4  
Collection Date: 7/22/2004 9:30:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed        |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Ethylbenzene                        | 150    | 5.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| m,p-Xylene                          | 290    | 10            |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Toluene                             | 30     | 5.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Xylenes, Total                      | 300    | 15            |      | µg/L                | 1               | 7/31/2004 8:54:00 AM |
| Surr: 1,2-Dichloroethane-d4         | 104    | 71-126        |      | %REC                | 1               | 7/31/2004 8:54:00 AM |
| Surr: 1,2-Dichloroethane-d4         | 97.5   | 71-126        |      | %REC                | 10              | 8/3/2004 7:32:00 AM  |
| Surr: 4-Bromofluorobenzene          | 100    | 74-125        |      | %REC                | 1               | 7/31/2004 8:54:00 AM |
| Surr: 4-Bromofluorobenzene          | 95.6   | 74-125        |      | %REC                | 10              | 8/3/2004 7:32:00 AM  |
| Surr: Dibromofluoromethane          | 96.7   | 73-126        |      | %REC                | 10              | 8/3/2004 7:32:00 AM  |
| Surr: Dibromofluoromethane          | 101    | 73-126        |      | %REC                | 1               | 7/31/2004 8:54:00 AM |
| Surr: Toluene-d8                    | 102    | 75-125        |      | %REC                | 1               | 7/31/2004 8:54:00 AM |
| Surr: Toluene-d8                    | 95.1   | 75-125        |      | %REC                | 10              | 8/3/2004 7:32:00 AM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                      |
| Chloride                            | 413    | 5.00          |      | mg/L                | 10              | 7/23/2004 2:54:00 PM |
| Fluoride                            | 1.07   | 0.100         |      | mg/L                | 1               | 7/23/2004 2:26:00 PM |
| Sulfate                             | 493    | 10.0          |      | mg/L                | 10              | 7/23/2004 2:54:00 PM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 7/23/2004 2:26:00 PM |
| Surr: Dichloroacetic acid (surr)    | 107    | 80-120        |      | %REC                | 1               | 7/23/2004 2:26:00 PM |
| Surr: Dichloroacetic acid (surr)    | 104    | 80-120        |      | %REC                | 10              | 7/23/2004 2:54:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>HDO</b> |                 |                      |
| Alkalinity, Bicarbonate (As CaCO3)  | 830    | 5.00          |      | mg/L                | 1               | 7/29/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 7/29/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 7/29/2004            |
| Alkalinity, Total (As CaCO3)        | 830    | 5.00          |      | mg/L                | 1               | 7/29/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                      |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 7/25/2004            |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: Aug 06 2004

CLIENT: Navajo Refining Company

Work Order: 0407269

Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9760 InstrumentID: ICP4500

MBLK Sample ID: MBLKW1-072704 Test Code: SW6020 Units: mg/L Analysis Date: 07/30/04 16:05

Client ID: Run ID: ICP4500\_040730A SeqNo: 517282 Prep Date: 7/27/2004 DF: 1

| Analyte    | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | ND     | 0.010  |         |               |      |               |               |      |           |      |
| Arsenic    | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Barium     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Beryllium  | ND     | 0.0020 |         |               |      |               |               |      |           |      |
| Boron      | ND     | 0.020  |         |               |      |               |               |      |           |      |
| Cadmium    | ND     | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium    | 0.0818 | 0.50   |         |               |      |               |               |      |           | J    |
| Chromium   | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Copper     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Iron       | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Lead       | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium  | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Manganese  | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Molybdenum | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium  | ND     | 0.20   |         |               |      |               |               |      |           |      |
| Selenium   | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Silver     | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium     | 0.2584 | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium   | ND     | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc       | ND     | 0.0050 |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is &gt; 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407269  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9760 InstrumentID: ICP4500

LCS Sample ID: MLCW1-072704 Test Code: SW6020 Units: mg/L Analysis Date: 07/30/04 16:09  
Client ID: Run ID: ICP4500\_040730A SeqNo: 517283 Prep Date: 7/27/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.04805 | 0.010  | 0.05    | 0             | 96.1 | 79-126        | 0             |      |           |      |
| Arsenic    | 0.05165 | 0.0050 | 0.05    | 0             | 103  | 80-121        | 0             |      |           |      |
| Barium     | 0.04777 | 0.0050 | 0.05    | 0             | 95.5 | 79.8-119      | 0             |      |           |      |
| Beryllium  | 0.04815 | 0.0020 | 0.05    | 0             | 96.3 | 78.9-120      | 0             |      |           |      |
| Boron      | 0.4822  | 0.020  | 0       | -0.001108     | 0    | 80-120        | 0             |      |           |      |
| Cadmium    | 0.05311 | 0.0020 | 0.05    | 0             | 106  | 79.1-119      | 0             |      |           |      |
| Calcium    | 5.091   | 0.50   | 5       | 0             | 102  | 80-121        | 0             |      |           |      |
| Chromium   | 0.04666 | 0.0050 | 0.05    | 0             | 93.3 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04845 | 0.0050 | 0.05    | 0             | 96.9 | 82-121        | 0             |      |           |      |
| Copper     | 0.04734 | 0.0050 | 0.05    | 0             | 94.7 | 83-121        | 0             |      |           |      |
| Iron       | 5.056   | 0.20   | 5       | 0             | 101  | 80-120        | 0             |      |           |      |
| Lead       | 0.04614 | 0.0050 | 0.05    | 0             | 92.3 | 80-118        | 0             |      |           |      |
| Magnesium  | 5.255   | 0.20   | 5       | 0             | 105  | 80-120        | 0             |      |           |      |
| Manganese  | 0.04684 | 0.0050 | 0.05    | 0             | 93.7 | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04377 | 0.0050 | 0.05    | 0             | 87.5 | 84.6-115      | 0             |      |           |      |
| Nickel     | 0.04852 | 0.0050 | 0.05    | 0             | 97   | 85-120        | 0             |      |           |      |
| Potassium  | 5.318   | 0.20   | 5       | 0             | 106  | 80-120        | 0             |      |           |      |
| Selenium   | 0.05268 | 0.0050 | 0.05    | 0             | 105  | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04722 | 0.0050 | 0.05    | 0             | 94.4 | 83-117        | 0             |      |           |      |
| Sodium     | 5.085   | 0.20   | 5       | 0             | 102  | 82.4-120      | 0             |      |           |      |
| Vanadium   | 0.04701 | 0.0050 | 0.05    | 0             | 94   | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.05398 | 0.0050 | 0.05    | 0             | 108  | 83-118        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407269  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9760 InstrumentID: ICP4500

MS Sample ID: 0407245-05CMS Test Code: SW6020 Units: mg/L Analysis Date: 07/31/04 14:48

Client ID: Run ID: ICP4500\_040731A SeqNo: 517528 Prep Date: 7/27/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC  | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|-------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.04578 | 0.010  | 0.05    | 0.004601      | 82.4  | 79-126        | 0             |      |           |      |
| Arsenic    | 0.04991 | 0.0050 | 0.05    | 0             | 99.8  | 80-121        | 0             |      |           |      |
| Barium     | 0.08031 | 0.0050 | 0.05    | 0.03605       | 88.5  | 79.8-119      | 0             |      |           |      |
| Beryllium  | 0.0496  | 0.0020 | 0.05    | 0             | 99.2  | 78.9-120      | 0             |      |           |      |
| Boron      | 0.5789  | 0.020  | 0       | 0.1056        | 0     | 80-120        | 0             |      |           |      |
| Cadmium    | 0.04853 | 0.0020 | 0.05    | 0.0002884     | 96.5  | 79.1-119      | 0             |      |           |      |
| Calcium    | 98.74   | 0.50   | 5       | 93.77         | 99.4  | 80-121        | 0             |      |           | EO   |
| Chromium   | 0.04436 | 0.0050 | 0.05    | 0             | 88.7  | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04276 | 0.0050 | 0.05    | 0.0007819     | 84    | 82-121        | 0             |      |           |      |
| Copper     | 0.04051 | 0.0050 | 0.05    | 0.000763      | 79.5  | 83-121        | 0             |      |           | S    |
| Iron       | 4.786   | 0.20   | 5       | 0.2484        | 90.8  | 80-120        | 0             |      |           |      |
| Lead       | 0.04366 | 0.0050 | 0.05    | 0             | 87.3  | 80-118        | 0             |      |           |      |
| Magnesium  | 10.02   | 0.20   | 5       | 5.498         | 90.4  | 80-120        | 0             |      |           |      |
| Manganese  | 0.06996 | 0.0050 | 0.05    | 0.02633       | 87.3  | 82-119        | 0             |      |           |      |
| Molybdenum | 0.0442  | 0.0050 | 0.05    | 0             | 88.4  | 84.6-115      | 0             |      |           |      |
| Nickel     | 0.04491 | 0.0050 | 0.05    | 0.003507      | 82.8  | 85-120        | 0             |      |           | S    |
| Potassium  | 13.45   | 0.20   | 5       | 8.849         | 92    | 80-120        | 0             |      |           |      |
| Selenium   | 0.05322 | 0.0050 | 0.05    | 0.003249      | 99.9  | 79.2-118      | 0             |      |           |      |
| Silver     | 0.03768 | 0.0050 | 0.05    | 0             | 75.4  | 83-117        | 0             |      |           | S    |
| Sodium     | 2000    | 0.20   | 5       | 0             | 40000 | 82.4-120      | 0             |      |           | SE   |
| Vanadium   | 0.04574 | 0.0050 | 0.05    | 0.0004995     | 90.5  | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.1042  | 0.0050 | 0.05    | 0.05816       | 92.1  | 83-118        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407269  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9760 InstrumentID: ICP4500

| MSD        | Sample ID: 0407245-05CMSD |                 |         | Test Code: SW6020 |            | Units: mg/L   |               | Analysis Date: 07/31/04 14:53 |           |      |
|------------|---------------------------|-----------------|---------|-------------------|------------|---------------|---------------|-------------------------------|-----------|------|
| Client ID: | Run ID:                   | ICP4500_040731A | SeqNo:  | 517529            | Prep Date: | 7/27/2004     | DF:           | 1                             |           |      |
| Analyte    | Result                    | PQL             | SPK Val | SPK Ref Value     | %REC       | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Aluminum   | 0.04597                   | 0.010           | 0.05    | 0.004601          | 82.7       | 79-126        | 0.04578       | 0.414                         | 15        |      |
| Arsenic    | 0.05063                   | 0.0050          | 0.05    | 0                 | 101        | 80-121        | 0.04991       | 1.43                          | 15        |      |
| Barium     | 0.08024                   | 0.0050          | 0.05    | 0.03605           | 88.4       | 79.8-119      | 0.08031       | 0.0872                        | 15        |      |
| Beryllium  | 0.04875                   | 0.0020          | 0.05    | 0                 | 97.5       | 78.9-120      | 0.0496        | 1.73                          | 15        |      |
| Boron      | 0.5724                    | 0.020           | 0       | 0.1056            | 0          | 80-120        | 0.5789        | 1.13                          | 15        |      |
| Cadmium    | 0.04915                   | 0.0020          | 0.05    | 0.0002884         | 97.7       | 79.1-119      | 0.04853       | 1.27                          | 15        |      |
| Calcium    | 97.59                     | 0.50            | 5       | 93.77             | 76.4       | 80-121        | 98.74         | 1.17                          | 15        | SEO  |
| Chromium   | 0.0452                    | 0.0050          | 0.05    | 0                 | 90.4       | 79.3-121      | 0.04436       | 1.88                          | 15        |      |
| Cobalt     | 0.04395                   | 0.0050          | 0.05    | 0.0007819         | 86.3       | 82-121        | 0.04276       | 2.74                          | 15        |      |
| Copper     | 0.04117                   | 0.0050          | 0.05    | 0.000763          | 80.8       | 83-121        | 0.04051       | 1.62                          | 15        | S    |
| Iron       | 4.818                     | 0.20            | 5       | 0.2484            | 91.4       | 80-120        | 4.786         | 0.666                         | 15        |      |
| Lead       | 0.04425                   | 0.0050          | 0.05    | 0                 | 88.5       | 80-118        | 0.04366       | 1.34                          | 15        |      |
| Magnesium  | 10.14                     | 0.20            | 5       | 5.498             | 92.8       | 80-120        | 10.02         | 1.19                          | 15        |      |
| Manganese  | 0.0695                    | 0.0050          | 0.05    | 0.02633           | 86.3       | 82-119        | 0.06996       | 0.66                          | 15        |      |
| Molybdenum | 0.04537                   | 0.0050          | 0.05    | 0                 | 90.7       | 84.6-115      | 0.0442        | 2.61                          | 15        |      |
| Nickel     | 0.04574                   | 0.0050          | 0.05    | 0.003507          | 84.5       | 85-120        | 0.04491       | 1.83                          | 15        | S    |
| Potassium  | 13.35                     | 0.20            | 5       | 8.849             | 90         | 80-120        | 13.45         | 0.746                         | 15        |      |
| Selenium   | 0.0518                    | 0.0050          | 0.05    | 0.003249          | 97.1       | 79.2-118      | 0.05322       | 2.7                           | 15        |      |
| Silver     | 0.03995                   | 0.0050          | 0.05    | 0                 | 79.9       | 83-117        | 0.03768       | 5.85                          | 15        | S    |
| Sodium     | 2000                      | 0.20            | 5       | 0                 | 40000      | 82.4-120      | 2000          | 0                             | 15        | SE   |
| Vanadium   | 0.04663                   | 0.0050          | 0.05    | 0.0004995         | 92.3       | 82.1-119      | 0.04574       | 1.93                          | 15        |      |
| Zinc       | 0.1025                    | 0.0050          | 0.05    | 0.05816           | 88.7       | 83-118        | 0.1042        | 1.64                          | 15        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

# QC BATCH REPORT

Batch ID: 9760 InstrumentID: ICP4500

DUP Sample ID: 0407245-05CDUP Test Code: SW6020 Units: mg/L Analysis Date: 07/31/04 14:43

Client ID: Run ID: ICP4500\_040731A SeqNo: 517527 Prep Date: 7/27/2004 DF: 1

| Analyte    | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|------------|-----------|--------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Aluminum   | 0.004476  | 0.010  | 0       | 0             | 0    | 0-0           | 0.004601      | 0     | 25        | J    |
| Arsenic    | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0008023     | 0     | 25        |      |
| Barium     | 0.03547   | 0.0050 | 0       | 0             | 0    | 0-0           | 0.03605       | 1.62  | 25        |      |
| Beryllium  | ND        | 0.0020 | 0       | 0             | 0    | 0-0           | 0.0002568     | 0     | 25        |      |
| Boron      | 0.1021    | 0.020  | 0       | 0             | 0    | 0-0           | 0.1056        | 3.37  | 25        |      |
| Cadmium    | 0.0001731 | 0.0020 | 0       | 0             | 0    | 0-0           | 0.0002884     | 0     | 25        | J    |
| Chromium   | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0004792     | 0     | 25        |      |
| Cobalt     | 0.0007157 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0007819     | 0     | 25        | J    |
| Copper     | 0.000729  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.000763      | 0     | 25        | J    |
| Iron       | 0.2422    | 0.20   | 0       | 0             | 0    | 0-0           | 0.2484        | 2.53  | 25        |      |
| Lead       | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00007642    | 0     | 25        |      |
| Magnesium  | 5.553     | 0.20   | 0       | 0             | 0    | 0-0           | 5.498         | 0.995 | 25        |      |
| Manganese  | 0.02583   | 0.0050 | 0       | 0             | 0    | 0-0           | 0.02633       | 1.92  | 25        |      |
| Molybdenum | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.001011      | 0     | 25        |      |
| Nickel     | 0.00343   | 0.0050 | 0       | 0             | 0    | 0-0           | 0.003507      | 0     | 25        | J    |
| Potassium  | 8.747     | 0.20   | 0       | 0             | 0    | 0-0           | 8.849         | 1.16  | 25        |      |
| Selenium   | 0.002954  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.003249      | 0     | 25        | J    |
| Silver     | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00002754    | 0     | 25        |      |
| Sodium     | ND        | 0.20   | 0       | 0             | 0    | 0-0           | 0             | 0     | 25        |      |
| Vanadium   | 0.0004141 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0004995     | 0     | 25        | J    |
| Zinc       | 0.05803   | 0.0050 | 0       | 0             | 0    | 0-0           | 0.05816       | 0.224 | 25        |      |

DUP Sample ID: 0407245-05CDUP Test Code: SW6020 Units: mg/L Analysis Date: 08/02/04 18:26

Client ID: Run ID: ICP4500\_040802A SeqNo: 518162 Prep Date: 7/27/2004 DF: 10

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Calcium | 102.5  | 5.0 | 0       | 0             | 0    | 0-0           | 100.6         | 1.87 | 25        |      |

The following samples were analyzed in this batch:

0407269-01C

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407269  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9817 InstrumentID: Mercury

MBLK Sample ID: GBLKW1-080204 Test Code: SW7470 Units: mg/L Analysis Date: 08/03/04 14:58

Client ID: Run ID: MERCURY\_040803B SeqNo: 518570 Prep Date: 8/2/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW1-080204 Test Code: SW7470 Units: mg/L Analysis Date: 08/03/04 15:00

Client ID: Run ID: MERCURY\_040803B SeqNo: 518571 Prep Date: 8/2/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00462 | 0.00020 | 0.005   | 0             | 92.4 | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW1-080204 Test Code: SW7470 Units: mg/L Analysis Date: 08/03/04 15:01

Client ID: Run ID: MERCURY\_040803B SeqNo: 518572 Prep Date: 8/2/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00522 | 0.00020 | 0.005   | 0             | 104  | 83-115        | 0.00462       | 12.2 | 20        |      |

MS Sample ID: 0407271-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 08/03/04 15:08

Client ID: Run ID: MERCURY\_040803B SeqNo: 518575 Prep Date: 8/2/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00475 | 0.00020 | 0.005   | 0.000008      | 94.8 | 83-115        | 0             |      |           |      |

MSD Sample ID: 0407271-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 08/03/04 15:12

Client ID: Run ID: MERCURY\_040803B SeqNo: 518576 Prep Date: 8/2/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00468 | 0.00020 | 0.005   | 0.000008      | 93.4 | 83-115        | 0.00475       | 1.48 | 20        |      |

DUP Sample ID: 0407271-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 08/03/04 15:07

Client ID: Run ID: MERCURY\_040803B SeqNo: 518574 Prep Date: 8/2/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | 0.000008      | 0    | 20        |      |

The following samples were analyzed in this batch:

0407269-01C

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9730 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-040723 Test Code: SW8270 Units: µg/L Analysis Date: 07/26/04 15:54

Client ID: Run ID: SV-3\_040726A SeqNo: 515255 Prep Date: 7/23/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 100    | 10  | 100     | 0             | 100  | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 96.01  | 10  | 100     | 0             | 96   | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 40.85  | 10  | 100     | 0             | 40.8 | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 106.5  | 10  | 100     | 0             | 107  | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 91.62  | 10  | 100     | 0             | 91.6 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 23.94  | 10  | 100     | 0             | 23.9 | 11-100        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9730 InstrumentID: SV-3

LCS Sample ID: SLCSW1-040723 Test Code: SW8270 Units: µg/L Analysis Date: 07/26/04 16:19

Client ID: Run ID: SV-3\_040726A SeqNo: 515256 Prep Date: 7/23/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 43.51  | 10  | 50      | 0             | 87   | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 104.3  | 10  | 100     | 0             | 104  | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 100.8  | 10  | 100     | 0             | 101  | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 44.75  | 10  | 50      | 0             | 89.5 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 74.62  | 10  | 100     | 0             | 74.6 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 53.59  | 10  | 50      | 0             | 107  | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 99.6   | 10  | 100     | 0             | 99.6 | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 50.85  | 10  | 50      | 0             | 102  | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 98.44  | 10  | 150     | 0             | 65.6 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 52.46  | 10  | 50      | 0             | 105  | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 37.59  | 10  | 100     | 0             | 37.6 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 50.99  | 10  | 50      | 0             | 102  | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 50.51  | 10  | 50      | 0             | 101  | 67-116        | 0             |      |           |      |
| Aniline                    | 46.16  | 10  | 50      | 0             | 92.3 | 40-130        | 0             |      |           |      |
| Anthracene                 | 53.46  | 10  | 50      | 0             | 107  | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 56.63  | 10  | 50      | 0             | 113  | 55-131        | 0             |      |           |      |
| Benzidine                  | 40.83  | 10  | 50      | 0             | 81.7 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 39.86  | 10  | 50      | 0             | 79.7 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 55.23  | 10  | 50      | 0             | 110  | 42-123        | 0             |      |           |      |
| Isophorone                 | 51.55  | 10  | 50      | 0             | 103  | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 50.36  | 10  | 50      | 0             | 101  | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 23.56  | 10  | 50      | 0             | 47.1 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 54.98  | 10  | 50      | 0             | 110  | 72-144        | 0             |      |           |      |
| Naphthalene                | 45.89  | 10  | 50      | 0             | 91.8 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 48.33  | 10  | 50      | 0             | 96.7 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 98.86  | 10  | 100     | 0             | 98.9 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 52.88  | 10  | 50      | 0             | 106  | 69-119        | 0             |      |           |      |
| Phenol                     | 30.48  | 10  | 100     | 0             | 30.5 | 16-115        | 0             |      |           |      |
| Pyrene                     | 51.66  | 10  | 50      | 0             | 103  | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 107.9  | 10  | 100     | 0             | 108  | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 98.98  | 10  | 100     | 0             | 99   | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 50.13  | 10  | 100     | 0             | 50.1 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 107.3  | 10  | 100     | 0             | 107  | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 98.37  | 10  | 100     | 0             | 98.4 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 26.91  | 10  | 100     | 0             | 26.9 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9730 InstrumentID: SV-3

MS Sample ID: 0407227-09EMS Test Code: SW8270 Units: µg/L Analysis Date: 07/26/04 17:08

Client ID: Run ID: SV-3\_040726A SeqNo: 515257 Prep Date: 7/23/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 53.1   | 11  | 57.47   | 0             | 92.4 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 116.9  | 11  | 114.9   | 0             | 102  | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 115    | 11  | 114.9   | 0             | 100  | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 52.79  | 11  | 57.47   | 0             | 91.9 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 86.92  | 11  | 114.9   | 0             | 75.6 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 61.01  | 11  | 57.47   | 0             | 106  | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 112.4  | 11  | 114.9   | 0             | 97.8 | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 50.79  | 11  | 57.47   | 0             | 88.4 | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 117.8  | 11  | 172.4   | 0             | 68.3 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 60.76  | 11  | 57.47   | 0             | 106  | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 53.85  | 11  | 114.9   | 0             | 46.8 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 56.83  | 11  | 57.47   | 0             | 98.9 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 56.31  | 11  | 57.47   | 0             | 98   | 67-116        | 0             |      |           |      |
| Aniline                    | 37.32  | 11  | 57.47   | 0             | 64.9 | 40-130        | 0             |      |           |      |
| Anthracene                 | 59.96  | 11  | 57.47   | 0             | 104  | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 65.4   | 11  | 57.47   | 0             | 114  | 55-131        | 0             |      |           |      |
| Benzidine                  | 6.81   | 11  | 57.47   | 0             | 11.8 | 10-115        | 0             |      |           | J    |
| Hexachloroethane           | 49.96  | 11  | 57.47   | 0             | 86.9 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 61.89  | 11  | 57.47   | 0             | 108  | 42-123        | 0             |      |           |      |
| Isophorone                 | 58.25  | 11  | 57.47   | 0             | 101  | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 57.32  | 11  | 57.47   | 0             | 99.7 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 29.79  | 11  | 57.47   | 0             | 51.8 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 63.56  | 11  | 57.47   | 0             | 111  | 72-144        | 0             |      |           |      |
| Naphthalene                | 54.17  | 11  | 57.47   | 0             | 94.2 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 57.33  | 11  | 57.47   | 0             | 99.8 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 119.8  | 11  | 114.9   | 0             | 104  | 65-123        | 0             |      |           |      |
| Phenanthrene               | 60.99  | 11  | 57.47   | 0             | 106  | 69-119        | 0             |      |           |      |
| Phenol                     | 39.81  | 11  | 114.9   | 0             | 34.6 | 16-115        | 0             |      |           |      |
| Pyrene                     | 59.41  | 11  | 57.47   | 0             | 103  | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 123.9  | 11  | 114.9   | 0             | 108  | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 108.5  | 11  | 114.9   | 0             | 94.4 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 59.31  | 11  | 114.9   | 0             | 51.6 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 112.4  | 11  | 114.9   | 0             | 97.8 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 108.3  | 11  | 114.9   | 0             | 94.2 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 36.81  | 11  | 114.9   | 0             | 32   | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9730 InstrumentID: SV-3

MSD Sample ID: 0407227-09EMSD Test Code: SW8270 Units: µg/L Analysis Date: 07/26/04 17:33

Client ID: Run ID: SV-3\_040726A SeqNo: 515258 Prep Date: 7/23/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 56.49  | 12  | 60.98   | 0             | 92.6 | 50-115        | 53.1          | 6.19 | 30        |      |
| 2,4,5-Trichlorophenol      | 124.4  | 12  | 122     | 0             | 102  | 68-128        | 116.9         | 6.18 | 30        |      |
| 2,4,6-Trichlorophenol      | 121.1  | 12  | 122     | 0             | 99.3 | 66-125        | 115           | 5.18 | 30        |      |
| 2-Methylnaphthalene        | 56.79  | 12  | 60.98   | 0             | 93.1 | 47-122        | 52.79         | 7.3  | 30        |      |
| 2-Methylphenol             | 94.58  | 12  | 122     | 0             | 77.6 | 51-115        | 86.92         | 8.44 | 30        |      |
| 2-Nitroaniline             | 64.34  | 12  | 60.98   | 0             | 106  | 64-128        | 61.01         | 5.31 | 30        |      |
| 2-Nitrophenol              | 119.5  | 12  | 122     | 0             | 98   | 60-119        | 112.4         | 6.06 | 30        |      |
| 3-Nitroaniline             | 54.96  | 12  | 60.98   | 0             | 90.1 | 61-118        | 50.79         | 7.89 | 30        |      |
| 4-Methylphenol             | 131.2  | 12  | 182.9   | 0             | 71.7 | 44-115        | 117.8         | 10.8 | 30        |      |
| 4-Nitroaniline             | 63.8   | 12  | 60.98   | 0             | 105  | 61-123        | 60.76         | 4.87 | 30        |      |
| 4-Nitrophenol              | 56.58  | 12  | 122     | 0             | 46.4 | 17-100        | 53.85         | 4.96 | 30        |      |
| Acenaphthene               | 60.92  | 12  | 60.98   | 0             | 99.9 | 68-115        | 56.83         | 6.94 | 30        |      |
| Acenaphthylene             | 60.51  | 12  | 60.98   | 0             | 99.2 | 67-116        | 56.31         | 7.19 | 30        |      |
| Aniline                    | 38.82  | 12  | 60.98   | 0             | 63.7 | 40-130        | 37.32         | 3.93 | 30        |      |
| Anthracene                 | 63.75  | 12  | 60.98   | 0             | 105  | 70-129        | 59.96         | 6.13 | 30        |      |
| Benz(a)anthracene          | 66.59  | 12  | 60.98   | 0             | 109  | 55-131        | 65.4          | 1.81 | 30        |      |
| Benzidine                  | 7.134  | 12  | 60.98   | 0             | 11.7 | 10-115        | 6.81          | 0    | 30        | J    |
| Hexachloroethane           | 53.41  | 12  | 60.98   | 0             | 87.6 | 46-115        | 49.96         | 6.69 | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 68.03  | 12  | 60.98   | 0             | 112  | 42-123        | 61.89         | 9.44 | 30        |      |
| Isophorone                 | 63.11  | 12  | 60.98   | 0             | 104  | 63-117        | 58.25         | 8.01 | 30        |      |
| N-Nitrosodi-n-propylamine  | 59.47  | 12  | 60.98   | 0             | 97.5 | 67-115        | 57.32         | 3.68 | 30        |      |
| N-Nitrosodimethylamine     | 34.06  | 12  | 60.98   | 0             | 55.9 | 28-115        | 29.79         | 13.4 | 30        |      |
| N-Nitrosodiphenylamine     | 65.74  | 12  | 60.98   | 0             | 108  | 72-144        | 63.56         | 3.38 | 30        |      |
| Naphthalene                | 57.78  | 12  | 60.98   | 0             | 94.8 | 52-115        | 54.17         | 6.46 | 30        |      |
| Nitrobenzene               | 59.16  | 12  | 60.98   | 0             | 97   | 65-115        | 57.33         | 3.14 | 30        |      |
| Pentachlorophenol          | 132.7  | 12  | 122     | 0             | 109  | 65-123        | 119.8         | 10.3 | 30        |      |
| Phenanthrene               | 63.58  | 12  | 60.98   | 0             | 104  | 69-119        | 60.99         | 4.17 | 30        |      |
| Phenol                     | 45.52  | 12  | 122     | 0             | 37.3 | 16-115        | 39.81         | 13.4 | 30        |      |
| Pyrene                     | 61.14  | 12  | 60.98   | 0             | 100  | 51-130        | 59.41         | 2.88 | 30        |      |
| Surr: 2,4,6-Tribromophenol | 131.6  | 12  | 122     | 0             | 108  | 39-153        | 123.9         | 6.07 | 30        |      |
| Surr: 2-Fluorobiphenyl     | 118.1  | 12  | 122     | 0             | 96.8 | 40-147        | 108.5         | 8.49 | 30        |      |
| Surr: 2-Fluorophenol       | 69.6   | 12  | 122     | 0             | 57.1 | 21-110        | 59.31         | 16   | 30        |      |
| Surr: 4-Terphenyl-d14      | 121    | 12  | 122     | 0             | 99.3 | 39-141        | 112.4         | 7.4  | 30        |      |
| Surr: Nitrobenzene-d5      | 121.2  | 12  | 122     | 0             | 99.4 | 37-140        | 108.3         | 11.2 | 30        |      |
| Surr: Phenol-d6            | 42.4   | 12  | 122     | 0             | 34.8 | 11-100        | 36.81         | 14.1 | 30        |      |

The following samples were analyzed in this batch:

0407269-01E

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407269  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22126 InstrumentID: VOA1

MBLK Sample ID: VBLKW-0730 Test Code: SW8260 Units: µg/L Analysis Date: 07/31/04 0:17

Client ID: Run ID: VOA1\_040730B SeqNo: 517741 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 47.62  | 5.0 | 50      | 0             | 95.2 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 47     | 5.0 | 50      | 0             | 94   | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.71  | 5.0 | 50      | 0             | 97.4 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 47.31  | 5.0 | 50      | 0             | 94.6 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22126 InstrumentID: VOA1

LCS Sample ID: VLCSW-0730 Test Code: SW8260 Units: µg/L Analysis Date: 07/30/04 23:49

Client ID: Run ID: VOA1\_040730B SeqNo: 517740 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 52.76  | 5.0 | 50      | 0             | 106  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 45.55  | 5.0 | 50      | 0             | 91.1 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 53.11  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 47.79  | 5.0 | 50      | 0             | 95.6 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 48.79  | 5.0 | 50      | 0             | 97.6 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 48.96  | 5.0 | 50      | 0             | 97.9 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 99.22  | 10  | 100     | 0             | 99.2 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 94.56  | 10  | 100     | 0             | 94.6 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 100.3  | 10  | 100     | 0             | 100  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 96.5   | 10  | 100     | 0             | 96.5 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 94.78  | 10  | 100     | 0             | 94.8 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 50.35  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 48.68  | 5.0 | 50      | 0             | 97.4 | 80-120        | 0             |      |           |      |
| Bromoform                   | 53.73  | 5.0 | 50      | 0             | 107  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 44.15  | 5.0 | 50      | 0             | 88.3 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 97.37  | 10  | 100     | 0             | 97.4 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 52.98  | 5.0 | 50      | 0             | 106  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 51.88  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Chloroethane                | 48.05  | 5.0 | 50      | 0             | 96.1 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 50.04  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Chloromethane               | 42.66  | 5.0 | 50      | 0             | 85.3 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 50.93  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 53.36  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 54.84  | 5.0 | 50      | 0             | 110  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 109.6  | 10  | 100     | 0             | 110  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 45.21  | 10  | 50      | 0             | 90.4 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.28  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 52.73  | 5.0 | 50      | 0             | 105  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 55.03  | 5.0 | 50      | 0             | 110  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 52.05  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 54.75  | 5.0 | 50      | 0             | 110  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 87.16  | 10  | 100     | 0             | 87.2 | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 46.98  | 2.0 | 50      | 0             | 94   | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 164.5  | 15  | 150     | 0             | 110  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.22  | 5.0 | 50      | 0             | 90.4 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 52.68  | 5.0 | 50      | 0             | 105  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 44.91  | 5.0 | 50      | 0             | 89.8 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.61  | 5.0 | 50      | 0             | 99.2 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22126 InstrumentID: VOA1

MS Sample ID: 0407282-06AMS Test Code: SW8260 Units: µg/L Analysis Date: 07/31/04 1:11

Client ID: Run ID: VOA1\_040730B SeqNo: 517742 Prep Date: DF: 5

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 248.4  | 25  | 250     | 0             | 99.4 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 225.9  | 25  | 250     | 0             | 90.4 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 248.6  | 25  | 250     | 0             | 99.4 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 256.7  | 25  | 250     | 0             | 103  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 234.7  | 25  | 250     | 0             | 93.9 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 257.5  | 25  | 250     | 0             | 103  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 500.4  | 50  | 500     | 0             | 100  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 50  | 500     | 0             | 0    | 60-135        | 0             |      |           | S    |
| 2-Hexanone                  | 435.4  | 50  | 500     | 0             | 87.1 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 439.9  | 50  | 500     | 0             | 88   | 67.4-121      | 0             |      |           |      |
| Acetone                     | 384.6  | 50  | 500     | 0             | 76.9 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 248.3  | 25  | 250     | 0             | 99.3 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 247.8  | 25  | 250     | 0             | 99.1 | 80-120        | 0             |      |           |      |
| Bromoform                   | 242.7  | 25  | 250     | 0             | 97.1 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 230.4  | 25  | 250     | 0             | 92.2 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 453.6  | 50  | 500     | 0             | 90.7 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 232.4  | 25  | 250     | 0             | 93   | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 251.1  | 25  | 250     | 0             | 100  | 80-120        | 0             |      |           |      |
| Chloroethane                | 229    | 25  | 250     | 0             | 91.6 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 254.3  | 25  | 250     | 0             | 102  | 80-120        | 0             |      |           |      |
| Chloromethane               | 203.3  | 25  | 250     | 0             | 81.3 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 234.5  | 25  | 250     | 0             | 93.8 | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 254.4  | 25  | 250     | 0             | 102  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 255.9  | 25  | 250     | 0             | 102  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 508.3  | 50  | 500     | 0             | 102  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 232.7  | 50  | 250     | 0             | 93.1 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 228.6  | 25  | 250     | 0             | 91.4 | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 548.1  | 25  | 250     | 306.2         | 96.8 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 237.8  | 25  | 250     | 0             | 95.1 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 236    | 25  | 250     | 0             | 94.4 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 246.5  | 25  | 250     | 0             | 98.6 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 621.8  | 50  | 500     | 0             | 124  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 204.6  | 10  | 250     | 0             | 81.8 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 758.2  | 75  | 750     | 0             | 101  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 251.2  | 25  | 250     | 0             | 100  | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 243.1  | 25  | 250     | 0             | 97.2 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 243.4  | 25  | 250     | 0             | 97.4 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 242.6  | 25  | 250     | 0             | 97   | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22126 InstrumentID: VOA1

MSD Sample ID: 0407282-06AMSD Test Code: SW8260 Units: µg/L Analysis Date: 07/31/04 1:39

Client ID: Run ID: VOA1\_040730B SeqNo: 517743 Prep Date: DF: 5

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 261.3  | 25  | 250     | 0             | 105  | 75.2-120      | 248.4         | 5.04   | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 231    | 25  | 250     | 0             | 92.4 | 72.4-121      | 225.9         | 2.22   | 20        |      |
| 1,1,2-Trichloroethane       | 254.2  | 25  | 250     | 0             | 102  | 80-120        | 248.6         | 2.23   | 20        |      |
| 1,1-Dichloroethane          | 244.4  | 25  | 250     | 0             | 97.8 | 76.9-120      | 256.7         | 4.92   | 20        |      |
| 1,1-Dichloroethene          | 233.5  | 25  | 250     | 0             | 93.4 | 72.6-123      | 234.7         | 0.536  | 20        |      |
| 1,2-Dichloroethane          | 253.8  | 25  | 250     | 0             | 102  | 80-120        | 257.5         | 1.42   | 20        |      |
| 2-Butanone                  | 456.9  | 50  | 500     | 0             | 91.4 | 69-131        | 500.4         | 9.1    | 20        |      |
| 2-Chloroethyl vinyl ether   | ND     | 50  | 500     | 0             | 0    | 60-135        | 0             | 0      | 20        | S    |
| 2-Hexanone                  | 447.9  | 50  | 500     | 0             | 89.6 | 55.6-126      | 435.4         | 2.83   | 20        |      |
| 4-Methyl-2-pentanone        | 456.9  | 50  | 500     | 0             | 91.4 | 67.4-121      | 439.9         | 3.78   | 20        |      |
| Acetone                     | 395.6  | 50  | 500     | 0             | 79.1 | 64.4-140      | 384.6         | 2.81   | 20        |      |
| Benzene                     | 242.7  | 25  | 250     | 0             | 97.1 | 80-120        | 248.3         | 2.28   | 20        |      |
| Bromodichloromethane        | 249.8  | 25  | 250     | 0             | 99.9 | 80-120        | 247.8         | 0.81   | 20        |      |
| Bromoform                   | 253.7  | 25  | 250     | 0             | 101  | 77.9-121      | 242.7         | 4.44   | 20        |      |
| Bromomethane                | 231    | 25  | 250     | 0             | 92.4 | 63.3-137      | 230.4         | 0.27   | 20        |      |
| Carbon disulfide            | 460.2  | 50  | 500     | 0             | 92   | 74.1-123      | 453.6         | 1.43   | 20        |      |
| Carbon tetrachloride        | 240.5  | 25  | 250     | 0             | 96.2 | 74.7-120      | 232.4         | 3.41   | 20        |      |
| Chlorobenzene               | 250.4  | 25  | 250     | 0             | 100  | 80-120        | 251.1         | 0.286  | 20        |      |
| Chloroethane                | 225.4  | 25  | 250     | 0             | 90.2 | 74.7-126      | 229           | 1.55   | 20        |      |
| Chloroform                  | 258.5  | 25  | 250     | 0             | 103  | 80-120        | 254.3         | 1.66   | 20        |      |
| Chloromethane               | 207.7  | 25  | 250     | 0             | 83.1 | 64.5-132      | 203.3         | 2.16   | 20        |      |
| cis-1,3-Dichloropropene     | 243.9  | 25  | 250     | 0             | 97.6 | 80-120        | 234.5         | 3.93   | 20        |      |
| Dibromochloromethane        | 261.8  | 25  | 250     | 0             | 105  | 80-120        | 254.4         | 2.89   | 20        |      |
| Ethylbenzene                | 267.2  | 25  | 250     | 0             | 107  | 80-120        | 255.9         | 4.33   | 20        |      |
| m,p-Xylene                  | 496.8  | 50  | 500     | 0             | 99.4 | 80-120        | 508.3         | 2.29   | 20        |      |
| Methylene chloride          | 227.7  | 50  | 250     | 0             | 91.1 | 76.2-120      | 232.7         | 2.17   | 20        |      |
| Styrene                     | 232    | 25  | 250     | 0             | 92.8 | 80-120        | 228.6         | 1.48   | 20        |      |
| Tetrachloroethene           | 553.7  | 25  | 250     | 306.2         | 99   | 68.5-130      | 548.1         | 1.01   | 20        |      |
| Toluene                     | 252.5  | 25  | 250     | 0             | 101  | 80-120        | 237.8         | 5.98   | 20        |      |
| trans-1,3-Dichloropropene   | 250.5  | 25  | 250     | 0             | 100  | 80-120        | 236           | 5.97   | 20        |      |
| Trichloroethene             | 237.8  | 25  | 250     | 0             | 95.1 | 78.9-120      | 246.5         | 3.62   | 20        |      |
| Vinyl acetate               | 630    | 50  | 500     | 0             | 126  | 62.4-133      | 621.8         | 1.3    | 20        |      |
| Vinyl chloride              | 210.4  | 10  | 250     | 0             | 84.2 | 72.7-128      | 204.6         | 2.79   | 20        |      |
| Xylenes, Total              | 747.6  | 75  | 750     | 0             | 99.7 | 80-120        | 758.2         | 1.41   | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 237.8  | 25  | 250     | 0             | 95.1 | 71-126        | 251.2         | 5.51   | 20        |      |
| Surr: 4-Bromofluorobenzene  | 250.1  | 25  | 250     | 0             | 100  | 74-125        | 243.1         | 2.83   | 20        |      |
| Surr: Dibromofluoromethane  | 243.3  | 25  | 250     | 0             | 97.3 | 73-126        | 243.4         | 0.0596 | 20        |      |
| Surr: Toluene-d8            | 256.2  | 25  | 250     | 0             | 102  | 75-125        | 242.6         | 5.45   | 20        |      |

The following samples were analyzed in this batch:

0407269-01A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R22159** InstrumentID: **VOA1**

MBLK Sample ID: **VBLKW-0802** Test Code: **SW8260** Units: **µg/L** Analysis Date: **08/03/04 1:11**

Client ID: Run ID: **VOA1\_040802C** SeqNo: **518363** Prep Date: DF: **1**

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 48.91  | 5.0 | 50      | 0             | 97.8 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 47.19  | 5.0 | 50      | 0             | 94.4 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 50.58  | 5.0 | 50      | 0             | 101  | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.92  | 5.0 | 50      | 0             | 99.8 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22159 InstrumentID: VOA1

LCS Sample ID: VLCSW-0802 Test Code: SW8260 Units: µg/L Analysis Date: 08/03/04 0:16

Client ID: Run ID: VOA1\_040802C SeqNo: 518362 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 54.69  | 5.0 | 50      | 0             | 109  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 43.95  | 5.0 | 50      | 0             | 87.9 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 51.98  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 54.01  | 5.0 | 50      | 0             | 108  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 51.71  | 5.0 | 50      | 0             | 103  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 50.61  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 112    | 10  | 100     | 0             | 112  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 94.49  | 10  | 100     | 0             | 94.5 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 94.96  | 10  | 100     | 0             | 95   | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 93.69  | 10  | 100     | 0             | 93.7 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 96.03  | 10  | 100     | 0             | 96   | 64.4-140      | 0             |      |           |      |
| Benzene                     | 52.83  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 48.68  | 5.0 | 50      | 0             | 97.4 | 80-120        | 0             |      |           |      |
| Bromoform                   | 47.37  | 5.0 | 50      | 0             | 94.7 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 43.54  | 5.0 | 50      | 0             | 87.1 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 101.5  | 10  | 100     | 0             | 102  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 51.05  | 5.0 | 50      | 0             | 102  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 50.29  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Chloroethane                | 46.4   | 5.0 | 50      | 0             | 92.8 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 53.57  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Chloromethane               | 41.66  | 5.0 | 50      | 0             | 83.3 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 52.48  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 50.24  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 54.17  | 5.0 | 50      | 0             | 108  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 106.8  | 10  | 100     | 0             | 107  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 46.46  | 10  | 50      | 0             | 92.9 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.79  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 52.38  | 5.0 | 50      | 0             | 105  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 51.88  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 51.41  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 58.15  | 5.0 | 50      | 0             | 116  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 83.47  | 10  | 100     | 0             | 83.5 | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 45.5   | 2.0 | 50      | 0             | 91   | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 159.8  | 15  | 150     | 0             | 107  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.98  | 5.0 | 50      | 0             | 94   | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.96  | 5.0 | 50      | 0             | 97.9 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 47.65  | 5.0 | 50      | 0             | 95.3 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 47.92  | 5.0 | 50      | 0             | 95.8 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22159 InstrumentID: VOA1

MS Sample ID: 0407361-01AMS Test Code: SW8260 Units: µg/L Analysis Date: 08/03/04 2:05

Client ID: Run ID: VOA1\_040802C SeqNo: 518364 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 50.27  | 5.0 | 50      | 0             | 101  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 49.12  | 5.0 | 50      | 0             | 98.2 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 50.33  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 51.45  | 5.0 | 50      | 0             | 103  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 48.7   | 5.0 | 50      | 0             | 97.4 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 51.75  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 106.5  | 10  | 100     | 0             | 106  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 60-135        | 0             |      |           | S    |
| 2-Hexanone                  | 89.73  | 10  | 100     | 0             | 89.7 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 93.47  | 10  | 100     | 0             | 93.5 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 78.65  | 10  | 100     | 0             | 78.7 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 50.46  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 50.21  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Bromoform                   | 47.99  | 5.0 | 50      | 0             | 96   | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 40.1   | 5.0 | 50      | 0             | 80.2 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 92.92  | 10  | 100     | 0             | 92.9 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 49.31  | 5.0 | 50      | 0             | 98.6 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 48.86  | 5.0 | 50      | 0             | 97.7 | 80-120        | 0             |      |           |      |
| Chloroethane                | 44.31  | 5.0 | 50      | 0             | 88.6 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 52.4   | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Chloromethane               | 38.52  | 5.0 | 50      | 0             | 77   | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 49.61  | 5.0 | 50      | 0             | 99.2 | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 50.02  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 51.42  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 103.3  | 10  | 100     | 0             | 103  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 45.95  | 10  | 50      | 0             | 91.9 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 47.51  | 5.0 | 50      | 0             | 95   | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 48.49  | 5.0 | 50      | 0             | 97   | 68.5-130      | 0             |      |           |      |
| Toluene                     | 49.21  | 5.0 | 50      | 0             | 98.4 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 49.24  | 5.0 | 50      | 0             | 98.5 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 50.94  | 5.0 | 50      | 0             | 102  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 115.5  | 10  | 100     | 0             | 115  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 42.3   | 2.0 | 50      | 0             | 84.6 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 153.6  | 15  | 150     | 0             | 102  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.81  | 5.0 | 50      | 0             | 91.6 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 46.31  | 5.0 | 50      | 0             | 92.6 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.29  | 5.0 | 50      | 0             | 92.6 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 45.21  | 5.0 | 50      | 0             | 90.4 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22159 InstrumentID: VOA1

MSD Sample ID: 0407361-01AMSD Test Code: SW8260 Units: µg/L Analysis Date: 08/03/04 2:32

Client ID: Run ID: VOA1\_040802C SeqNo: 518365 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 49.87  | 5.0 | 50      | 0             | 99.7 | 75.2-120      | 50.27         | 0.799  | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 48.35  | 5.0 | 50      | 0             | 96.7 | 72.4-121      | 49.12         | 1.58   | 20        |      |
| 1,1,2-Trichloroethane       | 51.42  | 5.0 | 50      | 0             | 103  | 80-120        | 50.33         | 2.15   | 20        |      |
| 1,1-Dichloroethane          | 50.13  | 5.0 | 50      | 0             | 100  | 76.9-120      | 51.45         | 2.58   | 20        |      |
| 1,1-Dichloroethene          | 47.79  | 5.0 | 50      | 0             | 95.6 | 72.6-123      | 48.7          | 1.89   | 20        |      |
| 1,2-Dichloroethane          | 50.61  | 5.0 | 50      | 0             | 101  | 80-120        | 51.75         | 2.23   | 20        |      |
| 2-Butanone                  | 95.73  | 10  | 100     | 0             | 95.7 | 69-131        | 106.5         | 10.6   | 20        |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 60-135        | 0             | 0      | 20        | S    |
| 2-Hexanone                  | 93.03  | 10  | 100     | 0             | 93   | 55.6-126      | 89.73         | 3.61   | 20        |      |
| 4-Methyl-2-pentanone        | 93.51  | 10  | 100     | 0             | 93.5 | 67.4-121      | 93.47         | 0.0421 | 20        |      |
| Acetone                     | 76.98  | 10  | 100     | 0             | 77   | 64.4-140      | 78.65         | 2.14   | 20        |      |
| Benzene                     | 51.81  | 5.0 | 50      | 0             | 104  | 80-120        | 50.46         | 2.63   | 20        |      |
| Bromodichloromethane        | 49.26  | 5.0 | 50      | 0             | 98.5 | 80-120        | 50.21         | 1.9    | 20        |      |
| Bromoform                   | 49.63  | 5.0 | 50      | 0             | 99.3 | 77.9-121      | 47.99         | 3.35   | 20        |      |
| Bromomethane                | 41.11  | 5.0 | 50      | 0             | 82.2 | 63.3-137      | 40.1          | 2.48   | 20        |      |
| Carbon disulfide            | 92.34  | 10  | 100     | 0             | 92.3 | 74.1-123      | 92.92         | 0.625  | 20        |      |
| Carbon tetrachloride        | 48.91  | 5.0 | 50      | 0             | 97.8 | 74.7-120      | 49.31         | 0.819  | 20        |      |
| Chlorobenzene               | 50.06  | 5.0 | 50      | 0             | 100  | 80-120        | 48.86         | 2.42   | 20        |      |
| Chloroethane                | 45.16  | 5.0 | 50      | 0             | 90.3 | 74.7-126      | 44.31         | 1.92   | 20        |      |
| Chloroform                  | 50.93  | 5.0 | 50      | 0             | 102  | 80-120        | 52.4          | 2.85   | 20        |      |
| Chloromethane               | 41.56  | 5.0 | 50      | 0             | 83.1 | 64.5-132      | 38.52         | 7.61   | 20        |      |
| cis-1,3-Dichloropropene     | 49.34  | 5.0 | 50      | 0             | 98.7 | 80-120        | 49.61         | 0.541  | 20        |      |
| Dibromochloromethane        | 49.34  | 5.0 | 50      | 0             | 98.7 | 80-120        | 50.02         | 1.36   | 20        |      |
| Ethylbenzene                | 52.86  | 5.0 | 50      | 0             | 106  | 80-120        | 51.42         | 2.77   | 20        |      |
| m,p-Xylene                  | 107.3  | 10  | 100     | 0             | 107  | 80-120        | 103.3         | 3.79   | 20        |      |
| Methylene chloride          | 45.8   | 10  | 50      | 0             | 91.6 | 76.2-120      | 45.95         | 0.345  | 20        |      |
| Styrene                     | 47.73  | 5.0 | 50      | 0             | 95.5 | 80-120        | 47.51         | 0.453  | 20        |      |
| Tetrachloroethene           | 49.63  | 5.0 | 50      | 0             | 99.3 | 68.5-130      | 48.49         | 2.32   | 20        |      |
| Toluene                     | 51.46  | 5.0 | 50      | 0             | 103  | 80-120        | 49.21         | 4.47   | 20        |      |
| trans-1,3-Dichloropropene   | 51.25  | 5.0 | 50      | 0             | 102  | 80-120        | 49.24         | 4      | 20        |      |
| Trichloroethene             | 50.84  | 5.0 | 50      | 0             | 102  | 78.9-120      | 50.94         | 0.198  | 20        |      |
| Vinyl acetate               | 112.7  | 10  | 100     | 0             | 113  | 62.4-133      | 115.5         | 2.38   | 20        |      |
| Vinyl chloride              | 42.81  | 2.0 | 50      | 0             | 85.6 | 72.7-128      | 42.3          | 1.19   | 20        |      |
| Xylenes, Total              | 158.9  | 15  | 150     | 0             | 106  | 80-120        | 153.6         | 3.38   | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 44.7   | 5.0 | 50      | 0             | 89.4 | 71-126        | 45.81         | 2.46   | 20        |      |
| Surr: 4-Bromofluorobenzene  | 49     | 5.0 | 50      | 0             | 98   | 74-125        | 46.31         | 5.65   | 20        |      |
| Surr: Dibromofluoromethane  | 45.76  | 5.0 | 50      | 0             | 91.5 | 73-126        | 46.29         | 1.13   | 20        |      |
| Surr: Toluene-d8            | 49.29  | 5.0 | 50      | 0             | 98.6 | 75-125        | 45.21         | 8.63   | 20        |      |

The following samples were analyzed in this batch:

0407269-01A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407269  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21983 InstrumentID: UV-2101PC

MBLK Sample ID: WBLKW1-072504 Test Code: E335.3 Units: mg/L Analysis Date: 07/25/04 0:00

Client ID: Run ID: UV-2101PC\_040725A SeqNo: 513927 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-072504 Test Code: E335.3 Units: mg/L Analysis Date: 07/25/04 0:00

Client ID: Run ID: UV-2101PC\_040725A SeqNo: 513928 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2044 | 0.020 | 0.2     | 0             | 102  | 80-120        | 0             |      |           |      |

MS Sample ID: 0407271-02DMS Test Code: E335.3 Units: mg/L Analysis Date: 07/25/04 0:00

Client ID: Run ID: UV-2101PC\_040725A SeqNo: 513940 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2105 | 0.020 | 0.2     | 0.0032        | 104  | 75-125        | 0             |      |           |      |

MSD Sample ID: 0407271-02DMSD Test Code: E335.3 Units: mg/L Analysis Date: 07/25/04 0:00

Client ID: Run ID: UV-2101PC\_040725A SeqNo: 513941 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Cyanide | 0.2092 | 0.020 | 0.2     | 0.0032        | 103  | 75-125        | 0.2105        | 0.619 | 25        |      |

DUP Sample ID: 0407271-02DDUP Test Code: E335.3 Units: mg/L Analysis Date: 07/25/04 0:00

Client ID: Run ID: UV-2101PC\_040725A SeqNo: 513939 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.003  | 0.020 | 0       | 0             | 0    | 0-0           | 0.0032        | 0    | 20        | J    |

The following samples were analyzed in this batch:

0407269-01D

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21985 InstrumentID: IC201

|                                  |                          |                       |         |               |                 |               |               |       |                               |      |  |
|----------------------------------|--------------------------|-----------------------|---------|---------------|-----------------|---------------|---------------|-------|-------------------------------|------|--|
| MBLK                             | Sample ID: WBLKW1-072304 |                       |         |               | Test Code: E300 |               | Units: mg/L   |       | Analysis Date: 07/23/04 13:00 |      |  |
| Client ID:                       |                          | Run ID: IC201_040723A |         | SeqNo: 514016 |                 | Prep Date:    |               | DF: 1 |                               |      |  |
| Analyte                          | Result                   | PQL                   | SPK Val | SPK Ref Value | %REC            | Control Limit | RPD Ref Value | %RPD  | RPD Limit                     | Qual |  |
| Chloride                         | ND                       | 0.50                  |         |               |                 |               |               |       |                               |      |  |
| Fluoride                         | ND                       | 0.10                  |         |               |                 |               |               |       |                               |      |  |
| Sulfate                          | ND                       | 1.0                   |         |               |                 |               |               |       |                               |      |  |
| Nitrate/Nitrite (as N)           | ND                       | 0.10                  |         |               |                 |               |               |       |                               |      |  |
| Surr: Dichloroacetic acid (surr) | 5.04                     | 0.10                  | 5       | 0             | 101             | 80-120        | 0             |       |                               |      |  |

|                                  |                           |                       |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----------------------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| LCS                              | Sample ID: WLC SW1-072304 |                       |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/23/04 13:29 |           |      |
| Client ID:                       |                           | Run ID: IC201_040723A |         | SeqNo: 514017   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                    | PQL                   | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 9.17                      | 0.50                  | 10      | 0               | 91.7 | 80-120        |               | 0                             |           |      |
| Fluoride                         | 1.94                      | 0.10                  | 2       | 0               | 97   | 80-120        |               | 0                             |           |      |
| Sulfate                          | 9.7                       | 1.0                   | 10      | 0               | 97   | 80-120        |               | 0                             |           |      |
| Nitrate/Nitrite (as N)           | 3.88                      | 0.10                  | 0       | 0               | 0    | 80-120        |               | 0                             |           |      |
| Surr: Dichloroacetic acid (surr) | 5.47                      | 0.10                  | 5       | 0               | 109  | 80-120        |               | 0                             |           |      |

|                                  |                          |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|--------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| LCS D                            | Sample ID: WLCSDW1-07230 |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/23/04 13:57 |           |      |
| Client ID:                       | Run ID: IC201_040723A    |      |         | SeqNo: 514018   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                   | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 9.16                     | 0.50 | 10      | 0               | 91.6 | 80-120        | 9.17          | 0.109                         | 20        |      |
| Fluoride                         | 1.94                     | 0.10 | 2       | 0               | 97   | 80-120        | 1.94          | 0                             | 20        |      |
| Sulfate                          | 9.71                     | 1.0  | 10      | 0               | 97.1 | 80-120        | 9.7           | 0.103                         | 20        |      |
| Nitrate/Nitrite (as N)           | 3.86                     | 0.10 | 0       | 0               | 0    | 80-120        | 3.88          | 0.517                         | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.41                     | 0.10 | 5       | 0               | 108  | 80-120        | 5.47          | 1.1                           | 20        |      |

|                                  |                          |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|--------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| MS                               | Sample ID: 0407269-01BMS |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/23/04 15:51 |           |      |
| Client ID: TEL-4                 | Run ID: IC201_040723A    |     |         | SeqNo: 514022   |      | Prep Date:    |               | DF: 10                        |           |      |
| Analyte                          | Result                   | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 507.6                    | 5.0 | 100     | 413.1           | 94.5 | 75-125        | 0             |                               |           | EO   |
| Fluoride                         | 19.5                     | 1.0 | 20      | 2.4             | 85.5 | 75-125        | 0             |                               |           |      |
| Sulfate                          | 612.9                    | 10  | 100     | 493.3           | 120  | 75-125        | 0             |                               |           | EO   |
| Nitrate/Nitrite (as N)           | 38.4                     | 1.0 | 40      | 0               | 96   | 75-125        | 0             |                               |           |      |
| Surr: Dichloroacetic acid (surr) | 52.8                     | 1.0 | 50      | 0               | 106  | 80-120        | 0             |                               |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407269  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21985 InstrumentID: IC201

|                                  |                           |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| MSD                              | Sample ID: 0407269-01BMSD |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/23/04 16:20 |           |      |
| Client ID: TEL-4                 | Run ID: IC201_040723A     |     |         | SeqNo: 514023   |      | Prep Date:    |               | DF: 10                        |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 497.7                     | 5.0 | 100     | 413.1           | 84.6 | 75-125        | 507.6         | 1.97                          | 20        | O    |
| Fluoride                         | 19.9                      | 1.0 | 20      | 2.4             | 87.5 | 75-125        | 19.5          | 2.03                          | 20        |      |
| Sulfate                          | 599.5                     | 10  | 100     | 493.3           | 106  | 75-125        | 612.9         | 2.21                          | 20        | EO   |
| Nitrate/Nitrite (as N)           | 37.5                      | 1.0 | 40      | 0               | 93.8 | 75-125        | 38.4          | 2.37                          | 20        |      |
| Surr: Dichloroacetic acid (surr) | 52.9                      | 1.0 | 50      | 0               | 106  | 80-120        | 52.8          | 0.189                         | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0407269-01BDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/23/04 15:23 |           |      |
| Client ID: TEL-4                 | Run ID: IC201_040723A     |     |         | SeqNo: 514021   |      | Prep Date:    |               | DF: 10                        |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 411.4                     | 5.0 | 0       | 0               | 0    | 0-0           | 413.1         | 0.412                         | 20        |      |
| Fluoride                         | 2                         | 1.0 | 0       | 0               | 0    | 0-0           | 2.4           | 18.2                          | 20        |      |
| Sulfate                          | 494.3                     | 10  | 0       | 0               | 0    | 0-0           | 493.3         | 0.203                         | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 1.0 | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 52.9                      | 1.0 | 50      | 0               | 106  | 80-120        | 52            | 1.72                          | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0407271-02BDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/23/04 20:36 |           |      |
| Client ID:                       | Run ID: IC201_040723A     |     |         | SeqNo: 514031   |      | Prep Date:    |               | DF: 100                       |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 229                       | 50  | 0       | 0               | 0    | 0-0           | 230           | 0.436                         | 20        |      |
| Fluoride                         | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Sulfate                          | 954                       | 100 | 0       | 0               | 0    | 0-0           | 954           | 0                             | 20        |      |
| Nitrate/Nitrite (as N)           | 18                        | 10  | 0       | 0               | 0    | 0-0           | 18            | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 523                       | 10  | 500     | 0               | 105  | 80-120        | 524           | 0.191                         | 20        |      |

The following samples were analyzed in this batch:

0407269-01B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407269  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R22094** InstrumentID: **WetChem**

**MBLK** Sample ID: **WBLKW1-072904** Test Code: **E310.1** Units: **mg/L** Analysis Date: **07/29/04 0:00**

Client ID: Run ID: **WETCHEM\_040729D** SeqNo: **516921** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

**LCS** Sample ID: **WLCSW1-072904** Test Code: **E310.1** Units: **mg/L** Analysis Date: **07/29/04 0:00**

Client ID: Run ID: **WETCHEM\_040729D** SeqNo: **516922** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 1000   | 5.0 | 0       | 0.01          | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Total (As CaCO3)       | 1000   | 5.0 | 1000    | 0             | 100  | 80-120        | 0             |      |           |      |

**DUP** Sample ID: **0407271-01BDUP** Test Code: **E310.1** Units: **mg/L** Analysis Date: **07/29/04 0:00**

Client ID: Run ID: **WETCHEM\_040729D** SeqNo: **516933** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 200.1  | 5.0 | 0       | 0             | 0    | 0-0           | 200.1         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 200.1  | 5.0 | 0       | 0             | 0    | 0-0           | 200.1         | 0    | 20        |      |

The following samples were analyzed in this batch:

0407269-01B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



**e-Lab, Inc.**  
10450 Stan  
**Houston, TX**  
(Tel) 281.5  
(Fax) 281.5

e-Lab, Inc.  
10450 Stancil Rd. #210  
Houston, Texas 77099  
(Tel) 281.530.5656  
(Fax) 281.530.5887

# Chain of Custody Form

Page 7 of 7

**e-Lab, Inc.**  
3352 128th Avenue  
**Holland, Michigan 49424**  
**(Tel) 616.399.6070**  
**(Fax) 616.399.6185**

| Customer Information                                                                                                                                                       |                    |         |      | Project Information       |                   |           |   | e-Lab Project Manager:                                                                                                                                                                                       |   |   |   | e-Lab Work Order #:                                                                 |   |   |   |   |      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------|------|---------------------------|-------------------|-----------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|-------------------------------------------------------------------------------------|---|---|---|---|------|
| Customer Information                                                                                                                                                       |                    |         |      | Project Information       |                   |           |   | Parameter/Method Request for Analysis                                                                                                                                                                        |   |   |   |                                                                                     |   |   |   |   |      |
| Purchase Order                                                                                                                                                             | Project Name       | A       |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| Work Order                                                                                                                                                                 | Project Number     | B       |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| Company Name                                                                                                                                                               | Bill To Company    | C       |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| Send Report To                                                                                                                                                             | Invoice Attn.      | D       |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| Address                                                                                                                                                                    | Address            | E       |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| City/State/Zip                                                                                                                                                             | City/State/Zip     | F       |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| Phone                                                                                                                                                                      | Phone              | G       |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| Fax                                                                                                                                                                        | Fax                | H       |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| e-Mail Address                                                                                                                                                             |                    | I       |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
|                                                                                                                                                                            |                    | J       |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| No.                                                                                                                                                                        | Sample Description | Date    | Time | Matrix                    | Pres. Key Numbers | # Bottles | A | B                                                                                                                                                                                                            | C | D | E | F                                                                                   | G | H | I | J | Hold |
| 1                                                                                                                                                                          | TEL-4              | 7/22/04 | 0930 | L                         |                   | 8         | A |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| 2                                                                                                                                                                          |                    |         |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| 3                                                                                                                                                                          |                    |         |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| 4                                                                                                                                                                          |                    |         |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| 5                                                                                                                                                                          |                    |         |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| 6                                                                                                                                                                          |                    |         |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| 7                                                                                                                                                                          |                    |         |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| 8                                                                                                                                                                          |                    |         |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| 9                                                                                                                                                                          |                    |         |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| 10                                                                                                                                                                         |                    |         |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   |                                                                                     |   |   |   |   |      |
| Sampler(s): Please Print & Sign                                                                                                                                            |                    |         |      | Shipment Method: Fed Ex   |                   |           |   | Required Turnaround Time: (Check Box)                                                                                                                                                                        |   |   |   | Results Due Date:                                                                   |   |   |   |   |      |
|                                                                                                                                                                            |                    |         |      |                           |                   |           |   | <input type="checkbox"/> 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 3 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour <input type="checkbox"/> Other |   |   |   |                                                                                     |   |   |   |   |      |
| Relinquished by: [Signature]                                                                                                                                               |                    |         |      | Received by: [Signature]  |                   |           |   | Time: 7/22                                                                                                                                                                                                   |   |   |   | Time: 11:05                                                                         |   |   |   |   |      |
| Relinquished by: [Signature]                                                                                                                                               |                    |         |      | Received by: [Signature]  |                   |           |   | Time: 7/22                                                                                                                                                                                                   |   |   |   | Time: 11:05                                                                         |   |   |   |   |      |
| Logged by (Laboratory):                                                                                                                                                    |                    |         |      | Received by (Laboratory): |                   |           |   | Time: 7/23/04                                                                                                                                                                                                |   |   |   | Time: 0930                                                                          |   |   |   |   |      |
| QC Package: (Check Box Below)                                                                                                                                              |                    |         |      | Cooler Temp               |                   |           |   | e-Lab Cooler ID                                                                                                                                                                                              |   |   |   | QC Package: (Check Box Below)                                                       |   |   |   |   |      |
| <input type="checkbox"/> Level II: Standard QC <input type="checkbox"/> TRRP LRC <input type="checkbox"/> Level IV: SW846 Methods/CLP like <input type="checkbox"/> Other: |                    |         |      |                           |                   |           |   |                                                                                                                                                                                                              |   |   |   | <input type="checkbox"/> Level III: Raw Data <input type="checkbox"/> TRRP Level IV |   |   |   |   |      |
| Preservative Key: 1-HCl   2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH   5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>4</sub> 7-Other        |                    |         |      | 8-4°C                     |                   |           |   | Note: Any changes must be made in writing once samples                                                                                                                                                       |   |   |   |                                                                                     |   |   |   |   |      |

e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 7/23/2004 8:30:00 AM

Work Order Number 0407269

Received by: RSZ

Checklist completed by

[Signature]  
Signature

7/23/04  
Date

Reviewed by

[Signature]  
Initials

7/23/04  
Date

Matrix:

W

Carrier name FedEx

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

Temperature(s)/Thermometer(s):

2.7c

003

Water - VOA vials have zero headspace?

Yes ☒

No ☐

No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

N/A ☐

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_



**e-Lab Analytical, Inc.**

10450 Standcliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

August 02, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: NCL/TEL

Work Order : **0407217**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 4 samples on 7/20/2004 8:45:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 40.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

**e-Lab Analytical, Inc.**

**Date:** August 02, 2004

**CLIENT:** Navajo Refining Company  
**Project:** NCL/TEL  
**Work Order:** 0407217

**Work Order Sample Summary**

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0407217-01           | NCL-33                  | Water         |                   | 7/19/2004 09:00        | 7/20/2004 08:45      | <input type="checkbox"/> |
| 0407217-02           | NCL-34                  | Water         |                   | 7/19/2004 09:30        | 7/20/2004 08:45      | <input type="checkbox"/> |
| 0407217-03           | MW-60                   | Water         |                   | 7/19/2004 11:00        | 7/20/2004 08:45      | <input type="checkbox"/> |
| 0407217-04           | MW-59                   | Water         |                   | 7/19/2004 13:45        | 7/20/2004 08:45      | <input type="checkbox"/> |

**e-Lab Analytical, Inc.****Date:** *August 02, 2004*

**CLIENT:** Navajo Refining Company  
**Project:** NCL/TEL  
**Work Order:** 0407217

**Case Narrative**

Batch 9719 Metals MS/MSD was an unrelated sample.

Batch R22101 Volatiles MS/MSD was an unrelated sample.

Batch R21861 Anions (sample NCL-33) MS/MSD recoveries were outside of control limits for Chloride (59.8% and 62.1% were E and O flagged) and Sulfate (49.2% and 46.3% were E and O flagged).

**e-Lab Analytical, Inc.**

Date: August 02, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407217  
Project: NCL/TEL  
Lab ID: 0407217-01

Client Sample ID: NCL-33  
Collection Date: 7/19/2004 9:00:00 AM  
Matrix: WATER

| Analyses                              | Result | Report Limit  | Qual | Units | Dilution Factor      | Date Analyzed         |
|---------------------------------------|--------|---------------|------|-------|----------------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |        |               |      |       |                      |                       |
|                                       |        | <b>SW7470</b> |      |       | Prep Date: 7/26/2004 | Analyst: JCJ          |
| Mercury                               | ND     | 0.000200      |      | mg/L  | 1                    | 7/26/2004 4:59:03 PM  |
| <b>ICP METALS, TOTAL</b>              |        |               |      |       |                      |                       |
|                                       |        | <b>SW6020</b> |      |       | Prep Date: 7/23/2004 | Analyst: SA           |
| Aluminum                              | 0.0121 | 0.0100        |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Arsenic                               | ND     | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Barium                                | 0.0513 | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Beryllium                             | ND     | 0.00200       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Boron                                 | 0.491  | 0.0200        |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Cadmium                               | ND     | 0.00100       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Calcium                               | 324    | 25.0          |      | mg/L  | 50                   | 7/28/2004 3:09:00 PM  |
| Chromium                              | ND     | 0.00200       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Cobalt                                | ND     | 0.00200       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Copper                                | ND     | 0.00200       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Iron                                  | 1.53   | 0.200         |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Lead                                  | ND     | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Magnesium                             | 120    | 10.0          |      | mg/L  | 50                   | 7/28/2004 3:09:00 PM  |
| Manganese                             | 0.0782 | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Molybdenum                            | ND     | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Nickel                                | ND     | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Potassium                             | 3.46   | 0.200         |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Selenium                              | ND     | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Silver                                | ND     | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Sodium                                | 104    | 10.0          |      | mg/L  | 50                   | 7/28/2004 3:09:00 PM  |
| Vanadium                              | ND     | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| Zinc                                  | ND     | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:03:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |               |      |       |                      |                       |
|                                       |        | <b>SW8270</b> |      |       | Prep Date: 7/22/2004 | Analyst: HV           |
| 1,2,4-Trichlorobenzene                | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |
| 2,4,5-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |
| 2,4,6-Trichlorophenol                 | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |
| 2-Methylnaphthalene                   | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |
| 2-Methylphenol                        | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |
| 2-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |
| 2-Nitrophenol                         | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |
| 3-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |
| 4-Methylphenol                        | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |
| 4-Nitroaniline                        | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |
| 4-Nitrophenol                         | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |
| Acenaphthene                          | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |
| Acenaphthylene                        | ND     | 10            |      | µg/L  | 1                    | 7/27/2004 7:46:00 PM  |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: August 02, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL  
 Lab ID: 0407217-01

Client Sample ID: NCL-33  
 Collection Date: 7/19/2004 9:00:00 AM  
 Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 7/27/2004 7:46:00 PM |
| Surr: 2,4,6-Tribromophenol | 119    | 39-153       |      | %REC  | 1               | 7/27/2004 7:46:00 PM |
| Surr: 2-Fluorobiphenyl     | 101    | 40-147       |      | %REC  | 1               | 7/27/2004 7:46:00 PM |
| Surr: 2-Fluorophenol       | 41.6   | 21-110       |      | %REC  | 1               | 7/27/2004 7:46:00 PM |
| Surr: 4-Terphenyl-d14      | 104    | 39-141       |      | %REC  | 1               | 7/27/2004 7:46:00 PM |
| Surr: Nitrobenzene-d5      | 95.2   | 37-140       |      | %REC  | 1               | 7/27/2004 7:46:00 PM |
| Surr: Phenol-d6            | 26.9   | 11-100       |      | %REC  | 1               | 7/27/2004 7:46:00 PM |

## VOLATILES BY GC/MS

SW8260

Analyst: HLBW

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 7/28/2004 6:47:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 7/28/2004 6:47:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

AR Page 2 of 13

**e-Lab Analytical, Inc.**

Date: August 02, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407217  
Project: NCL/TEL  
Lab ID: 0407217-01

Client Sample ID: NCL-33  
Collection Date: 7/19/2004 9:00:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units        | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|--------------|-----------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L         | 1               | 7/28/2004 6:47:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 88.5   | 71-126        |      | %REC         | 1               | 7/28/2004 6:47:00 PM  |
| Surr: 4-Bromofluorobenzene          | 108    | 74-125        |      | %REC         | 1               | 7/28/2004 6:47:00 PM  |
| Surr: Dibromofluoromethane          | 99.1   | 73-126        |      | %REC         | 1               | 7/28/2004 6:47:00 PM  |
| Surr: Toluene-d8                    | 112    | 75-125        |      | %REC         | 1               | 7/28/2004 6:47:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: LMD |                 |                       |
| Chloride                            | 289    | 5.00          |      | mg/L         | 10              | 7/21/2004 2:42:00 AM  |
| Fluoride                            | 2.37   | 0.100         |      | mg/L         | 1               | 7/20/2004 10:25:00 PM |
| Sulfate                             | 377    | 10.0          |      | mg/L         | 10              | 7/21/2004 2:42:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L         | 1               | 7/20/2004 10:25:00 PM |
| Surr: Dichloroacetic acid (surr)    | 108    | 80-120        |      | %REC         | 1               | 7/20/2004 10:25:00 PM |
| Surr: Dichloroacetic acid (surr)    | 110    | 80-120        |      | %REC         | 10              | 7/21/2004 2:42:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: LMD |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 640    | 5.00          |      | mg/L         | 1               | 7/22/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L         | 1               | 7/22/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L         | 1               | 7/22/2004             |
| Alkalinity, Total (As CaCO3)        | 640    | 5.00          |      | mg/L         | 1               | 7/22/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: LMD |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L         | 1               | 7/25/2004             |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: August 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407217  
**Project:** NCL/TEL  
**Lab ID:** 0407217-02

**Client Sample ID:** NCL-34  
**Collection Date:** 7/19/2004 9:30:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor      | Date Analyzed         |
|---------------------------------------|---------|---------------|------|-------|----------------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                      |                       |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: 7/26/2004 | Analyst: JCJ          |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                    | 7/26/2004 5:00:34 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                      |                       |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: 7/23/2004 | Analyst: SA           |
| Aluminum                              | 0.0532  | 0.0100        |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Arsenic                               | ND      | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Barium                                | 0.727   | 0.100         |      | mg/L  | 20                   | 7/28/2004 3:15:00 PM  |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Boron                                 | 0.277   | 0.0200        |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Calcium                               | 277     | 10.0          |      | mg/L  | 20                   | 7/28/2004 3:15:00 PM  |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Cobalt                                | ND      | 0.00200       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Copper                                | ND      | 0.00200       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Iron                                  | 0.292   | 0.200         |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Magnesium                             | 108     | 4.00          |      | mg/L  | 20                   | 7/28/2004 3:15:00 PM  |
| Manganese                             | 0.109   | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Molybdenum                            | ND      | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Nickel                                | ND      | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Potassium                             | 1.03    | 0.200         |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Sodium                                | 162     | 4.00          |      | mg/L  | 20                   | 7/28/2004 3:15:00 PM  |
| Vanadium                              | ND      | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| Zinc                                  | 0.00856 | 0.00500       |      | mg/L  | 1                    | 7/27/2004 11:09:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                      |                       |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: 7/22/2004 | Analyst: HV           |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                    | 7/27/2004 8:16:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: August 02, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407217  
Project: NCL/TEL  
Lab ID: 0407217-02

Client Sample ID: NCL-34  
Collection Date: 7/19/2004 9:30:00 AM  
Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units                | Dilution Factor | Date Analyzed        |
|----------------------------|--------|---------------|------|----------------------|-----------------|----------------------|
| Aniline                    | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Anthracene                 | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Benz(a)anthracene          | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Benzidine                  | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Hexachloroethane           | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Isophorone                 | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Naphthalene                | 14     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Nitrobenzene               | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Pentachlorophenol          | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Phenanthrene               | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Phenol                     | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Pyrene                     | ND     | 10            |      | µg/L                 | 1               | 7/27/2004 8:16:00 PM |
| Surr: 2,4,6-Tribromophenol | 116    | 39-153        |      | %REC                 | 1               | 7/27/2004 8:16:00 PM |
| Surr: 2-Fluorobiphenyl     | 96.5   | 40-147        |      | %REC                 | 1               | 7/27/2004 8:16:00 PM |
| Surr: 2-Fluorophenol       | 45.7   | 21-110        |      | %REC                 | 1               | 7/27/2004 8:16:00 PM |
| Surr: 4-Terphenyl-d14      | 99.3   | 39-141        |      | %REC                 | 1               | 7/27/2004 8:16:00 PM |
| Surr: Nitrobenzene-d5      | 97.6   | 37-140        |      | %REC                 | 1               | 7/27/2004 8:16:00 PM |
| Surr: Phenol-d6            | 28.5   | 11-100        |      | %REC                 | 1               | 7/27/2004 8:16:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      | Analyst: <b>HLBW</b> |                 |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| 1,2-Dichloroethane         | 45     | 5.0           |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| Acetone                    | 30     | 10            |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| Benzene                    | 2,600  | 120           |      | µg/L                 | 25              | 7/30/2004 2:43:00 AM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L                 | 1               | 7/28/2004 5:18:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: August 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407217  
**Project:** NCL/TEL  
**Lab ID:** 0407217-02

**Client Sample ID:** NCL-34  
**Collection Date:** 7/19/2004 9:30:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed         |
|-------------------------------------|--------|---------------|------|-------|---------------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Ethylbenzene                        | 200    | 120           |      | µg/L  | 25                  | 7/30/2004 2:43:00 AM  |
| m,p-Xylene                          | 240    | 10            |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Xylenes, Total                      | 240    | 15            |      | µg/L  | 1                   | 7/28/2004 5:18:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 100    | 71-126        |      | %REC  | 25                  | 7/30/2004 2:43:00 AM  |
| Surr: 1,2-Dichloroethane-d4         | 86.8   | 71-126        |      | %REC  | 1                   | 7/28/2004 5:18:00 PM  |
| Surr: 4-Bromofluorobenzene          | 97.8   | 74-125        |      | %REC  | 25                  | 7/30/2004 2:43:00 AM  |
| Surr: 4-Bromofluorobenzene          | 111    | 74-125        |      | %REC  | 1                   | 7/28/2004 5:18:00 PM  |
| Surr: Dibromofluoromethane          | 96.4   | 73-126        |      | %REC  | 1                   | 7/28/2004 5:18:00 PM  |
| Surr: Dibromofluoromethane          | 95.8   | 73-126        |      | %REC  | 25                  | 7/30/2004 2:43:00 AM  |
| Surr: Toluene-d8                    | 97.3   | 75-125        |      | %REC  | 25                  | 7/30/2004 2:43:00 AM  |
| Surr: Toluene-d8                    | 113    | 75-125        |      | %REC  | 1                   | 7/28/2004 5:18:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>LMD</b> |                       |
| Chloride                            | 364    | 5.00          |      | mg/L  | 10                  | 7/21/2004 3:10:00 AM  |
| Fluoride                            | 1.45   | 0.100         |      | mg/L  | 1                   | 7/20/2004 11:22:00 PM |
| Sulfate                             | 154    | 10.0          |      | mg/L  | 10                  | 7/21/2004 3:10:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1                   | 7/20/2004 11:22:00 PM |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC  | 1                   | 7/20/2004 11:22:00 PM |
| Surr: Dichloroacetic acid (surr)    | 110    | 80-120        |      | %REC  | 10                  | 7/21/2004 3:10:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>LMD</b> |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 640    | 5.00          |      | mg/L  | 1                   | 7/22/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 7/22/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 7/22/2004             |
| Alkalinity, Total (As CaCO3)        | 640    | 5.00          |      | mg/L  | 1                   | 7/22/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: <b>LMD</b> |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1                   | 7/25/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: August 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407217  
**Project:** NCL/TEL  
**Lab ID:** 0407217-03

**Client Sample ID:** MW-60  
**Collection Date:** 7/19/2004 11:00:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 7/26/2004 5:02:05 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | 0.0282  | 0.0100       |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Arsenic                               | 0.0334  | 0.00500      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Barium                                | 0.0121  | 0.00500      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Boron                                 | 0.477   | 0.0200       |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Calcium                               | 399     | 25.0         |      | mg/L  | 50              | 7/28/2004 3:21:00 PM  |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Cobalt                                | 0.00682 | 0.00200      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Copper                                | ND      | 0.00200      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Iron                                  | 2.77    | 0.200        |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Magnesium                             | 379     | 10.0         |      | mg/L  | 50              | 7/28/2004 3:21:00 PM  |
| Manganese                             | 0.722   | 0.250        |      | mg/L  | 50              | 7/28/2004 3:21:00 PM  |
| Molybdenum                            | 0.00603 | 0.00500      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Nickel                                | 0.00687 | 0.00500      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Potassium                             | 0.437   | 0.200        |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Sodium                                | 277     | 10.0         |      | mg/L  | 50              | 7/28/2004 3:21:00 PM  |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| Zinc                                  | ND      | 0.00500      |      | mg/L  | 1               | 7/27/2004 11:15:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: August 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407217  
**Project:** NCL/TEL  
**Lab ID:** 0407217-03

**Client Sample ID:** MW-60  
**Collection Date:** 7/19/2004 11:00:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Naphthalene                | 14     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 7/27/2004 8:45:00 PM |
| Surr: 2,4,6-Tribromophenol | 111    | 39-153       |      | %REC  | 1               | 7/27/2004 8:45:00 PM |
| Surr: 2-Fluorobiphenyl     | 85.1   | 40-147       |      | %REC  | 1               | 7/27/2004 8:45:00 PM |
| Surr: 2-Fluorophenol       | 44.0   | 21-110       |      | %REC  | 1               | 7/27/2004 8:45:00 PM |
| Surr: 4-Terphenyl-d14      | 100    | 39-141       |      | %REC  | 1               | 7/27/2004 8:45:00 PM |
| Surr: Nitrobenzene-d5      | 92.4   | 37-140       |      | %REC  | 1               | 7/27/2004 8:45:00 PM |
| Surr: Phenol-d6            | 26.9   | 11-100       |      | %REC  | 1               | 7/27/2004 8:45:00 PM |

**VOLATILES BY GC/MS****SW8260****Analyst: HLBW**

|                           |     |     |  |      |   |                      |
|---------------------------|-----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND  | 5.0 |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| 1,1,2,2-Tetrachloroethane | ND  | 5.0 |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| 1,1,2-Trichloroethane     | ND  | 5.0 |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| 1,1-Dichloroethane        | ND  | 5.0 |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| 1,1-Dichloroethene        | ND  | 5.0 |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| 1,2-Dichloroethane        | ND  | 5.0 |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| 2-Butanone                | ND  | 10  |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| 2-Chloroethyl vinyl ether | ND  | 10  |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| 2-Hexanone                | ND  | 10  |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| 4-Methyl-2-pentanone      | ND  | 10  |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| Acetone                   | 16  | 10  |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| Benzene                   | 160 | 5.0 |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| Bromodichloromethane      | ND  | 5.0 |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| Bromoform                 | ND  | 5.0 |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| Bromomethane              | ND  | 5.0 |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| Carbon disulfide          | ND  | 10  |  | µg/L | 1 | 7/28/2004 5:48:00 PM |
| Carbon tetrachloride      | ND  | 5.0 |  | µg/L | 1 | 7/28/2004 5:48:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

AR Page 8 of 13

**e-Lab Analytical, Inc.**

Date: August 02, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407217  
Project: NCL/TEL  
Lab ID: 0407217-03

Client Sample ID: MW-60  
Collection Date: 7/19/2004 11:00:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|-------|-----------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Ethylbenzene                        | 120    | 5.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L  | 1               | 7/28/2004 5:48:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 85.6   | 71-126        |      | %REC  | 1               | 7/28/2004 5:48:00 PM  |
| Surr: 4-Bromofluorobenzene          | 109    | 74-125        |      | %REC  | 1               | 7/28/2004 5:48:00 PM  |
| Surr: Dibromofluoromethane          | 98.0   | 73-126        |      | %REC  | 1               | 7/28/2004 5:48:00 PM  |
| Surr: Toluene-d8                    | 112    | 75-125        |      | %REC  | 1               | 7/28/2004 5:48:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: LMD    |                       |
| Chloride                            | 181    | 5.00          |      | mg/L  | 10              | 7/21/2004 4:07:00 AM  |
| Fluoride                            | 0.870  | 0.100         |      | mg/L  | 1               | 7/20/2004 11:51:00 PM |
| Sulfate                             | 1,660  | 100           |      | mg/L  | 100             | 7/21/2004 4:36:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1               | 7/20/2004 11:51:00 PM |
| Surr: Dichloroacetic acid (surr)    | 108    | 80-120        |      | %REC  | 1               | 7/20/2004 11:51:00 PM |
| Surr: Dichloroacetic acid (surr)    | 110    | 80-120        |      | %REC  | 10              | 7/21/2004 4:07:00 AM  |
| Surr: Dichloroacetic acid (surr)    | 110    | 80-120        |      | %REC  | 100             | 7/21/2004 4:36:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: LMD    |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 625    | 5.00          |      | mg/L  | 1               | 7/22/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1               | 7/22/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1               | 7/22/2004             |
| Alkalinity, Total (As CaCO3)        | 625    | 5.00          |      | mg/L  | 1               | 7/22/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: LMD    |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1               | 7/25/2004             |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: August 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407217  
**Project:** NCL/TEL  
**Lab ID:** 0407217-04

**Client Sample ID:** MW-59  
**Collection Date:** 7/19/2004 1:45:00 PM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor             | Date Analyzed         |
|---------------------------------------|---------|---------------|------|-------|-----------------------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                             |                       |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: <b>7/26/2004</b> | Analyst: <b>JCJ</b>   |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                           | 7/26/2004 5:03:37 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                             |                       |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: <b>7/23/2004</b> | Analyst: <b>SA</b>    |
| Aluminum                              | 0.0143  | 0.0100        |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Arsenic                               | 0.0407  | 0.00500       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Barium                                | 0.0114  | 0.00500       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Boron                                 | 0.229   | 0.0200        |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Calcium                               | 502     | 10.0          |      | mg/L  | 20                          | 7/28/2004 3:26:00 PM  |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Cobalt                                | 0.00300 | 0.00200       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Copper                                | ND      | 0.00200       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Iron                                  | 0.301   | 0.200         |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Magnesium                             | 309     | 4.00          |      | mg/L  | 20                          | 7/28/2004 3:26:00 PM  |
| Manganese                             | 0.341   | 0.00500       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Molybdenum                            | ND      | 0.00500       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Nickel                                | ND      | 0.00500       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Potassium                             | 0.451   | 0.200         |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Sodium                                | 163     | 4.00          |      | mg/L  | 20                          | 7/28/2004 3:26:00 PM  |
| Vanadium                              | ND      | 0.00500       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| Zinc                                  | ND      | 0.00500       |      | mg/L  | 1                           | 7/27/2004 11:21:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                             |                       |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: <b>7/22/2004</b> | Analyst: <b>HV</b>    |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                           | 7/27/2004 9:14:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: August 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407217  
**Project:** NCL/TEL  
**Lab ID:** 0407217-04

**Client Sample ID:** MW-59  
**Collection Date:** 7/19/2004 1:45:00 PM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units         | Dilution Factor      | Date Analyzed        |
|----------------------------|--------|--------------|------|---------------|----------------------|----------------------|
| Aniline                    | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Phenol                     | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L          | 1                    | 7/27/2004 9:14:00 PM |
| Surr: 2,4,6-Tribromophenol | 114    | 39-153       |      | %REC          | 1                    | 7/27/2004 9:14:00 PM |
| Surr: 2-Fluorobiphenyl     | 100    | 40-147       |      | %REC          | 1                    | 7/27/2004 9:14:00 PM |
| Surr: 2-Fluorophenol       | 45.0   | 21-110       |      | %REC          | 1                    | 7/27/2004 9:14:00 PM |
| Surr: 4-Terphenyl-d14      | 108    | 39-141       |      | %REC          | 1                    | 7/27/2004 9:14:00 PM |
| Surr: Nitrobenzene-d5      | 89.8   | 37-140       |      | %REC          | 1                    | 7/27/2004 9:14:00 PM |
| Surr: Phenol-d6            | 28.5   | 11-100       |      | %REC          | 1                    | 7/27/2004 9:14:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        |              |      | <b>SW8260</b> | <b>Analyst: HLBW</b> |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0          |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0          |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| 2-Butanone                 | ND     | 10           |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10           |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| 2-Hexanone                 | ND     | 10           |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10           |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| Acetone                    | ND     | 10           |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| Benzene                    | 190    | 50           |      | µg/L          | 10                   | 7/30/2004 3:10:00 AM |
| Bromodichloromethane       | ND     | 5.0          |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| Bromoform                  | ND     | 5.0          |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| Bromomethane               | ND     | 5.0          |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| Carbon disulfide           | ND     | 10           |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |
| Carbon tetrachloride       | ND     | 5.0          |      | µg/L          | 1                    | 7/28/2004 6:18:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: August 02, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407217  
Project: NCL/TEL  
Lab ID: 0407217-04

Client Sample ID: MW-59  
Collection Date: 7/19/2004 1:45:00 PM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units        | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|--------------|-----------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Ethylbenzene                        | 35     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L         | 1               | 7/28/2004 6:18:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 102    | 71-126        |      | %REC         | 10              | 7/30/2004 3:10:00 AM  |
| Surr: 1,2-Dichloroethane-d4         | 86.7   | 71-126        |      | %REC         | 1               | 7/28/2004 6:18:00 PM  |
| Surr: 4-Bromofluorobenzene          | 95.8   | 74-125        |      | %REC         | 10              | 7/30/2004 3:10:00 AM  |
| Surr: 4-Bromofluorobenzene          | 110    | 74-125        |      | %REC         | 1               | 7/28/2004 6:18:00 PM  |
| Surr: Dibromofluoromethane          | 102    | 73-126        |      | %REC         | 10              | 7/30/2004 3:10:00 AM  |
| Surr: Dibromofluoromethane          | 97.3   | 73-126        |      | %REC         | 1               | 7/28/2004 6:18:00 PM  |
| Surr: Toluene-d8                    | 98.1   | 75-125        |      | %REC         | 10              | 7/30/2004 3:10:00 AM  |
| Surr: Toluene-d8                    | 112    | 75-125        |      | %REC         | 1               | 7/28/2004 6:18:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: LMD |                 |                       |
| Chloride                            | 143    | 5.00          |      | mg/L         | 10              | 7/21/2004 5:04:00 AM  |
| Fluoride                            | 1.42   | 0.100         |      | mg/L         | 1               | 7/21/2004 12:19:00 AM |
| Sulfate                             | 1,520  | 100           |      | mg/L         | 100             | 7/21/2004 5:33:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L         | 1               | 7/21/2004 12:19:00 AM |
| Surr: Dichloroacetic acid (surr)    | 111    | 80-120        |      | %REC         | 1               | 7/21/2004 12:19:00 AM |
| Surr: Dichloroacetic acid (surr)    | 111    | 80-120        |      | %REC         | 10              | 7/21/2004 5:04:00 AM  |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC         | 100             | 7/21/2004 5:33:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: LMD |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 470    | 5.00          |      | mg/L         | 1               | 7/22/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L         | 1               | 7/22/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L         | 1               | 7/22/2004             |
| Alkalinity, Total (As CaCO3)        | 470    | 5.00          |      | mg/L         | 1               | 7/22/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: LMD |                 |                       |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.****Date:** August 02, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407217  
**Project:** NCL/TEL  
**Lab ID:** 0407217-04

**Client Sample ID:** MW-59  
**Collection Date:** 7/19/2004 1:45:00 PM  
**Matrix:** WATER

| Analyses | Result | Report<br>Limit | Qual | Units | Dilution<br>Factor | Date Analyzed |
|----------|--------|-----------------|------|-------|--------------------|---------------|
| Cyanide  | ND     | 0.0200          |      | mg/L  | 1                  | 7/25/2004     |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: Aug 02 2004

CLIENT: Navajo Refining Company

Work Order: 0407217

Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9719 InstrumentID: ICP7500

MBLK Sample ID: MBLKW2-072304 Test Code: SW6020 Units: mg/L Analysis Date: 07/27/04 16:54

Client ID: Run ID: ICP7500\_040727A SeqNo: 515521 Prep Date: 7/23/2004 DF: 1

| Analyte    | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|-----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | ND        | 0.010  |         |               |      |               |               |      |           |      |
| Arsenic    | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Barium     | 0.0007406 | 0.0050 |         |               |      |               |               |      |           | J    |
| Beryllium  | ND        | 0.0020 |         |               |      |               |               |      |           |      |
| Boron      | ND        | 0.020  |         |               |      |               |               |      |           |      |
| Cadmium    | ND        | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium    | ND        | 0.50   |         |               |      |               |               |      |           |      |
| Chromium   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt     | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Copper     | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Iron       | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Lead       | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium  | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Manganese  | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Molybdenum | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel     | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium  | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Selenium   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Silver     | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium     | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc       | ND        | 0.0050 |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is &gt; 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407217  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9719 InstrumentID: ICP7500

LCS Sample ID: MLCSW2-072304 Test Code: SW6020 Units: mg/L Analysis Date: 07/27/04 17:00

Client ID: Run ID: ICP7500\_040727A SeqNo: 515522 Prep Date: 7/23/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.04404 | 0.010  | 0.05    | 0             | 88.1 | 79-126        | 0             |      |           |      |
| Arsenic    | 0.04561 | 0.0050 | 0.05    | 0             | 91.2 | 80-121        | 0             |      |           |      |
| Barium     | 0.04268 | 0.0050 | 0.05    | 0             | 85.4 | 79.8-119      | 0             |      |           |      |
| Beryllium  | 0.04462 | 0.0020 | 0.05    | 0             | 89.2 | 78.9-120      | 0             |      |           |      |
| Boron      | 0.4575  | 0.020  | 0       | 0             | 0    | 80-120        | 0             |      |           |      |
| Cadmium    | 0.04323 | 0.0020 | 0.05    | 0             | 86.5 | 79.1-119      | 0             |      |           |      |
| Calcium    | 4.467   | 0.50   | 5       | 0             | 89.3 | 80-121        | 0             |      |           |      |
| Chromium   | 0.04384 | 0.0050 | 0.05    | 0             | 87.7 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04405 | 0.0050 | 0.05    | 0             | 88.1 | 82-121        | 0             |      |           |      |
| Copper     | 0.0421  | 0.0050 | 0.05    | 0             | 84.2 | 83-121        | 0             |      |           |      |
| Iron       | 4.681   | 0.20   | 5       | 0             | 93.6 | 80-120        | 0             |      |           |      |
| Lead       | 0.0416  | 0.0050 | 0.05    | 0             | 83.2 | 80-118        | 0             |      |           |      |
| Magnesium  | 4.73    | 0.20   | 5       | 0             | 94.6 | 80-120        | 0             |      |           |      |
| Manganese  | 0.0454  | 0.0050 | 0.05    | 0             | 90.8 | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04205 | 0.0050 | 0.05    | 0             | 84.1 | 80-115        | 0             |      |           |      |
| Nickel     | 0.04442 | 0.0050 | 0.05    | 0             | 88.8 | 85-120        | 0             |      |           |      |
| Potassium  | 4.784   | 0.20   | 5       | 0             | 95.7 | 80-120        | 0             |      |           |      |
| Selenium   | 0.04719 | 0.0050 | 0.05    | 0             | 94.4 | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04051 | 0.0050 | 0.05    | 0             | 81   | 80-117        | 0             |      |           |      |
| Sodium     | 4.574   | 0.20   | 5       | 0             | 91.5 | 82.4-120      | 0             |      |           |      |
| Vanadium   | 0.04393 | 0.0050 | 0.05    | 0             | 87.9 | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.04662 | 0.0050 | 0.05    | 0             | 93.2 | 83-118        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9719 InstrumentID: ICP7500

MS Sample ID: 0407190-21BMS Test Code: SW6020 Units: mg/L Analysis Date: 07/28/04 17:03

Client ID: Run ID: ICP7500\_040728A SeqNo: 516183 Prep Date: 7/23/2004 DF: 5

| Analyte    | Result  | PQL   | SPK Val | SPK Ref Value | %REC  | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|-------|---------|---------------|-------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.1084  | 0.050 | 0.05    | 0.0864        | 44.1  | 79-126        | 0             |      |           | S    |
| Arsenic    | 0.04904 | 0.025 | 0.05    | -0.002334     | 103   | 80-121        | 0             |      |           |      |
| Barium     | 0.06    | 0.025 | 0.05    | 0.01274       | 94.5  | 79.8-119      | 0             |      |           |      |
| Beryllium  | 0.04032 | 0.010 | 0.05    | 0.0001654     | 80.3  | 78.9-120      | 0             |      |           |      |
| Boron      | 5.78    | 0.10  | 0.1     | 5.165         | 615   | 80-120        | 0             |      |           | SEO  |
| Cadmium    | 0.0474  | 0.010 | 0.05    | 0.000711      | 93.4  | 79.1-119      | 0             |      |           |      |
| Calcium    | 462.4   | 2.5   | 5       | 479.9         | -349  | 80-121        | 0             |      |           | SO   |
| Chromium   | 0.04748 | 0.025 | 0.05    | 0.001852      | 91.2  | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.2184  | 0.025 | 0.05    | 0.1738        | 89.4  | 82-121        | 0             |      |           |      |
| Copper     | 0.04715 | 0.025 | 0.05    | 0.00434       | 85.6  | 83-121        | 0             |      |           |      |
| Iron       | 64.45   | 1.0   | 5       | 60.75         | 74    | 80-120        | 0             |      |           | SO   |
| Lead       | 0.05045 | 0.025 | 0.05    | 0.0009415     | 99    | 80-118        | 0             |      |           |      |
| Magnesium  | 263.1   | 1.0   | 5       | 299.2         | -722  | 80-120        | 0             |      |           | SO   |
| Manganese  | 5.315   | 0.025 | 0.05    | 5.415         | -200  | 82-119        | 0             |      |           | SO   |
| Molybdenum | 0.04951 | 0.025 | 0.05    | 0.0008995     | 97.2  | 84.6-115      | 0             |      |           |      |
| Nickel     | 0.2467  | 0.025 | 0.05    | 0.2064        | 80.6  | 85-120        | 0             |      |           | SO   |
| Potassium  | 25.46   | 1.0   | 5       | 21.94         | 70.5  | 80-120        | 0             |      |           | SO   |
| Selenium   | 0.0543  | 0.025 | 0.05    | 0.004083      | 100   | 79.2-118      | 0             |      |           |      |
| Silver     | 0.03953 | 0.025 | 0.05    | -0.006395     | 91.8  | 83-117        | 0             |      |           |      |
| Sodium     | 1999    | 1.0   | 5       | 2293          | -5880 | 82.4-120      | 0             |      |           | SEO  |
| Vanadium   | 0.04824 | 0.025 | 0.05    | -0.001036     | 98.6  | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.3632  | 0.025 | 0.05    | 0.3274        | 71.7  | 83-118        | 0             |      |           | SO   |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9719 InstrumentID: ICP7500

MSD Sample ID: 0407190-21BMSD Test Code: SW6020 Units: mg/L Analysis Date: 07/28/04 17:09

Client ID: Run ID: ICP7500\_040728A SeqNo: 516184 Prep Date: 7/23/2004 DF: 5

| Analyte    | Result  | PQL   | SPK Val | SPK Ref Value | %REC  | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|------------|---------|-------|---------|---------------|-------|---------------|---------------|-------|-----------|------|
| Aluminum   | 0.1049  | 0.050 | 0.05    | 0.0864        | 37.1  | 79-126        | 0.1084        | 3.28  | 15        | S    |
| Arsenic    | 0.04779 | 0.025 | 0.05    | -0.002334     | 100   | 80-121        | 0.04904       | 2.58  | 15        |      |
| Barium     | 0.0584  | 0.025 | 0.05    | 0.01274       | 91.3  | 79.8-119      | 0.06          | 2.7   | 15        |      |
| Beryllium  | 0.04005 | 0.010 | 0.05    | 0.0001654     | 79.8  | 78.9-120      | 0.04032       | 0.659 | 15        |      |
| Boron      | 5.665   | 0.10  | 0       | 5.165         | 0     | 80-120        | 5.78          | 2.01  | 15        | E    |
| Cadmium    | 0.04558 | 0.010 | 0.05    | 0.000711      | 89.7  | 79.1-119      | 0.0474        | 3.91  | 15        |      |
| Calcium    | 446.6   | 2.5   | 5       | 479.9         | -665  | 80-121        | 462.4         | 3.48  | 15        | SO   |
| Chromium   | 0.0458  | 0.025 | 0.05    | 0.001852      | 87.9  | 79.3-121      | 0.04748       | 3.59  | 15        |      |
| Cobalt     | 0.2088  | 0.025 | 0.05    | 0.1738        | 70.2  | 82-121        | 0.2184        | 4.49  | 15        | S    |
| Copper     | 0.04564 | 0.025 | 0.05    | 0.00434       | 82.6  | 83-121        | 0.04715       | 3.27  | 15        | S    |
| Iron       | 62.1    | 1.0   | 5       | 60.75         | 27    | 80-120        | 64.45         | 3.71  | 15        | SO   |
| Lead       | 0.04957 | 0.025 | 0.05    | 0.0009415     | 97.3  | 80-118        | 0.05045       | 1.75  | 15        |      |
| Magnesium  | 245.2   | 1.0   | 5       | 299.2         | -1080 | 80-120        | 263.1         | 7.04  | 15        | SO   |
| Manganese  | 5.19    | 0.025 | 0.05    | 5.415         | -450  | 82-119        | 5.315         | 2.38  | 15        | SO   |
| Molybdenum | 0.0512  | 0.025 | 0.05    | 0.0008995     | 101   | 84.6-115      | 0.04951       | 3.36  | 15        |      |
| Nickel     | 0.2372  | 0.025 | 0.05    | 0.2064        | 61.7  | 85-120        | 0.2467        | 3.91  | 15        | SO   |
| Potassium  | 24.44   | 1.0   | 5       | 21.94         | 49.9  | 80-120        | 25.46         | 4.13  | 15        | SO   |
| Selenium   | 0.04666 | 0.025 | 0.05    | 0.004083      | 85.1  | 79.2-118      | 0.0543        | 15.1  | 15        | R    |
| Silver     | 0.0387  | 0.025 | 0.05    | -0.006395     | 90.2  | 83-117        | 0.03953       | 2.13  | 15        |      |
| Sodium     | 1860    | 1.0   | 5       | 2293          | -8670 | 82.4-120      | 1999          | 7.23  | 15        | SEO  |
| Vanadium   | 0.04678 | 0.025 | 0.05    | -0.001036     | 95.6  | 82.1-119      | 0.04824       | 3.08  | 15        |      |
| Zinc       | 0.356   | 0.025 | 0.05    | 0.3274        | 57.4  | 83-118        | 0.3632        | 1.99  | 15        | SO   |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

# QC BATCH REPORT

Batch ID: 9719 InstrumentID: ICP7500

DUP Sample ID: 0407190-21BDUP Test Code: SW6020 Units: mg/L Analysis Date: 07/28/04 16:51

Client ID: Run ID: ICP7500\_040728A SeqNo: 516182 Prep Date: 7/23/2004 DF: 5

| Analyte    | Result   | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|------------|----------|-------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Aluminum   | 0.0711   | 0.050 | 0       | 0             | 0    | 0-0           | 0.0864        | 19.4  | 25        |      |
| Arsenic    | ND       | 0.025 | 0       | 0             | 0    | 0-0           | -0.002334     | 0     | 25        |      |
| Barium     | 0.01118  | 0.025 | 0       | 0             | 0    | 0-0           | 0.01274       | 0     | 25        | J    |
| Beryllium  | ND       | 0.010 | 0       | 0             | 0    | 0-0           | 0.0001654     | 0     | 25        |      |
| Boron      | 5.275    | 0.10  | 0       | 0             | 0    | 0-0           | 5.165         | 2.11  | 25        | E    |
| Cadmium    | ND       | 0.010 | 0       | 0             | 0    | 0-0           | 0.000711      | 0     | 25        |      |
| Calcium    | 467      | 2.5   | 0       | 0             | 0    | 0-0           | 479.9         | 2.74  | 25        |      |
| Chromium   | ND       | 0.025 | 0       | 0             | 0    | 0-0           | 0.001852      | 0     | 25        |      |
| Cobalt     | 0.1734   | 0.025 | 0       | 0             | 0    | 0-0           | 0.1738        | 0.23  | 25        |      |
| Copper     | 0.004558 | 0.025 | 0       | 0             | 0    | 0-0           | 0.00434       | 0     | 25        | J    |
| Iron       | 60.3     | 1.0   | 0       | 0             | 0    | 0-0           | 60.75         | 0.743 | 25        |      |
| Lead       | ND       | 0.025 | 0       | 0             | 0    | 0-0           | 0.0009415     | 0     | 25        |      |
| Magnesium  | 263      | 1.0   | 0       | 0             | 0    | 0-0           | 299.2         | 12.9  | 25        |      |
| Manganese  | 5.385    | 0.025 | 0       | 0             | 0    | 0-0           | 5.415         | 0.556 | 25        |      |
| Molybdenum | ND       | 0.025 | 0       | 0             | 0    | 0-0           | 0.0008995     | 0     | 25        |      |
| Nickel     | 0.2028   | 0.025 | 0       | 0             | 0    | 0-0           | 0.2064        | 1.76  | 25        |      |
| Potassium  | 20.86    | 1.0   | 0       | 0             | 0    | 0-0           | 21.94         | 5.02  | 25        |      |
| Selenium   | 0.01156  | 0.025 | 0       | 0             | 0    | 0-0           | 0.004083      | 0     | 25        | J    |
| Silver     | ND       | 0.025 | 0       | 0             | 0    | 0-0           | -0.006395     | 0     | 25        |      |
| Sodium     | 2021     | 1.0   | 0       | 0             | 0    | 0-0           | 2293          | 12.6  | 25        | E    |
| Vanadium   | ND       | 0.025 | 0       | 0             | 0    | 0-0           | -0.001036     | 0     | 25        |      |
| Zinc       | 0.323    | 0.025 | 0       | 0             | 0    | 0-0           | 0.3274        | 1.32  | 25        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0407217-01C | 0407217-02C | 0407217-03C |
| 0407217-04C |             |             |

ND - Not Detected at the Reporting Limit

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P - Dual Column results percent difference > 40%

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CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9741 InstrumentID: Mercury

MBLK Sample ID: GBLKW2-072604 Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:25

Client ID: Run ID: MERCURY\_040726B SeqNo: 514829 Prep Date: 7/26/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW2-072604 Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:26

Client ID: Run ID: MERCURY\_040726B SeqNo: 514830 Prep Date: 7/26/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00499 | 0.00020 | 0.005   | 0             | 99.8 | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW2-072604 Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:28

Client ID: Run ID: MERCURY\_040726B SeqNo: 514831 Prep Date: 7/26/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.0048 | 0.00020 | 0.005   | 0             | 96   | 83-115        | 0.00499       | 3.88 | 20        |      |

MS Sample ID: 0407160-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:37

Client ID: Run ID: MERCURY\_040726B SeqNo: 514834 Prep Date: 7/26/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00515 | 0.00020 | 0.005   | 0.000013      | 103  | 83-115        | 0             |      |           |      |

MSD Sample ID: 0407160-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:38

Client ID: Run ID: MERCURY\_040726B SeqNo: 514835 Prep Date: 7/26/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00522 | 0.00020 | 0.005   | 0.000013      | 104  | 83-115        | 0.00515       | 1.35 | 20        |      |

DUP Sample ID: 0407160-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:35

Client ID: Run ID: MERCURY\_040726B SeqNo: 514833 Prep Date: 7/26/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | 0.000013      | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0407217-01C | 0407217-02C | 0407217-03C |
| 0407217-04C |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9711 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-040722 Test Code: SW8270 Units: µg/L Analysis Date: 07/27/04 10:46

Client ID: Run ID: SV-3\_040725B SeqNo: 515922 Prep Date: 7/22/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 115.4  | 10  | 100     | 0             | 115  | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 98.83  | 10  | 100     | 0             | 98.8 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 41.45  | 10  | 100     | 0             | 41.5 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 111.2  | 10  | 100     | 0             | 111  | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 96.08  | 10  | 100     | 0             | 96.1 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 25.33  | 10  | 100     | 0             | 25.3 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9711 InstrumentID: SV-3

LCS Sample ID: SLCSW1-040722 Test Code: SW8270 Units: µg/L Analysis Date: 07/27/04 11:11

Client ID: Run ID: SV-3\_040725B SeqNo: 515923 Prep Date: 7/22/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 49.81  | 10  | 50      | 0             | 99.6 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 105.9  | 10  | 100     | 0             | 106  | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 105    | 10  | 100     | 0             | 105  | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 48.44  | 10  | 50      | 0             | 96.9 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 75.9   | 10  | 100     | 0             | 75.9 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 53.38  | 10  | 50      | 0             | 107  | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 100.5  | 10  | 100     | 0             | 101  | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 47.3   | 10  | 50      | 0             | 94.6 | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 103.4  | 10  | 150     | 0             | 68.9 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 53.45  | 10  | 50      | 0             | 107  | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 42.79  | 10  | 100     | 0             | 42.8 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 52.49  | 10  | 50      | 0             | 105  | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 51.48  | 10  | 50      | 0             | 103  | 67-116        | 0             |      |           |      |
| Aniline                    | 41.7   | 10  | 50      | 0             | 83.4 | 40-130        | 0             |      |           |      |
| Anthracene                 | 54.48  | 10  | 50      | 0             | 109  | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 55.16  | 10  | 50      | 0             | 110  | 55-131        | 0             |      |           |      |
| Benzidine                  | 13.89  | 10  | 50      | 0             | 27.8 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 48.85  | 10  | 50      | 0             | 97.7 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 56.63  | 10  | 50      | 0             | 113  | 42-123        | 0             |      |           |      |
| Isophorone                 | 52.58  | 10  | 50      | 0             | 105  | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 51.32  | 10  | 50      | 0             | 103  | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 23.33  | 10  | 50      | 0             | 46.7 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 54.38  | 10  | 50      | 0             | 109  | 72-144        | 0             |      |           |      |
| Naphthalene                | 48.75  | 10  | 50      | 0             | 97.5 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 50.51  | 10  | 50      | 0             | 101  | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 112.2  | 10  | 100     | 0             | 112  | 65-123        | 0             |      |           |      |
| Phenanthrene               | 53.73  | 10  | 50      | 0             | 107  | 69-119        | 0             |      |           |      |
| Phenol                     | 32.16  | 10  | 100     | 0             | 32.2 | 16-115        | 0             |      |           |      |
| Pyrene                     | 48.29  | 10  | 50      | 0             | 96.6 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 115.2  | 10  | 100     | 0             | 115  | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 100.6  | 10  | 100     | 0             | 101  | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 50.77  | 10  | 100     | 0             | 50.8 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 108.8  | 10  | 100     | 0             | 109  | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 100.6  | 10  | 100     | 0             | 101  | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 28.97  | 10  | 100     | 0             | 29   | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9711 InstrumentID: SV-3

LCSO Sample ID: SLCSDW1-040722 Test Code: SW8270 Units: µg/L Analysis Date: 07/27/04 11:35

Client ID: Run ID: SV-3\_040725B SeqNo: 515924 Prep Date: 7/22/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,2,4-Trichlorobenzene     | 50.66  | 10  | 50      | 0             | 101  | 50-115        | 49.81         | 1.69   | 30        |      |
| 2,4,5-Trichlorophenol      | 107.3  | 10  | 100     | 0             | 107  | 68-128        | 105.9         | 1.29   | 30        |      |
| 2,4,6-Trichlorophenol      | 102.2  | 10  | 100     | 0             | 102  | 66-125        | 105           | 2.65   | 30        |      |
| 2-Methylnaphthalene        | 47.74  | 10  | 50      | 0             | 95.5 | 47-122        | 48.44         | 1.46   | 30        |      |
| 2-Methylphenol             | 77.8   | 10  | 100     | 0             | 77.8 | 51-115        | 75.9          | 2.48   | 30        |      |
| 2-Nitroaniline             | 52.72  | 10  | 50      | 0             | 105  | 64-128        | 53.38         | 1.25   | 30        |      |
| 2-Nitrophenol              | 103.9  | 10  | 100     | 0             | 104  | 60-119        | 100.5         | 3.25   | 30        |      |
| 3-Nitroaniline             | 48.69  | 10  | 50      | 0             | 97.4 | 61-118        | 47.3          | 2.89   | 30        |      |
| 4-Methylphenol             | 102.7  | 10  | 150     | 0             | 68.5 | 44-115        | 103.4         | 0.619  | 30        |      |
| 4-Nitroaniline             | 51.65  | 10  | 50      | 0             | 103  | 61-123        | 53.45         | 3.43   | 30        |      |
| 4-Nitrophenol              | 41.98  | 10  | 100     | 0             | 42   | 17-100        | 42.79         | 1.92   | 30        |      |
| Acenaphthene               | 50.09  | 10  | 50      | 0             | 100  | 68-115        | 52.49         | 4.67   | 30        |      |
| Acenaphthylene             | 50.78  | 10  | 50      | 0             | 102  | 67-116        | 51.48         | 1.38   | 30        |      |
| Aniline                    | 40.77  | 10  | 50      | 0             | 81.5 | 40-130        | 41.7          | 2.26   | 30        |      |
| Anthracene                 | 52.93  | 10  | 50      | 0             | 106  | 70-129        | 54.48         | 2.87   | 30        |      |
| Benz(a)anthracene          | 51.84  | 10  | 50      | 0             | 104  | 55-131        | 55.16         | 6.21   | 30        |      |
| Benzidine                  | 12.43  | 10  | 50      | 0             | 24.9 | 10-115        | 13.89         | 11.1   | 30        |      |
| Hexachloroethane           | 50.67  | 10  | 50      | 0             | 101  | 46-115        | 48.85         | 3.66   | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 55.85  | 10  | 50      | 0             | 112  | 42-123        | 56.63         | 1.4    | 30        |      |
| Isophorone                 | 53.06  | 10  | 50      | 0             | 106  | 63-117        | 52.58         | 0.898  | 30        |      |
| N-Nitrosodi-n-propylamine  | 51.62  | 10  | 50      | 0             | 103  | 67-115        | 51.32         | 0.575  | 30        |      |
| N-Nitrosodimethylamine     | 25.31  | 10  | 50      | 0             | 50.6 | 28-115        | 23.33         | 8.14   | 30        |      |
| N-Nitrosodiphenylamine     | 54.8   | 10  | 50      | 0             | 110  | 72-144        | 54.38         | 0.771  | 30        |      |
| Naphthalene                | 48.99  | 10  | 50      | 0             | 98   | 52-115        | 48.75         | 0.497  | 30        |      |
| Nitrobenzene               | 50.51  | 10  | 50      | 0             | 101  | 65-115        | 50.51         | 0.0127 | 30        |      |
| Pentachlorophenol          | 103.7  | 10  | 100     | 0             | 104  | 65-123        | 112.2         | 7.83   | 30        |      |
| Phenanthrene               | 52.79  | 10  | 50      | 0             | 106  | 69-119        | 53.73         | 1.75   | 30        |      |
| Phenol                     | 33.67  | 10  | 100     | 0             | 33.7 | 16-115        | 32.16         | 4.58   | 30        |      |
| Pyrene                     | 49.66  | 10  | 50      | 0             | 99.3 | 51-130        | 48.29         | 2.79   | 30        |      |
| Surr: 2,4,6-Tribromophenol | 114.1  | 10  | 100     | 0             | 114  | 39-153        | 115.2         | 0.976  | 30        |      |
| Surr: 2-Fluorobiphenyl     | 99.96  | 10  | 100     | 0             | 100  | 40-147        | 100.6         | 0.594  | 30        |      |
| Surr: 2-Fluorophenol       | 52.2   | 10  | 100     | 0             | 52.2 | 21-110        | 50.77         | 2.78   | 30        |      |
| Surr: 4-Terphenyl-d14      | 106.7  | 10  | 100     | 0             | 107  | 39-141        | 108.8         | 1.92   | 30        |      |
| Surr: Nitrobenzene-d5      | 102.3  | 10  | 100     | 0             | 102  | 37-140        | 100.6         | 1.63   | 30        |      |
| Surr: Phenol-d6            | 37.36  | 10  | 100     | 0             | 37.4 | 11-100        | 28.97         | 25.3   | 30        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0407217-01E | 0407217-02E | 0407217-03E |
| 0407217-04E |             |             |

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CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22061 InstrumentID: VOA3

MBLK Sample ID: VBLKW-0728 Test Code: SW8260 Units: µg/L Analysis Date: 07/28/04 10:24  
 Client ID: Run ID: VOA3\_040728A SeqNo: 515976 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 53.68  | 5.0 | 50      | 0             | 107  | 71-126        |               | 0    |           |      |
| Surr: 4-Bromofluorobenzene  | 51.07  | 5.0 | 50      | 0             | 102  | 74-125        |               | 0    |           |      |
| Surr: Dibromofluoromethane  | 55.16  | 5.0 | 50      | 0             | 110  | 73-126        |               | 0    |           |      |
| Surr: Toluene-d8            | 55.07  | 5.0 | 50      | 0             | 110  | 75-125        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22061 InstrumentID: VOA3

LCS Sample ID: VLCSW-0728 Test Code: SW8260 Units: µg/L Analysis Date: 07/28/04 9:24

Client ID: Run ID: VOA3\_040728A SeqNo: 515975 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 50.94  | 5.0 | 50      | 0             | 102  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 49.25  | 5.0 | 50      | 0             | 98.5 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 49.47  | 5.0 | 50      | 0             | 98.9 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 49.92  | 5.0 | 50      | 0             | 99.8 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 49.99  | 5.0 | 50      | 0             | 100  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 48.83  | 5.0 | 50      | 0             | 97.7 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 101.3  | 10  | 100     | 0             | 101  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 97.24  | 10  | 100     | 0             | 97.2 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 98.42  | 10  | 100     | 0             | 98.4 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 102    | 10  | 100     | 0             | 102  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 108.4  | 10  | 100     | 0             | 108  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 49     | 5.0 | 50      | 0             | 98   | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 51.04  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Bromoform                   | 49.33  | 5.0 | 50      | 0             | 98.7 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 47.55  | 5.0 | 50      | 0             | 95.1 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 103.9  | 10  | 100     | 0             | 104  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 52.05  | 5.0 | 50      | 0             | 104  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 49.75  | 5.0 | 50      | 0             | 99.5 | 80-120        | 0             |      |           |      |
| Chloroethane                | 49.38  | 5.0 | 50      | 0             | 98.8 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 50.79  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Chloromethane               | 49.97  | 5.0 | 50      | 0             | 99.9 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 52.64  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 49.12  | 5.0 | 50      | 0             | 98.2 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 51.2   | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 103.2  | 10  | 100     | 0             | 103  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 47.85  | 10  | 50      | 0             | 95.7 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.42  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 48.36  | 5.0 | 50      | 0             | 96.7 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 50.82  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 51.93  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 50.75  | 5.0 | 50      | 0             | 102  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 108.6  | 10  | 100     | 0             | 109  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 50.63  | 2.0 | 50      | 0             | 101  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 156    | 15  | 150     | 0             | 104  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 53.36  | 5.0 | 50      | 0             | 107  | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 55.29  | 5.0 | 50      | 0             | 111  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 54.7   | 5.0 | 50      | 0             | 109  | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 53.19  | 5.0 | 50      | 0             | 106  | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

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P - Dual Column results percent difference > 40%

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R22061** InstrumentID: **VOA3**

MS Sample ID: **0407280-01AMS** Test Code: **SW8260** Units: **µg/L** Analysis Date: **07/28/04 13:51**

Client ID: Run ID: **VOA3\_040728A** SeqNo: **515981** Prep Date: DF: **25**

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 1356   | 120 | 1250    | 0             | 108  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 1298   | 120 | 1250    | 0             | 104  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 1281   | 120 | 1250    | 0             | 102  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 1321   | 120 | 1250    | 0             | 106  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 1357   | 120 | 1250    | 0             | 109  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 1319   | 120 | 1250    | 0             | 105  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 2574   | 250 | 2500    | 0             | 103  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 2407   | 250 | 2500    | 0             | 96.3 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 2447   | 250 | 2500    | 0             | 97.9 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 2521   | 250 | 2500    | 0             | 101  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 2671   | 250 | 2500    | 0             | 107  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 1299   | 120 | 1250    | 0             | 104  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 1339   | 120 | 1250    | 0             | 107  | 80-120        | 0             |      |           |      |
| Bromoform                   | 1248   | 120 | 1250    | 0             | 99.8 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 1454   | 120 | 1250    | 0             | 116  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 2754   | 250 | 2500    | 0             | 110  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 1379   | 120 | 1250    | 0             | 110  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 1306   | 120 | 1250    | 0             | 104  | 80-120        | 0             |      |           |      |
| Chloroethane                | 1337   | 120 | 1250    | 0             | 107  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 1365   | 120 | 1250    | 0             | 109  | 80-120        | 0             |      |           |      |
| Chloromethane               | 1231   | 120 | 1250    | 0             | 98.5 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 1357   | 120 | 1250    | 0             | 109  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 1236   | 120 | 1250    | 0             | 98.9 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 1335   | 120 | 1250    | 0             | 107  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 2702   | 250 | 2500    | 0             | 108  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 1290   | 250 | 1250    | 0             | 103  | 76.2-120      | 0             |      |           |      |
| Styrene                     | 1282   | 120 | 1250    | 0             | 103  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 1266   | 120 | 1250    | 0             | 101  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 1332   | 120 | 1250    | 0             | 107  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 1308   | 120 | 1250    | 0             | 105  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 1312   | 120 | 1250    | 0             | 105  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 2885   | 250 | 2500    | 0             | 115  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 1290   | 50  | 1250    | 0             | 103  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 4073   | 380 | 3750    | 0             | 109  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 1326   | 120 | 1250    | 0             | 106  | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 1386   | 120 | 1250    | 0             | 111  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 1369   | 120 | 1250    | 0             | 110  | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 1389   | 120 | 1250    | 0             | 111  | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22061 InstrumentID: VOA3

| MSD                         | Sample ID: 0407280-01AMSD |                      |         | Test Code: SW8260 |      | Units: µg/L   |               | Analysis Date: 07/28/04 14:21 |           |      |
|-----------------------------|---------------------------|----------------------|---------|-------------------|------|---------------|---------------|-------------------------------|-----------|------|
| Client ID:                  |                           | Run ID: VOA3_040728A |         | SeqNo: 516045     |      | Prep Date:    |               | DF: 25                        |           |      |
| Analyte                     | Result                    | PQL                  | SPK Val | SPK Ref Value     | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 1340                      | 120                  | 1250    | 0                 | 107  | 75.2-120      | 1356          | 1.18                          | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 1324                      | 120                  | 1250    | 0                 | 106  | 72.4-121      | 1298          | 1.97                          | 20        |      |
| 1,1,2-Trichloroethane       | 1261                      | 120                  | 1250    | 0                 | 101  | 80-120        | 1281          | 1.62                          | 20        |      |
| 1,1-Dichloroethane          | 1299                      | 120                  | 1250    | 0                 | 104  | 76.9-120      | 1321          | 1.67                          | 20        |      |
| 1,1-Dichloroethene          | 1319                      | 120                  | 1250    | 0                 | 106  | 72.6-123      | 1357          | 2.83                          | 20        |      |
| 1,2-Dichloroethane          | 1267                      | 120                  | 1250    | 0                 | 101  | 80-120        | 1319          | 3.95                          | 20        |      |
| 2-Butanone                  | 2620                      | 250                  | 2500    | 0                 | 105  | 69-131        | 2574          | 1.75                          | 20        |      |
| 2-Chloroethyl vinyl ether   | 2387                      | 250                  | 2500    | 0                 | 95.5 | 60-135        | 2407          | 0.831                         | 20        |      |
| 2-Hexanone                  | 2447                      | 250                  | 2500    | 0                 | 97.9 | 55.6-126      | 2447          | 0.00678                       | 20        |      |
| 4-Methyl-2-pentanone        | 2595                      | 250                  | 2500    | 0                 | 104  | 67.4-121      | 2521          | 2.88                          | 20        |      |
| Acetone                     | 2663                      | 250                  | 2500    | 0                 | 107  | 64.4-140      | 2671          | 0.306                         | 20        |      |
| Benzene                     | 1292                      | 120                  | 1250    | 0                 | 103  | 80-120        | 1299          | 0.589                         | 20        |      |
| Bromodichloromethane        | 1312                      | 120                  | 1250    | 0                 | 105  | 80-120        | 1339          | 2.05                          | 20        |      |
| Bromoform                   | 1263                      | 120                  | 1250    | 0                 | 101  | 77.9-121      | 1248          | 1.24                          | 20        |      |
| Bromomethane                | 1341                      | 120                  | 1250    | 0                 | 107  | 63.3-137      | 1454          | 8.07                          | 20        |      |
| Carbon disulfide            | 2745                      | 250                  | 2500    | 0                 | 110  | 74.1-123      | 2754          | 0.302                         | 20        |      |
| Carbon tetrachloride        | 1333                      | 120                  | 1250    | 0                 | 107  | 74.7-120      | 1379          | 3.38                          | 20        |      |
| Chlorobenzene               | 1268                      | 120                  | 1250    | 0                 | 101  | 80-120        | 1306          | 2.96                          | 20        |      |
| Chloroethane                | 1329                      | 120                  | 1250    | 0                 | 106  | 74.7-126      | 1337          | 0.608                         | 20        |      |
| Chloroform                  | 1345                      | 120                  | 1250    | 0                 | 108  | 80-120        | 1365          | 1.5                           | 20        |      |
| Chloromethane               | 1261                      | 120                  | 1250    | 0                 | 101  | 64.5-132      | 1231          | 2.45                          | 20        |      |
| cis-1,3-Dichloropropene     | 1362                      | 120                  | 1250    | 0                 | 109  | 80-120        | 1357          | 0.42                          | 20        |      |
| Dibromochloromethane        | 1265                      | 120                  | 1250    | 0                 | 101  | 80-120        | 1236          | 2.32                          | 20        |      |
| Ethylbenzene                | 1378                      | 120                  | 1250    | 0                 | 110  | 80-120        | 1335          | 3.15                          | 20        |      |
| m,p-Xylene                  | 2689                      | 250                  | 2500    | 0                 | 108  | 80-120        | 2702          | 0.47                          | 20        |      |
| Methylene chloride          | 1273                      | 250                  | 1250    | 0                 | 102  | 76.2-120      | 1290          | 1.29                          | 20        |      |
| Styrene                     | 1311                      | 120                  | 1250    | 0                 | 105  | 80-120        | 1282          | 2.26                          | 20        |      |
| Tetrachloroethene           | 1286                      | 120                  | 1250    | 0                 | 103  | 68.5-130      | 1266          | 1.57                          | 20        |      |
| Toluene                     | 1332                      | 120                  | 1250    | 0                 | 107  | 80-120        | 1332          | 0.0102                        | 20        |      |
| trans-1,3-Dichloropropene   | 1351                      | 120                  | 1250    | 0                 | 108  | 80-120        | 1308          | 3.22                          | 20        |      |
| Trichloroethene             | 1304                      | 120                  | 1250    | 0                 | 104  | 78.9-120      | 1312          | 0.609                         | 20        |      |
| Vinyl acetate               | 2907                      | 250                  | 2500    | 0                 | 116  | 62.4-133      | 2885          | 0.761                         | 20        |      |
| Vinyl chloride              | 1335                      | 50                   | 1250    | 0                 | 107  | 72.7-128      | 1290          | 3.43                          | 20        |      |
| Xylenes, Total              | 4080                      | 380                  | 3750    | 0                 | 109  | 80-120        | 4073          | 0.187                         | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 1300                      | 120                  | 1250    | 0                 | 104  | 71-126        | 1326          | 2.03                          | 20        |      |
| Surr: 4-Bromofluorobenzene  | 1323                      | 120                  | 1250    | 0                 | 106  | 74-125        | 1386          | 4.64                          | 20        |      |
| Surr: Dibromofluoromethane  | 1334                      | 120                  | 1250    | 0                 | 107  | 73-126        | 1369          | 2.58                          | 20        |      |
| Surr: Toluene-d8            | 1374                      | 120                  | 1250    | 0                 | 110  | 75-125        | 1389          | 1.11                          | 20        |      |

The following samples were analyzed in this batch:

0407217-01A 0407217-02A 0407217-03A  
 0407217-04A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22101 InstrumentID: VOA1

MBLK Sample ID: VBLKW-0729 Test Code: SW8260 Units: µg/L Analysis Date: 07/29/04 20:47

Client ID: Run ID: VOA1\_040729A SeqNo: 516997 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 48.04  | 5.0 | 50      | 0             | 96.1 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.08  | 5.0 | 50      | 0             | 96.2 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 47.93  | 5.0 | 50      | 0             | 95.9 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.33  | 5.0 | 50      | 0             | 98.7 | 75-125        | 0             |      |           |      |

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B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22101 InstrumentID: VOA1

LCS Sample ID: VLCSW-0729 Test Code: SW8260 Units: µg/L Analysis Date: 07/29/04 20:19

Client ID: Run ID: VOA1\_040729A SeqNo: 516996 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 48.73  | 5.0 | 50      | 0             | 97.5 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 47.3   | 5.0 | 50      | 0             | 94.6 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 49.28  | 5.0 | 50      | 0             | 98.6 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 47.79  | 5.0 | 50      | 0             | 95.6 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 44.53  | 5.0 | 50      | 0             | 89.1 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 48.18  | 5.0 | 50      | 0             | 96.4 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 89.5   | 10  | 100     | 0             | 89.5 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 101.5  | 10  | 100     | 0             | 102  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 95.16  | 10  | 100     | 0             | 95.2 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 90.62  | 10  | 100     | 0             | 90.6 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 83.59  | 10  | 100     | 0             | 83.6 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 53.95  | 5.0 | 50      | 0             | 108  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 51.31  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Bromoform                   | 49.2   | 5.0 | 50      | 0             | 98.4 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 52.63  | 5.0 | 50      | 0             | 105  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 98.9   | 10  | 100     | 0             | 98.9 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 51.31  | 5.0 | 50      | 0             | 103  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 52.43  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Chloroethane                | 52.32  | 5.0 | 50      | 0             | 105  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 46.67  | 5.0 | 50      | 0             | 93.3 | 80-120        | 0             |      |           |      |
| Chloromethane               | 51.2   | 5.0 | 50      | 0             | 102  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 53.37  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 49.31  | 5.0 | 50      | 0             | 98.6 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 55.64  | 5.0 | 50      | 0             | 111  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 112.3  | 10  | 100     | 0             | 112  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 46.43  | 10  | 50      | 0             | 92.9 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 49.89  | 5.0 | 50      | 0             | 99.8 | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 50.88  | 5.0 | 50      | 0             | 102  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 53.13  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 53.85  | 5.0 | 50      | 0             | 108  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 52.39  | 5.0 | 50      | 0             | 105  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 105.6  | 10  | 100     | 0             | 106  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 51.68  | 2.0 | 50      | 0             | 103  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 165.4  | 15  | 150     | 0             | 110  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 41.76  | 5.0 | 50      | 0             | 83.5 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 50.53  | 5.0 | 50      | 0             | 101  | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 43.63  | 5.0 | 50      | 0             | 87.3 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.85  | 5.0 | 50      | 0             | 99.7 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22101 InstrumentID: VOA1

| MS                          | Sample ID: 0407328-01AMS |              |         | Test Code: SW8260 |        | Units: µg/L   |               | Analysis Date: 07/29/04 22:09 |           |      |
|-----------------------------|--------------------------|--------------|---------|-------------------|--------|---------------|---------------|-------------------------------|-----------|------|
| Client ID:                  | Run ID:                  | VOA1_040729A |         | SeqNo:            | 516999 |               | Prep Date:    | DF: 500                       |           |      |
| Analyte                     | Result                   | PQL          | SPK Val | SPK Ref Value     | %REC   | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 23960                    | 2,500        | 25000   | 0                 | 95.8   | 75.2-120      | 0             |                               |           |      |
| 1,1,2,2-Tetrachloroethane   | 23590                    | 2,500        | 25000   | 0                 | 94.3   | 72.4-121      | 0             |                               |           |      |
| 1,1,2-Trichloroethane       | 24260                    | 2,500        | 25000   | 0                 | 97     | 80-120        | 0             |                               |           |      |
| 1,1-Dichloroethane          | 21990                    | 2,500        | 25000   | 0                 | 88     | 76.9-120      | 0             |                               |           |      |
| 1,1-Dichloroethene          | 21580                    | 2,500        | 25000   | 0                 | 86.3   | 72.6-123      | 0             |                               |           |      |
| 1,2-Dichloroethane          | 24340                    | 2,500        | 25000   | 0                 | 97.4   | 80-120        | 0             |                               |           |      |
| 2-Butanone                  | 44920                    | 5,000        | 50000   | 0                 | 89.8   | 69-131        | 0             |                               |           |      |
| 2-Chloroethyl vinyl ether   | 48580                    | 5,000        | 50000   | 0                 | 97.2   | 60-135        | 0             |                               |           |      |
| 2-Hexanone                  | 45510                    | 5,000        | 50000   | 0                 | 91     | 55.6-126      | 0             |                               |           |      |
| 4-Methyl-2-pentanone        | 44160                    | 5,000        | 50000   | 0                 | 88.3   | 67.4-121      | 0             |                               |           |      |
| Acetone                     | 39830                    | 5,000        | 50000   | 0                 | 79.7   | 64.4-140      | 0             |                               |           |      |
| Benzene                     | 43560                    | 2,500        | 25000   | 16670             | 108    | 80-120        | 0             |                               |           |      |
| Bromodichloromethane        | 24490                    | 2,500        | 25000   | 0                 | 98     | 80-120        | 0             |                               |           |      |
| Bromoform                   | 25000                    | 2,500        | 25000   | 0                 | 100    | 77.9-121      | 0             |                               |           |      |
| Bromomethane                | 24200                    | 2,500        | 25000   | 0                 | 96.8   | 63.3-137      | 0             |                               |           |      |
| Carbon disulfide            | 44380                    | 5,000        | 50000   | 0                 | 88.8   | 74.1-123      | 0             |                               |           |      |
| Carbon tetrachloride        | 47150                    | 2,500        | 25000   | 22830             | 97.3   | 74.7-120      | 0             |                               |           |      |
| Chlorobenzene               | 101700                   | 2,500        | 25000   | 81740             | 79.9   | 80-120        | 0             |                               |           | SE   |
| Chloroethane                | 23150                    | 2,500        | 25000   | 0                 | 92.6   | 74.7-126      | 0             |                               |           |      |
| Chloroform                  | 39070                    | 2,500        | 25000   | 15600             | 93.9   | 80-120        | 0             |                               |           |      |
| Chloromethane               | 22830                    | 2,500        | 25000   | 0                 | 91.3   | 64.5-132      | 0             |                               |           |      |
| cis-1,3-Dichloropropene     | 26000                    | 2,500        | 25000   | 0                 | 104    | 80-120        | 0             |                               |           |      |
| Dibromochloromethane        | 24030                    | 2,500        | 25000   | 0                 | 96.1   | 80-120        | 0             |                               |           |      |
| Ethylbenzene                | 25870                    | 2,500        | 25000   | 0                 | 103    | 80-120        | 0             |                               |           |      |
| m,p-Xylene                  | 51430                    | 5,000        | 50000   | 0                 | 103    | 80-120        | 0             |                               |           |      |
| Methylene chloride          | 23420                    | 5,000        | 25000   | 0                 | 93.7   | 76.2-120      | 0             |                               |           |      |
| Styrene                     | 23310                    | 2,500        | 25000   | 0                 | 93.2   | 80-120        | 0             |                               |           |      |
| Tetrachloroethene           | 23610                    | 2,500        | 25000   | 0                 | 94.5   | 68.5-130      | 0             |                               |           |      |
| Toluene                     | 24350                    | 2,500        | 25000   | 0                 | 97.4   | 80-120        | 0             |                               |           |      |
| trans-1,3-Dichloropropene   | 25890                    | 2,500        | 25000   | 0                 | 104    | 80-120        | 0             |                               |           |      |
| Trichloroethene             | 24430                    | 2,500        | 25000   | 0                 | 97.7   | 78.9-120      | 0             |                               |           |      |
| Vinyl acetate               | 60400                    | 5,000        | 50000   | 0                 | 121    | 62.4-133      | 0             |                               |           |      |
| Vinyl chloride              | 22130                    | 1,000        | 25000   | 0                 | 88.5   | 72.7-128      | 0             |                               |           |      |
| Xylenes, Total              | 77490                    | 7,500        | 75000   | 0                 | 103    | 80-120        | 0             |                               |           |      |
| Surr: 1,2-Dichloroethane-d4 | 22360                    | 2,500        | 25000   | 0                 | 89.5   | 71-126        | 0             |                               |           |      |
| Surr: 4-Bromofluorobenzene  | 24400                    | 2,500        | 25000   | 0                 | 97.6   | 74-125        | 0             |                               |           |      |
| Surr: Dibromofluoromethane  | 22010                    | 2,500        | 25000   | 0                 | 88     | 73-126        | 0             |                               |           |      |
| Surr: Toluene-d8            | 23620                    | 2,500        | 25000   | 0                 | 94.5   | 75-125        | 0             |                               |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R22101 InstrumentID: VOA1

MSD Sample ID: 0407328-01AMSD Test Code: SW8260 Units: µg/L Analysis Date: 07/29/04 22:36

Client ID: Run ID: VOA1\_040729A SeqNo: 517000 Prep Date: DF: 500

| Analyte                     | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-------|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 23460  | 2,500 | 25000   | 0             | 93.9 | 75.2-120      | 23960         | 2.1    | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 23800  | 2,500 | 25000   | 0             | 95.2 | 72.4-121      | 23590         | 0.893  | 20        |      |
| 1,1,2-Trichloroethane       | 26130  | 2,500 | 25000   | 0             | 105  | 80-120        | 24260         | 7.42   | 20        |      |
| 1,1-Dichloroethane          | 26090  | 2,500 | 25000   | 0             | 104  | 76.9-120      | 21990         | 17.1   | 20        |      |
| 1,1-Dichloroethene          | 22460  | 2,500 | 25000   | 0             | 89.8 | 72.6-123      | 21580         | 4.01   | 20        |      |
| 1,2-Dichloroethane          | 27110  | 2,500 | 25000   | 0             | 108  | 80-120        | 24340         | 10.7   | 20        |      |
| 2-Butanone                  | 50310  | 5,000 | 50000   | 0             | 101  | 69-131        | 44920         | 11.3   | 20        |      |
| 2-Chloroethyl vinyl ether   | 48990  | 5,000 | 50000   | 0             | 98   | 60-135        | 48580         | 0.827  | 20        |      |
| 2-Hexanone                  | 45740  | 5,000 | 50000   | 0             | 91.5 | 55.6-126      | 45510         | 0.487  | 20        |      |
| 4-Methyl-2-pentanone        | 47430  | 5,000 | 50000   | 0             | 94.9 | 67.4-121      | 44160         | 7.13   | 20        |      |
| Acetone                     | 41450  | 5,000 | 50000   | 0             | 82.9 | 64.4-140      | 39830         | 4      | 20        |      |
| Benzene                     | 43600  | 2,500 | 25000   | 16670         | 108  | 80-120        | 43560         | 0.0867 | 20        |      |
| Bromodichloromethane        | 25150  | 2,500 | 25000   | 0             | 101  | 80-120        | 24490         | 2.64   | 20        |      |
| Bromoform                   | 24660  | 2,500 | 25000   | 0             | 98.7 | 77.9-121      | 25000         | 1.36   | 20        |      |
| Bromomethane                | 22810  | 2,500 | 25000   | 0             | 91.3 | 63.3-137      | 24200         | 5.88   | 20        |      |
| Carbon disulfide            | 43210  | 5,000 | 50000   | 0             | 86.4 | 74.1-123      | 44380         | 2.66   | 20        |      |
| Carbon tetrachloride        | 46500  | 2,500 | 25000   | 22830         | 94.7 | 74.7-120      | 47150         | 1.39   | 20        |      |
| Chlorobenzene               | 103500 | 2,500 | 25000   | 81740         | 87.1 | 80-120        | 101700        | 1.74   | 20        | E    |
| Chloroethane                | 22900  | 2,500 | 25000   | 0             | 91.6 | 74.7-126      | 23150         | 1.06   | 20        |      |
| Chloroform                  | 41460  | 2,500 | 25000   | 15600         | 103  | 80-120        | 39070         | 5.92   | 20        |      |
| Chloromethane               | 20970  | 2,500 | 25000   | 0             | 83.9 | 64.5-132      | 22830         | 8.45   | 20        |      |
| cis-1,3-Dichloropropene     | 25290  | 2,500 | 25000   | 0             | 101  | 80-120        | 26000         | 2.8    | 20        |      |
| Dibromochloromethane        | 26050  | 2,500 | 25000   | 0             | 104  | 80-120        | 24030         | 8.08   | 20        |      |
| Ethylbenzene                | 24600  | 2,500 | 25000   | 0             | 98.4 | 80-120        | 25870         | 5.06   | 20        |      |
| m,p-Xylene                  | 47780  | 5,000 | 50000   | 0             | 95.6 | 80-120        | 51430         | 7.36   | 20        |      |
| Methylene chloride          | 23500  | 5,000 | 25000   | 0             | 94   | 76.2-120      | 23420         | 0.356  | 20        |      |
| Styrene                     | 23200  | 2,500 | 25000   | 0             | 92.8 | 80-120        | 23310         | 0.493  | 20        |      |
| Tetrachloroethene           | 22170  | 2,500 | 25000   | 0             | 88.7 | 68.5-130      | 23610         | 6.3    | 20        |      |
| Toluene                     | 24640  | 2,500 | 25000   | 0             | 98.6 | 80-120        | 24350         | 1.21   | 20        |      |
| trans-1,3-Dichloropropene   | 25270  | 2,500 | 25000   | 0             | 101  | 80-120        | 25890         | 2.42   | 20        |      |
| Trichloroethene             | 24060  | 2,500 | 25000   | 0             | 96.2 | 78.9-120      | 24430         | 1.51   | 20        |      |
| Vinyl acetate               | 69210  | 5,000 | 50000   | 0             | 138  | 62.4-133      | 60400         | 13.6   | 20        | S    |
| Vinyl chloride              | 20320  | 1,000 | 25000   | 0             | 81.3 | 72.7-128      | 22130         | 8.52   | 20        |      |
| Xylenes, Total              | 73090  | 7,500 | 75000   | 0             | 97.4 | 80-120        | 77490         | 5.85   | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 25070  | 2,500 | 25000   | 0             | 100  | 71-126        | 22360         | 11.4   | 20        |      |
| Surr: 4-Bromofluorobenzene  | 24000  | 2,500 | 25000   | 0             | 96   | 74-125        | 24400         | 1.65   | 20        |      |
| Surr: Dibromofluoromethane  | 24250  | 2,500 | 25000   | 0             | 97   | 73-126        | 22010         | 9.68   | 20        |      |
| Surr: Toluene-d8            | 25020  | 2,500 | 25000   | 0             | 100  | 75-125        | 23620         | 5.76   | 20        |      |

The following samples were analyzed in this batch:

0407217-02A 0407217-04A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R21861** InstrumentID: **IC201**

**MBLK** Sample ID: **WBLKW1-072004** Test Code: **E300** Units: **mg/L** Analysis Date: **07/20/04 21:00**

Client ID: Run ID: **IC201\_040720A** SeqNo: **511332** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.08   | 0.10 | 5       | 0             | 102  | 80-120        |               | 0    |           |      |

**LCS** Sample ID: **WLCSW1-072004** Test Code: **E300** Units: **mg/L** Analysis Date: **07/20/04 21:28**

Client ID: Run ID: **IC201\_040720A** SeqNo: **511333** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.04   | 0.50 | 10      | 0             | 90.4 | 80-120        |               | 0    |           |      |
| Fluoride                         | 1.89   | 0.10 | 2       | 0             | 94.5 | 80-120        |               | 0    |           |      |
| Sulfate                          | 9.63   | 1.0  | 10      | 0             | 96.3 | 80-120        |               | 0    |           |      |
| Nitrate/Nitrite (as N)           | 3.84   | 0.10 | 0       | 0             | 0    | 80-120        |               | 0    |           |      |
| Surr: Dichloroacetic acid (surr) | 5.42   | 0.10 | 5       | 0             | 108  | 80-120        |               | 0    |           |      |

**LCSD** Sample ID: **WLCSW1DUP-072** Test Code: **E300** Units: **mg/L** Analysis Date: **07/20/04 21:57**

Client ID: Run ID: **IC201\_040720A** SeqNo: **511334** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.04   | 0.50 | 10      | 0             | 90.4 | 80-120        |               | 0    |           |      |
| Fluoride                         | 1.89   | 0.10 | 2       | 0             | 94.5 | 80-120        |               | 0    |           |      |
| Sulfate                          | 9.65   | 1.0  | 10      | 0             | 96.5 | 80-120        |               | 0    |           |      |
| Nitrate/Nitrite (as N)           | 3.84   | 0.10 | 0       | 0             | 0    | 80-120        |               | 0    |           |      |
| Surr: Dichloroacetic acid (surr) | 5.44   | 0.10 | 5       | 0             | 109  | 80-120        |               | 0    |           |      |

**MS** Sample ID: **0407217-01BMS** Test Code: **E300** Units: **mg/L** Analysis Date: **07/21/04 1:45**

Client ID: **NCL-33** Run ID: **IC201\_040720A** SeqNo: **511342** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 351.6  | 0.50 | 10      | 345.6         | 59.8 | 75-125        |               | 0    |           | SEO  |
| Fluoride                         | 4.28   | 0.10 | 2       | 2.37          | 95.5 | 75-125        |               | 0    |           |      |
| Sulfate                          | 487.3  | 1.0  | 10      | 483           | 43.2 | 75-125        |               | 0    |           | SEO  |
| Nitrate/Nitrite (as N)           | 4.02   | 0.10 | 4       | 0.32          | 92.5 | 75-125        |               | 0    |           |      |
| Surr: Dichloroacetic acid (surr) | 5.02   | 0.10 | 5       | 0             | 100  | 80-120        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

# QC BATCH REPORT

Batch ID: R21861 InstrumentID: IC201

MSD Sample ID: 0407217-01BMSD Test Code: E300 Units: mg/L Analysis Date: 07/21/04 2:13

Client ID: NCL-33 Run ID: IC201\_040720A SeqNo: 511343 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 351.9  | 0.50 | 10      | 345.6         | 62.1 | 75-125        | 351.6         | 0.0654 | 20        | SEO  |
| Fluoride                         | 4.28   | 0.10 | 2       | 2.37          | 95.5 | 75-125        | 4.28          | 0      | 20        |      |
| Sulfate                          | 487.6  | 1.0  | 10      | 483           | 46.3 | 75-125        | 487.3         | 0.0636 | 20        | SEO  |
| Nitrate/Nitrite (as N)           | 4.04   | 0.10 | 4       | 0.32          | 93   | 75-125        | 4.02          | 0.496  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.24   | 0.10 | 5       | 0             | 105  | 80-120        | 5.02          | 4.29   | 20        |      |

DUP Sample ID: 0407217-01BDUP Test Code: E300 Units: mg/L Analysis Date: 07/20/04 22:54

Client ID: NCL-33 Run ID: IC201\_040720A SeqNo: 511336 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Fluoride                         | 2.33   | 0.10 | 0       | 0             | 0    | 0-0           | 2.37          | 1.7  | 20        |      |
| Nitrate/Nitrite (as N)           | 0.32   | 0.10 | 0       | 0             | 0    | 0-0           | 0.32          | 0    | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.07   | 0.10 | 5       | 0             | 101  | 80-120        | 5.39          | 6.12 | 20        |      |

DUP Sample ID: 0407217-02BDUP Test Code: E300 Units: mg/L Analysis Date: 07/21/04 3:39

Client ID: NCL-34 Run ID: IC201\_040720A SeqNo: 511346 Prep Date: DF: 10

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 363.7  | 5.0 | 0       | 0             | 0    | 0-0           | 363.7         | 0     | 20        |      |
| Fluoride                         | 2.2    | 1.0 | 0       | 0             | 0    | 0-0           | 2.2           | 0     | 20        |      |
| Sulfate                          | 153.7  | 10  | 0       | 0             | 0    | 0-0           | 153.9         | 0.13  | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 1.0 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 55     | 1.0 | 50      | 0             | 110  | 80-120        | 54.9          | 0.182 | 20        |      |

DUP Sample ID: 0407217-04BDUP Test Code: E300 Units: mg/L Analysis Date: 07/21/04 6:01

Client ID: MW-59 Run ID: IC201\_040720A SeqNo: 511351 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 220    | 50  | 0       | 0             | 0    | 0-0           | 221           | 0.454  | 20        |      |
| Fluoride                         | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0      | 20        |      |
| Sulfate                          | 1520   | 100 | 0       | 0             | 0    | 0-0           | 1519          | 0.0658 | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0      | 20        |      |
| Surr: Dichloroacetic acid (surr) | 548    | 10  | 500     | 0             | 110  | 80-120        | 545           | 0.549  | 20        |      |

The following samples were analyzed in this batch:

0407217-01B 0407217-02B 0407217-03B  
 0407217-04B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R21916** InstrumentID: **WetChem**

**MBLK** Sample ID: **WBLKW1-072204** Test Code: **E310.1** Units: **mg/L** Analysis Date: **07/22/04 0:00**

Client ID: Run ID: **WETCHEM\_040722A** SeqNo: **512756** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

**LCS** Sample ID: **WLCSW1-072204** Test Code: **E310.1** Units: **mg/L** Analysis Date: **07/22/04 0:00**

Client ID: Run ID: **WETCHEM\_040722A** SeqNo: **512757** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 1000   | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Total (As CaCO3)       | 1000   | 5.0 | 1000    | 0             | 100  | 80-120        | 0             |      |           |      |

**DUP** Sample ID: **0407119-02DDUP** Test Code: **E310.1** Units: **mg/L** Analysis Date: **07/22/04 0:00**

Client ID: Run ID: **WETCHEM\_040722A** SeqNo: **512775** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 340.1  | 5.0 | 0       | 0             | 0    | 0-0           | 340.1         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 340.1  | 5.0 | 0       | 0             | 0    | 0-0           | 340.1         | 0    | 20        |      |

**DUP** Sample ID: **0407217-04BDUP** Test Code: **E310.1** Units: **mg/L** Analysis Date: **07/22/04 0:00**

Client ID: **MW-59** Run ID: **WETCHEM\_040722A** SeqNo: **512776** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 470.1  | 5.0 | 0       | 0             | 0    | 0-0           | 470.1         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 470.1  | 5.0 | 0       | 0             | 0    | 0-0           | 470.1         | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0407217-01B | 0407217-02B | 0407217-03B |
| 0407217-04B |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407217  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R21983** InstrumentID: **UV-2101PC**

**MBLK** Sample ID: **WBLKW1-072504** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/25/04 0:00**

Client ID: Run ID: **UV-2101PC\_040725A** SeqNo: **513927** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

**LCS** Sample ID: **WLCSW1-072504** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/25/04 0:00**

Client ID: Run ID: **UV-2101PC\_040725A** SeqNo: **513928** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2044 | 0.020 | 0.2     | 0             | 102  | 80-120        | 0             |      |           |      |

**MS** Sample ID: **0407271-02DMS** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/25/04 0:00**

Client ID: Run ID: **UV-2101PC\_040725A** SeqNo: **513940** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2105 | 0.020 | 0.2     | 0.0032        | 104  | 75-125        | 0             |      |           |      |

**MSD** Sample ID: **0407271-02DMSD** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/25/04 0:00**

Client ID: Run ID: **UV-2101PC\_040725A** SeqNo: **513941** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Cyanide | 0.2092 | 0.020 | 0.2     | 0.0032        | 103  | 75-125        | 0.2105        | 0.619 | 25        |      |

**DUP** Sample ID: **0407271-02DDUP** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/25/04 0:00**

Client ID: Run ID: **UV-2101PC\_040725A** SeqNo: **513939** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.003  | 0.020 | 0       | 0             | 0    | 0-0           | 0.0032        | 0    | 20        | J    |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0407217-01D | 0407217-02D | 0407217-03D |
| 0407217-04D |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

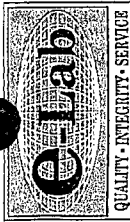
R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



☐ e-Lab, Inc.  
10450 Stancil Rd. #210  
Houston, Texas 77099  
(Tel) 281.530.5656  
(Fax) 281.530.5887

## Chain of Custody Form

Page 1 of 1

☐ e-Lab, Inc.  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

| Customer Information |                    |                 |                                       | Project Information |                   |           |   | e-Lab Project Manager |   |   |   | e-Lab Work Order # |   |   |   |   |      |
|----------------------|--------------------|-----------------|---------------------------------------|---------------------|-------------------|-----------|---|-----------------------|---|---|---|--------------------|---|---|---|---|------|
| Purchase Order       | Project Name       | Project Number  | Parameter/Method Request for Analysis |                     |                   |           |   |                       |   |   |   |                    |   |   |   |   |      |
| Work Order           | Project Number     | Bill To Company | Invoice Attn.                         |                     |                   |           |   |                       |   |   |   |                    |   |   |   |   |      |
| Company Name         | Address            | City/State/Zip  | Phone                                 |                     |                   |           |   |                       |   |   |   |                    |   |   |   |   |      |
| Send Report To       | City/State/Zip     | Phone           | Fax                                   |                     |                   |           |   |                       |   |   |   |                    |   |   |   |   |      |
| Address              | City/State/Zip     | Phone           | Fax                                   |                     |                   |           |   |                       |   |   |   |                    |   |   |   |   |      |
| e-Mail Address       | City/State/Zip     | Phone           | Fax                                   |                     |                   |           |   |                       |   |   |   |                    |   |   |   |   |      |
| No.                  | Sample Description | Date            | Time                                  | Matrix              | Pres. Key Numbers | # Bottles | A | B                     | C | D | E | F                  | G | H | I | J | Hold |
| 1                    | NCL-33             | 4/19/04         | 0900                                  | L                   | 12,98             | 8         | X |                       |   |   |   |                    |   |   |   |   |      |
| 2                    | NCL-34             | 4/19/04         | 0730                                  | 1                   | 1                 | 1         | X |                       |   |   |   |                    |   |   |   |   |      |
| 3                    | MW-60              | 4/19/04         | 1100                                  | 1                   | 1                 | 1         | X |                       |   |   |   |                    |   |   |   |   |      |
| 4                    | MW-59              | 4/19/04         | 1345                                  | 1                   | 1                 | 1         | X |                       |   |   |   |                    |   |   |   |   |      |
| 5                    |                    |                 |                                       |                     |                   |           |   |                       |   |   |   |                    |   |   |   |   |      |
| 6                    |                    |                 |                                       |                     |                   |           |   |                       |   |   |   |                    |   |   |   |   |      |
| 7                    |                    |                 |                                       |                     |                   |           |   |                       |   |   |   |                    |   |   |   |   |      |
| 8                    |                    |                 |                                       |                     |                   |           |   |                       |   |   |   |                    |   |   |   |   |      |
| 9                    |                    |                 |                                       |                     |                   |           |   |                       |   |   |   |                    |   |   |   |   |      |
| 10                   |                    |                 |                                       |                     |                   |           |   |                       |   |   |   |                    |   |   |   |   |      |

| Sampler(s): Please Print & Sign |              | Shipment Method:         |              | Required Turnaround Time: (Check Box) |                                    | Results Due Date:                  |                                |
|---------------------------------|--------------|--------------------------|--------------|---------------------------------------|------------------------------------|------------------------------------|--------------------------------|
| Relinquished by:                | Date:        | Relinquished by:         | Date:        | <input type="checkbox"/> 10 Wk Days   | <input type="checkbox"/> 5 Wk Days | <input type="checkbox"/> 3 Wk Days | <input type="checkbox"/> Other |
| <i>[Signature]</i>              | 4/19/04 1615 | <i>[Signature]</i>       | 4/19/04 1615 | <input type="checkbox"/> 10 Wk Days   | <input type="checkbox"/> 5 Wk Days | <input type="checkbox"/> 3 Wk Days | <input type="checkbox"/> Other |
| Relinquished by:                | Date:        | Relinquished by:         | Date:        | <input type="checkbox"/> 10 Wk Days   | <input type="checkbox"/> 5 Wk Days | <input type="checkbox"/> 3 Wk Days | <input type="checkbox"/> Other |
| <i>[Signature]</i>              | 4/19/04 1615 | <i>[Signature]</i>       | 4/19/04 1615 | <input type="checkbox"/> 10 Wk Days   | <input type="checkbox"/> 5 Wk Days | <input type="checkbox"/> 3 Wk Days | <input type="checkbox"/> Other |
| Logged by (Laboratory):         | Date:        | Checked by (Laboratory): | Date:        | Notes: 2 Coolers                      |                                    |                                    |                                |
| <i>[Signature]</i>              | 4/19/04 1615 | <i>[Signature]</i>       | 4/19/04 1615 |                                       |                                    |                                    |                                |

| QC Package: (Check Box Below) |             |                                                           |                                              |
|-------------------------------|-------------|-----------------------------------------------------------|----------------------------------------------|
| e-Lab Cooler ID               | Cooler Temp | Level II: Standard QC                                     | Level III: Raw Data                          |
|                               |             | <input type="checkbox"/> Level II: Standard QC            | <input type="checkbox"/> Level III: Raw Data |
|                               |             | <input type="checkbox"/> TRRP LRC                         | <input type="checkbox"/> TRRP Level IV       |
|                               |             | <input type="checkbox"/> Level IV: SW846 Methods/CLP like | <input type="checkbox"/> Other:              |

Preservative Key: 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 6-NaHSO<sub>4</sub> 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 7/20/2004 8:45:00 AM

Work Order Number 0407217

Received by: FSM

Checklist completed by

Signature

Date

Reviewed by

Initials

Date

Matrix: L

Carrier name FedEx

|                                                         |                                         |                             |                                                 |
|---------------------------------------------------------|-----------------------------------------|-----------------------------|-------------------------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| Custody seals intact on shipping container/cooler?      | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Temperature(s)/Thermometer(s):                          | <u>2.3, 3.6C</u>                        | <u>003</u>                  |                                                 |
| Water - VOA vials have zero headspace?                  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input type="checkbox"/> |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/>                    |

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

NAVAJO REFINING COMPANY

501 E. MAIN STREET  
ARTESIA NM 88210  
5057483311

SHIP DATE: 19JUL2004  
ACCOUNT # 113884186

Part #

TO:

E-LAB  
SAMPLE RECEIVING  
10450 STANCLIFF ROAD STE 210  
HOUSTON TX 77099

2815305656  
BILL RECIPIENT

De

FedEx STANDARD OVERNIGHT

System # 2223500 19JUL2004

TRK# 7902 1230 3151 Form 0201

TUE

DELIVER BY:  
20JUL2004

A2

IAH

77099-TX-US A9 JGQA

OSUS-05-2-00 2223500 2844 04/02

NAVAJO REFINING COMPANY

501 E. MAIN STREET  
ARTESIA NM 88210  
5057483311

SHIP DATE:  
ACCOUNT #

19JUL2004  
113884186

Part #

TO:

E-LAB  
SAMPLE RECEIVING  
10450 STANCLIFF ROAD STE 210  
HOUSTON TX 77099

2815305656

BILL RECIPIENT

Deliv

FedEx STANDARD OVERNIGHT

System # 2223500 19JUL2004

TRK# 7902 1230 7709 Form 0201

TUE

DELIVER BY:  
20JUL2004

A2

IAH

77099-TX-US A9 JGQA

OSUS-05-2-00 2223500 2844 04/02



**e-Lab Analytical, Inc.**

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

July 28, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: NCL/TEL

Work Order : **0407160**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 3 samples on 7/15/2004 8:50:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 31.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

**e-Lab Analytical, Inc.**

**Date:** July 28, 2004

**CLIENT:** Navajo Refining Company

**Project:** NCL/TEL

**Work Order:** 0407160

## Work Order Sample Summary

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0407160-01           | MW-53                   | Water         |                   | 7/14/2004 10:45        | 7/15/2004 08:50      | <input type="checkbox"/> |
| 0407160-02           | MW-54A                  | Water         |                   | 7/14/2004 11:10        | 7/15/2004 08:50      | <input type="checkbox"/> |
| 0407160-03           | MW-55                   | Water         |                   | 7/14/2004 13:30        | 7/15/2004 08:50      | <input type="checkbox"/> |

**e-Lab Analytical, Inc.****Date:** *July 28, 2004***CLIENT:** Navajo Refining Company**Project:** NCL/TEL**Work Order:** 0407160**Case Narrative**

Batch R21773 Volatiles MS/MSD was an unrelated sample.

Batch R21757 Anions (sample MW-53) MS/MSD recoveries were outside of control limits for Sulfate (recoveries were S and O flagged) and Fluoride (74% in the MSD only). Recoveries were within control limits in the LCS/LCSD..

**e-Lab Analytical, Inc.**

Date: July 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407160  
**Project:** NCL/TEL  
**Lab ID:** 0407160-01

**Client Sample ID:** MW-53  
**Collection Date:** 7/14/2004 10:45:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|---------------------------------------|---------|--------------|------|-------|-----------------|----------------------|
| <hr/>                                 |         |              |      |       |                 |                      |
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                      |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 7/26/2004 4:34:02 PM |
|                                       |         |              |      |       |                 |                      |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                      |
| Aluminum                              | 0.0204  | 0.0100       |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Barium                                | 0.0283  | 0.00500      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Boron                                 | 0.337   | 0.0200       |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Calcium                               | 288     | 10.0         |      | mg/L  | 20              | 7/22/2004 9:05:00 PM |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Cobalt                                | 0.00523 | 0.00200      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Copper                                | ND      | 0.00200      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Iron                                  | ND      | 0.200        |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Magnesium                             | 167     | 4.00         |      | mg/L  | 20              | 7/22/2004 9:05:00 PM |
| Manganese                             | 1.76    | 0.100        |      | mg/L  | 20              | 7/22/2004 9:05:00 PM |
| Molybdenum                            | 0.0171  | 0.00500      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Nickel                                | 0.00578 | 0.00500      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Potassium                             | 1.09    | 0.200        |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Sodium                                | 122     | 4.00         |      | mg/L  | 20              | 7/22/2004 9:05:00 PM |
| Vanadium                              | 0.00612 | 0.00500      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
| Zinc                                  | ND      | 0.00500      |      | mg/L  | 1               | 7/22/2004 5:59:00 AM |
|                                       |         |              |      |       |                 |                      |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                      |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 7/21/2004 8:19:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407160  
Project: NCL/TEL  
Lab ID: 0407160-01

Client Sample ID: MW-53  
Collection Date: 7/14/2004 10:45:00 AM  
Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed        |
|----------------------------|--------|---------------|------|-------|--------------------|----------------------|
| Aniline                    | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Anthracene                 | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Benz(a)anthracene          | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Benzidine                  | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Hexachloroethane           | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Isophorone                 | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Naphthalene                | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Nitrobenzene               | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Pentachlorophenol          | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Phenanthrene               | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Phenol                     | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Pyrene                     | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 8:19:00 PM |
| Surr: 2,4,6-Tribromophenol | 83.6   | 39-153        |      | %REC  | 1                  | 7/21/2004 8:19:00 PM |
| Surr: 2-Fluorobiphenyl     | 75.7   | 40-147        |      | %REC  | 1                  | 7/21/2004 8:19:00 PM |
| Surr: 2-Fluorophenol       | 33.7   | 21-110        |      | %REC  | 1                  | 7/21/2004 8:19:00 PM |
| Surr: 4-Terphenyl-d14      | 78.2   | 39-141        |      | %REC  | 1                  | 7/21/2004 8:19:00 PM |
| Surr: Nitrobenzene-d5      | 71.9   | 37-140        |      | %REC  | 1                  | 7/21/2004 8:19:00 PM |
| Surr: Phenol-d6            | 20.2   | 11-100        |      | %REC  | 1                  | 7/21/2004 8:19:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | <b>Analyst: PC</b> |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| Acetone                    | ND     | 10            |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| Benzene                    | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:04:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407160  
Project: NCL/TEL  
Lab ID: 0407160-01

Client Sample ID: MW-53  
Collection Date: 7/14/2004 10:45:00 AM  
Matrix: WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|-----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 7/16/2004 8:04:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 91.5   | 71-126       |      | %REC  | 1               | 7/16/2004 8:04:00 PM |
| Surr: 4-Bromofluorobenzene  | 84.3   | 74-125       |      | %REC  | 1               | 7/16/2004 8:04:00 PM |
| Surr: Dibromofluoromethane  | 90.9   | 73-126       |      | %REC  | 1               | 7/16/2004 8:04:00 PM |
| Surr: Toluene-d8            | 88.4   | 75-125       |      | %REC  | 1               | 7/16/2004 8:04:00 PM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |      |        |  |      |     |                       |
|----------------------------------|------|--------|--|------|-----|-----------------------|
| Chloride                         | 56.5 | 2.50   |  | mg/L | 5   | 7/15/2004 9:09:00 PM  |
| Fluoride                         | 1.17 | 0.100  |  | mg/L | 1   | 7/15/2004 6:18:00 PM  |
| Sulfate                          | 943  | 100    |  | mg/L | 100 | 7/15/2004 10:34:00 PM |
| Nitrate/Nitrite (as N)           | ND   | 0.100  |  | mg/L | 1   | 7/15/2004 6:18:00 PM  |
| Surr: Dichloroacetic acid (surr) | 104  | 80-120 |  | %REC | 5   | 7/15/2004 9:09:00 PM  |
| Surr: Dichloroacetic acid (surr) | 105  | 80-120 |  | %REC | 100 | 7/15/2004 10:34:00 PM |
| Surr: Dichloroacetic acid (surr) | 106  | 80-120 |  | %REC | 1   | 7/15/2004 6:18:00 PM  |

**ALKALINITY****E310.1**Analyst: **LMD**

|                                    |     |      |  |      |   |           |
|------------------------------------|-----|------|--|------|---|-----------|
| Alkalinity, Bicarbonate (As CaCO3) | 320 | 5.00 |  | mg/L | 1 | 7/22/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 7/22/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 7/22/2004 |
| Alkalinity, Total (As CaCO3)       | 320 | 5.00 |  | mg/L | 1 | 7/22/2004 |

**CYANIDE, TOTAL****E335.3**Analyst: **LMD**

|         |    |        |  |      |   |           |
|---------|----|--------|--|------|---|-----------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 7/17/2004 |
|---------|----|--------|--|------|---|-----------|

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**

Date: July 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407160  
**Project:** NCL/TEL  
**Lab ID:** 0407160-02

**Client Sample ID:** MW-54A  
**Collection Date:** 7/14/2004 11:10:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor             | Date Analyzed        |
|---------------------------------------|---------|---------------|------|-------|-----------------------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                             |                      |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: <b>7/26/2004</b> | Analyst: <b>JCJ</b>  |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                           | 7/26/2004 4:42:30 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                             |                      |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: <b>7/19/2004</b> | Analyst: <b>SA</b>   |
| Aluminum                              | ND      | 0.0100        |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Arsenic                               | 0.00583 | 0.00500       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Barium                                | 0.0169  | 0.00500       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Boron                                 | 0.337   | 0.0200        |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Calcium                               | 379     | 10.0          |      | mg/L  | 20                          | 7/22/2004 9:28:00 PM |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Cobalt                                | 0.00239 | 0.00200       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Copper                                | ND      | 0.00200       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Iron                                  | 0.387   | 0.200         |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Magnesium                             | 123     | 4.00          |      | mg/L  | 20                          | 7/22/2004 9:28:00 PM |
| Manganese                             | 0.461   | 0.00500       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Molybdenum                            | 0.00868 | 0.00500       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Nickel                                | ND      | 0.00500       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Potassium                             | 0.234   | 0.200         |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Sodium                                | 47.1    | 0.200         |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Vanadium                              | 0.00528 | 0.00500       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| Zinc                                  | 0.00635 | 0.00500       |      | mg/L  | 1                           | 7/22/2004 6:05:00 AM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                             |                      |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: <b>7/15/2004</b> | Analyst: <b>HV</b>   |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                           | 7/21/2004 8:44:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407160  
Project: NCL/TEL  
Lab ID: 0407160-02

Client Sample ID: MW-54A  
Collection Date: 7/14/2004 11:10:00 AM  
Matrix: WATER

| Analyses                   | Result | Report<br>Limit | Qual | Units | Dilution<br>Factor | Date Analyzed        |
|----------------------------|--------|-----------------|------|-------|--------------------|----------------------|
| Aniline                    | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Anthracene                 | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Benz(a)anthracene          | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Benzidine                  | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Hexachloroethane           | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Isophorone                 | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| N-Nitrosodimethylamine     | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Naphthalene                | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Nitrobenzene               | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Pentachlorophenol          | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Phenanthrene               | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Phenol                     | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Pyrene                     | ND     | 10              |      | µg/L  | 1                  | 7/21/2004 8:44:00 PM |
| Surr: 2,4,6-Tribromophenol | 84.9   | 39-153          |      | %REC  | 1                  | 7/21/2004 8:44:00 PM |
| Surr: 2-Fluorobiphenyl     | 74.9   | 40-147          |      | %REC  | 1                  | 7/21/2004 8:44:00 PM |
| Surr: 2-Fluorophenol       | 31.6   | 21-110          |      | %REC  | 1                  | 7/21/2004 8:44:00 PM |
| Surr: 4-Terphenyl-d14      | 78.1   | 39-141          |      | %REC  | 1                  | 7/21/2004 8:44:00 PM |
| Surr: Nitrobenzene-d5      | 71.8   | 37-140          |      | %REC  | 1                  | 7/21/2004 8:44:00 PM |
| Surr: Phenol-d6            | 21.8   | 11-100          |      | %REC  | 1                  | 7/21/2004 8:44:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 7/16/2004 8:30:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 7/16/2004 8:30:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
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E - Value above quantitation range  
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AR Page 5 of 9

**e-Lab Analytical, Inc.**

Date: July 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407160  
**Project:** NCL/TEL  
**Lab ID:** 0407160-02

**Client Sample ID:** MW-54A  
**Collection Date:** 7/14/2004 11:10:00 AM  
**Matrix:** WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|-----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 7/16/2004 8:30:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 90.4   | 71-126       |      | %REC  | 1               | 7/16/2004 8:30:00 PM |
| Surr: 4-Bromofluorobenzene  | 87.4   | 74-125       |      | %REC  | 1               | 7/16/2004 8:30:00 PM |
| Surr: Dibromofluoromethane  | 92.6   | 73-126       |      | %REC  | 1               | 7/16/2004 8:30:00 PM |
| Surr: Toluene-d8            | 88.0   | 75-125       |      | %REC  | 1               | 7/16/2004 8:30:00 PM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |      |        |  |      |     |                       |
|----------------------------------|------|--------|--|------|-----|-----------------------|
| Chloride                         | 173  | 2.50   |  | mg/L | 5   | 7/16/2004             |
| Fluoride                         | 1.20 | 0.100  |  | mg/L | 1   | 7/15/2004 11:31:00 PM |
| Sulfate                          | 627  | 100    |  | mg/L | 100 | 7/16/2004 12:28:00 AM |
| Nitrate/Nitrite (as N)           | ND   | 0.100  |  | mg/L | 1   | 7/15/2004 11:31:00 PM |
| Surr: Dichloroacetic acid (surr) | 106  | 80-120 |  | %REC | 1   | 7/15/2004 11:31:00 PM |
| Surr: Dichloroacetic acid (surr) | 105  | 80-120 |  | %REC | 5   | 7/16/2004             |
| Surr: Dichloroacetic acid (surr) | 105  | 80-120 |  | %REC | 100 | 7/16/2004 12:28:00 AM |

**ALKALINITY****E310.1**Analyst: **LMD**

|                                    |     |      |  |      |   |           |
|------------------------------------|-----|------|--|------|---|-----------|
| Alkalinity, Bicarbonate (As CaCO3) | 465 | 5.00 |  | mg/L | 1 | 7/22/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 7/22/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 7/22/2004 |
| Alkalinity, Total (As CaCO3)       | 465 | 5.00 |  | mg/L | 1 | 7/22/2004 |

**CYANIDE, TOTAL****E335.3**Analyst: **LMD**

|         |    |        |  |      |   |           |
|---------|----|--------|--|------|---|-----------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 7/17/2004 |
|---------|----|--------|--|------|---|-----------|

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
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\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407160  
Project: NCL/TEL  
Lab ID: 0407160-03

Client Sample ID: MW-55  
Collection Date: 7/14/2004 1:30:00 PM  
Matrix: WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor      | Date Analyzed        |
|---------------------------------------|---------|---------------|------|-------|----------------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                      |                      |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: 7/26/2004 | Analyst: JCJ         |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                    | 7/26/2004 4:44:01 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                      |                      |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: 7/19/2004 | Analyst: SA          |
| Aluminum                              | ND      | 0.0100        |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Arsenic                               | 0.00530 | 0.00500       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Barium                                | 0.00770 | 0.00500       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Boron                                 | 0.484   | 0.0200        |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Calcium                               | 449     | 25.0          |      | mg/L  | 50                   | 7/22/2004 9:34:00 PM |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Cobalt                                | ND      | 0.00200       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Copper                                | ND      | 0.00200       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Iron                                  | ND      | 0.200         |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Magnesium                             | 260     | 10.0          |      | mg/L  | 50                   | 7/22/2004 9:34:00 PM |
| Manganese                             | 0.485   | 0.00500       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Molybdenum                            | 0.0279  | 0.00500       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Nickel                                | 0.00693 | 0.00500       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Potassium                             | 0.806   | 0.200         |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Sodium                                | 196     | 10.0          |      | mg/L  | 50                   | 7/22/2004 9:34:00 PM |
| Vanadium                              | 0.0132  | 0.00500       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| Zinc                                  | ND      | 0.00500       |      | mg/L  | 1                    | 7/22/2004 6:39:00 AM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                      |                      |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: 7/15/2004 | Analyst: HV          |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 9:08:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407160  
Project: NCL/TEL  
Lab ID: 0407160-03

Client Sample ID: MW-55  
Collection Date: 7/14/2004 1:30:00 PM  
Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed        |
|----------------------------|--------|---------------|------|-------|--------------------|----------------------|
| Aniline                    | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Anthracene                 | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Benz(a)anthracene          | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Benzidine                  | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Hexachloroethane           | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Isophorone                 | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Naphthalene                | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Nitrobenzene               | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Pentachlorophenol          | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Phenanthrene               | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Phenol                     | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Pyrene                     | ND     | 10            |      | µg/L  | 1                  | 7/21/2004 9:08:00 PM |
| Surr: 2,4,6-Tribromophenol | 81.8   | 39-153        |      | %REC  | 1                  | 7/21/2004 9:08:00 PM |
| Surr: 2-Fluorobiphenyl     | 73.0   | 40-147        |      | %REC  | 1                  | 7/21/2004 9:08:00 PM |
| Surr: 2-Fluorophenol       | 32.5   | 21-110        |      | %REC  | 1                  | 7/21/2004 9:08:00 PM |
| Surr: 4-Terphenyl-d14      | 77.0   | 39-141        |      | %REC  | 1                  | 7/21/2004 9:08:00 PM |
| Surr: Nitrobenzene-d5      | 70.2   | 37-140        |      | %REC  | 1                  | 7/21/2004 9:08:00 PM |
| Surr: Phenol-d6            | 20.8   | 11-100        |      | %REC  | 1                  | 7/21/2004 9:08:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | <b>Analyst: PC</b> |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| Acetone                    | ND     | 10            |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| Benzene                    | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L  | 1                  | 7/16/2004 8:55:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

AR Page 8 of 9

**e-Lab Analytical, Inc.**
**Date:** July 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407160  
**Project:** NCL/TEL  
**Lab ID:** 0407160-03

**Client Sample ID:** MW-55  
**Collection Date:** 7/14/2004 1:30:00 PM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 7/16/2004 8:55:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 89.5   | 71-126        |      | %REC                | 1               | 7/16/2004 8:55:00 PM  |
| Surr: 4-Bromofluorobenzene          | 87.3   | 74-125        |      | %REC                | 1               | 7/16/2004 8:55:00 PM  |
| Surr: Dibromofluoromethane          | 91.0   | 73-126        |      | %REC                | 1               | 7/16/2004 8:55:00 PM  |
| Surr: Toluene-d8                    | 88.1   | 75-125        |      | %REC                | 1               | 7/16/2004 8:55:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | <b>Analyst: MG</b>  |                 |                       |
| Chloride                            | 290    | 50.0          |      | mg/L                | 100             | 7/16/2004 1:54:00 AM  |
| Fluoride                            | 1.13   | 0.100         |      | mg/L                | 1               | 7/16/2004 12:57:00 AM |
| Sulfate                             | 1,560  | 100           |      | mg/L                | 100             | 7/16/2004 1:54:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 7/16/2004 12:57:00 AM |
| Surr: Dichloroacetic acid (surr)    | 101    | 80-120        |      | %REC                | 1               | 7/16/2004 12:57:00 AM |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC                | 100             | 7/16/2004 1:54:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | <b>Analyst: LMD</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 375    | 5.00          |      | mg/L                | 1               | 7/22/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 7/22/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 7/22/2004             |
| Alkalinity, Total (As CaCO3)        | 375    | 5.00          |      | mg/L                | 1               | 7/22/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | <b>Analyst: LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 7/17/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: Jul 28 2004

CLIENT: Navajo Refining Company

Work Order: 0407160

Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9647 InstrumentID: ICP7500

MBLK Sample ID: MBLKW1-071904 Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 5:48

Client ID: Run ID: ICP7500\_040721C SeqNo: 512507 Prep Date: 7/19/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Arsenic    | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Barium     | 0.01107 | 0.0050 |         |               |      |               |               |      |           |      |
| Beryllium  | ND      | 0.0020 |         |               |      |               |               |      |           |      |
| Boron      | ND      | 0.020  |         |               |      |               |               |      |           |      |
| Cadmium    | ND      | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium    | 0.2675  | 0.50   |         |               |      |               |               |      |           | J    |
| Chromium   | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Copper     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Iron       | 0.03845 | 0.20   |         |               |      |               |               |      |           | J    |
| Lead       | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium  | ND      | 0.20   |         |               |      |               |               |      |           |      |
| Manganese  | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Molybdenum | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium  | ND      | 0.20   |         |               |      |               |               |      |           |      |
| Selenium   | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Silver     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium     | ND      | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium   | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc       | ND      | 0.0050 |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW1-071904 Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 20:54

Client ID: Run ID: ICP7500\_040722A SeqNo: 513164 Prep Date: 7/19/2004 DF: 1

| Analyte  | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum | 0.015  | 0.010 |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is &gt; 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9647 InstrumentID: ICP7500

LCS Sample ID: MLCSW1-071904 Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 5:53

Client ID: Run ID: ICP7500\_040721C SeqNo: 512508 Prep Date: 7/19/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Arsenic   | 0.04952 | 0.0050 | 0.05    | 0             | 99   | 80-121        | 0             |      |           |      |
| Barium    | 0.05617 | 0.0050 | 0.05    | 0             | 112  | 79.8-119      | 0             |      |           |      |
| Beryllium | 0.0484  | 0.0020 | 0.05    | 0             | 96.8 | 78.9-120      | 0             |      |           |      |
| Boron     | 0.5341  | 0.020  | 0       | -0.007959     | 0    | 80-120        | 0             |      |           |      |
| Cadmium   | 0.05664 | 0.0020 | 0.05    | 0             | 113  | 79.1-119      | 0             |      |           |      |
| Calcium   | 5.209   | 0.50   | 5       | 0             | 104  | 80-121        | 0             |      |           |      |
| Chromium  | 0.04752 | 0.0050 | 0.05    | 0             | 95   | 79.3-121      | 0             |      |           |      |
| Cobalt    | 0.04651 | 0.0050 | 0.05    | 0             | 93   | 82-121        | 0             |      |           |      |
| Copper    | 0.04617 | 0.0050 | 0.05    | 0             | 92.3 | 83-121        | 0             |      |           |      |
| Iron      | 5.078   | 0.20   | 5       | 0             | 102  | 80-120        | 0             |      |           |      |
| Lead      | 0.04485 | 0.0050 | 0.05    | 0             | 89.7 | 80-118        | 0             |      |           |      |
| Magnesium | 5.324   | 0.20   | 5       | 0             | 106  | 80-120        | 0             |      |           |      |
| Manganese | 0.04849 | 0.0050 | 0.05    | 0             | 97   | 82-119        | 0             |      |           |      |
| Nickel    | 0.04828 | 0.0050 | 0.05    | 0             | 96.6 | 85-120        | 0             |      |           |      |
| Potassium | 5.306   | 0.20   | 5       | 0             | 106  | 80-120        | 0             |      |           |      |
| Selenium  | 0.0495  | 0.0050 | 0.05    | 0             | 99   | 79.2-118      | 0             |      |           |      |
| Silver    | 0.04313 | 0.0050 | 0.05    | 0             | 86.3 | 83-117        | 0             |      |           |      |
| Sodium    | 5.205   | 0.20   | 5       | 0             | 104  | 82.4-120      | 0             |      |           |      |
| Vanadium  | 0.04807 | 0.0050 | 0.05    | 0             | 96.1 | 82.1-119      | 0             |      |           |      |
| Zinc      | 0.04911 | 0.0050 | 0.05    | 0             | 98.2 | 83-118        | 0             |      |           |      |

LCS Sample ID: MLCSW1-071904 Test Code: SW6020 Units: mg/L Analysis Date: 07/23/04 14:12

Client ID: Run ID: ICP7500\_040723A SeqNo: 513453 Prep Date: 7/19/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.05658 | 0.010  | 0.05    | 0             | 113  | 79-126        | 0             |      |           |      |
| Molybdenum | 0.04801 | 0.0050 | 0.05    | 0             | 96   | 84.6-115      | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9647 InstrumentID: ICP7500

MS Sample ID: 0407174-07CMS Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 7:08

Client ID: Run ID: ICP7500\_040721C SeqNo: 512524 Prep Date: 7/19/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.03899 | 0.010  | 0.05    | -0.002621     | 83.2 | 79-126        | 0             |      |           |      |
| Arsenic    | 0.04914 | 0.0050 | 0.05    | -0.0008387    | 100  | 80-121        | 0             |      |           |      |
| Barium     | 0.03947 | 0.0050 | 0.05    | -0.00421      | 87.4 | 79.8-119      | 0             |      |           |      |
| Boron      | 0.5345  | 0.020  | 0       | 0.01216       | 0    | 80-120        | 0             |      |           |      |
| Cadmium    | 0.04603 | 0.0020 | 0.05    | -0.00004586   | 92.2 | 79.1-119      | 0             |      |           |      |
| Calcium    | 4.784   | 0.50   | 5       | 0.7668        | 80.3 | 80-121        | 0             |      |           |      |
| Chromium   | 0.04477 | 0.0050 | 0.05    | 0.0001007     | 89.3 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04393 | 0.0050 | 0.05    | -0.00001264   | 87.9 | 82-121        | 0             |      |           |      |
| Copper     | 0.04391 | 0.0050 | 0.05    | -0.0001676    | 88.2 | 83-121        | 0             |      |           |      |
| Iron       | 4.772   | 0.20   | 5       | -0.003628     | 95.5 | 80-120        | 0             |      |           |      |
| Lead       | 0.04365 | 0.0050 | 0.05    | -0.00001977   | 87.3 | 80-118        | 0             |      |           |      |
| Magnesium  | 4.622   | 0.20   | 5       | 0.2407        | 87.6 | 80-120        | 0             |      |           |      |
| Manganese  | 0.04549 | 0.0050 | 0.05    | -0.00002527   | 91   | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04382 | 0.0050 | 0.05    | -0.0001675    | 88   | 84.6-115      | 0             |      |           |      |
| Nickel     | 0.04573 | 0.0050 | 0.05    | 0.0002155     | 91   | 85-120        | 0             |      |           |      |
| Potassium  | 4.813   | 0.20   | 5       | 0.005151      | 96.2 | 80-120        | 0             |      |           |      |
| Selenium   | 0.04735 | 0.0050 | 0.05    | -0.001535     | 97.8 | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04778 | 0.0050 | 0.05    | -0.0003609    | 96.3 | 83-117        | 0             |      |           |      |
| Sodium     | 4.498   | 0.20   | 5       | 0.258         | 84.8 | 82.4-120      | 0             |      |           |      |
| Vanadium   | 0.04482 | 0.0050 | 0.05    | 0.0001307     | 89.4 | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.04722 | 0.0050 | 0.05    | -0.0003896    | 95.2 | 83-118        | 0             |      |           |      |

MS Sample ID: 0407174-07CMS Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 22:03

Client ID: Run ID: ICP7500\_040722A SeqNo: 513176 Prep Date: 7/19/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | 0.05073 | 0.0020 | 0.05    | 0             | 101  | 78.9-120      | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9647 InstrumentID: ICP7500

MSD Sample ID: 0407174-07CMSD Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 7:14

Client ID: Run ID: ICP7500\_040721C SeqNo: 512527 Prep Date: 7/19/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.04197 | 0.010  | 0.05    | -0.002621     | 89.2 | 79-126        | 0.03899       | 7.36 | 15        |      |
| Arsenic    | 0.05041 | 0.0050 | 0.05    | -0.0008387    | 102  | 80-121        | 0.04914       | 2.55 | 15        |      |
| Barium     | 0.04255 | 0.0050 | 0.05    | -0.00421      | 93.5 | 79.8-119      | 0.03947       | 7.51 | 15        |      |
| Boron      | 0.5697  | 0.020  | 0       | 0.01216       | 0    | 80-120        | 0.5345        | 6.38 | 15        |      |
| Cadmium    | 0.04762 | 0.0020 | 0.05    | -0.00004586   | 95.3 | 79.1-119      | 0.04603       | 3.4  | 15        |      |
| Calcium    | 4.991   | 0.50   | 5       | 0.7668        | 84.5 | 80-121        | 4.784         | 4.24 | 15        |      |
| Chromium   | 0.04702 | 0.0050 | 0.05    | 0.0001007     | 93.8 | 79.3-121      | 0.04477       | 4.9  | 15        |      |
| Cobalt     | 0.04624 | 0.0050 | 0.05    | -0.00001264   | 92.5 | 82-121        | 0.04393       | 5.12 | 15        |      |
| Copper     | 0.04593 | 0.0050 | 0.05    | -0.0001676    | 92.2 | 83-121        | 0.04391       | 4.5  | 15        |      |
| Iron       | 4.964   | 0.20   | 5       | -0.003628     | 99.4 | 80-120        | 4.772         | 3.94 | 15        |      |
| Lead       | 0.04527 | 0.0050 | 0.05    | -0.00001977   | 90.6 | 80-118        | 0.04365       | 3.64 | 15        |      |
| Magnesium  | 4.822   | 0.20   | 5       | 0.2407        | 91.6 | 80-120        | 4.622         | 4.24 | 15        |      |
| Manganese  | 0.04705 | 0.0050 | 0.05    | -0.00002527   | 94.2 | 82-119        | 0.04549       | 3.37 | 15        |      |
| Molybdenum | 0.04697 | 0.0050 | 0.05    | -0.0001675    | 94.3 | 84.6-115      | 0.04382       | 6.94 | 15        |      |
| Nickel     | 0.04844 | 0.0050 | 0.05    | 0.0002155     | 96.4 | 85-120        | 0.04573       | 5.76 | 15        |      |
| Potassium  | 5.057   | 0.20   | 5       | 0.005151      | 101  | 80-120        | 4.813         | 4.94 | 15        |      |
| Selenium   | 0.04997 | 0.0050 | 0.05    | -0.001535     | 103  | 79.2-118      | 0.04735       | 5.38 | 15        |      |
| Silver     | 0.04813 | 0.0050 | 0.05    | -0.0003609    | 97   | 83-117        | 0.04778       | 0.73 | 15        |      |
| Sodium     | 4.731   | 0.20   | 5       | 0.258         | 89.5 | 82.4-120      | 4.498         | 5.05 | 15        |      |
| Vanadium   | 0.0472  | 0.0050 | 0.05    | 0.0001307     | 94.1 | 82.1-119      | 0.04482       | 5.17 | 15        |      |
| Zinc       | 0.04926 | 0.0050 | 0.05    | -0.0003896    | 99.3 | 83-118        | 0.04722       | 4.23 | 15        |      |

MSD Sample ID: 0407174-07CMSD Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 22:09

Client ID: Run ID: ICP7500\_040722A SeqNo: 513177 Prep Date: 7/19/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | 0.05073 | 0.0020 | 0.05    | 0             | 101  | 78.9-120      | 0.05073       | 0    | 15        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9647 InstrumentID: ICP7500

DUP Sample ID: 0407174-07CDUP Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 7:02

Client ID: Run ID: ICP7500\_040721C SeqNo: 512521 Prep Date: 7/19/2004 DF: 1

| Analyte    | Result   | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | ND       | 0.010  | 0       | 0             | 0    | 0-0           | -0.002621     | 0    | 25        |      |
| Arsenic    | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0008387    | 0    | 25        |      |
| Barium     | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.00421      | 0    | 25        |      |
| Boron      | ND       | 0.020  | 0       | 0             | 0    | 0-0           | 0.01216       | 0    | 25        |      |
| Cadmium    | ND       | 0.0020 | 0       | 0             | 0    | 0-0           | -0.00004586   | 0    | 25        |      |
| Calcium    | 0.225    | 0.50   | 0       | 0             | 0    | 0-0           | 0.7668        | 0    | 25        | J    |
| Chromium   | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0001007     | 0    | 25        |      |
| Cobalt     | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.00001264   | 0    | 25        |      |
| Copper     | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0001676    | 0    | 25        |      |
| Iron       | ND       | 0.20   | 0       | 0             | 0    | 0-0           | -0.003628     | 0    | 25        |      |
| Lead       | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.00001977   | 0    | 25        |      |
| Magnesium  | 0.07947  | 0.20   | 0       | 0             | 0    | 0-0           | 0.2407        | 0    | 25        | J    |
| Manganese  | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.00002527   | 0    | 25        |      |
| Molybdenum | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0001675    | 0    | 25        |      |
| Nickel     | 0.003499 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0002155     | 0    | 25        | J    |
| Potassium  | ND       | 0.20   | 0       | 0             | 0    | 0-0           | 0.005151      | 0    | 25        |      |
| Selenium   | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.001535     | 0    | 25        |      |
| Silver     | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0003609    | 0    | 25        |      |
| Sodium     | 0.08162  | 0.20   | 0       | 0             | 0    | 0-0           | 0.258         | 0    | 25        | J    |
| Vanadium   | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0001307     | 0    | 25        |      |
| Zinc       | 0.002546 | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0003896    | 0    | 25        | J    |

DUP Sample ID: 0407174-07CDUP Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 21:57

Client ID: Run ID: ICP7500\_040722A SeqNo: 513175 Prep Date: 7/19/2004 DF: 1

| Analyte   | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | ND     | 0.0020 | 0       | 0             | 0    | 0-0           | 0             | 0    | 25        |      |

The following samples were analyzed in this batch:

0407160-01C 0407160-02C 0407160-03C

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407160  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9741 InstrumentID: Mercury

MBLK Sample ID: GBLKW2-072604 Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:25

Client ID: Run ID: MERCURY\_040726B SeqNo: 514829 Prep Date: 7/26/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW2-072604 Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:26

Client ID: Run ID: MERCURY\_040726B SeqNo: 514830 Prep Date: 7/26/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00499 | 0.00020 | 0.005   | 0             | 99.8 | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW2-072604 Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:28

Client ID: Run ID: MERCURY\_040726B SeqNo: 514831 Prep Date: 7/26/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.0048 | 0.00020 | 0.005   | 0             | 96   | 83-115        | 0.00499       | 3.88 | 20        |      |

MS Sample ID: 0407160-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:37

Client ID: MW-53 Run ID: MERCURY\_040726B SeqNo: 514834 Prep Date: 7/26/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00515 | 0.00020 | 0.005   | 0.000013      | 103  | 83-115        | 0             |      |           |      |

MSD Sample ID: 0407160-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:38

Client ID: MW-53 Run ID: MERCURY\_040726B SeqNo: 514835 Prep Date: 7/26/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00522 | 0.00020 | 0.005   | 0.000013      | 104  | 83-115        | 0.00515       | 1.35 | 20        |      |

DUP Sample ID: 0407160-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:35

Client ID: MW-53 Run ID: MERCURY\_040726B SeqNo: 514833 Prep Date: 7/26/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | 0.000013      | 0    | 20        |      |

The following samples were analyzed in this batch:

0407160-01C 0407160-02C 0407160-03C

ND - Not Detected at the Reporting Limit

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9606 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-040715 Test Code: SW8270 Units: µg/L Analysis Date: 07/16/04 13:16

Client ID: Run ID: SV-3\_040715A SeqNo: 509089 Prep Date: 7/15/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 76.59  | 10  | 100     | 0             | 76.6 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 65.5   | 10  | 100     | 0             | 65.5 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 30.28  | 10  | 100     | 0             | 30.3 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 69.47  | 10  | 100     | 0             | 69.5 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 60.01  | 10  | 100     | 0             | 60   | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 18.38  | 10  | 100     | 0             | 18.4 | 11-100        | 0             |      |           |      |

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9606 InstrumentID: SV-3

LCS Sample ID: SLCSW1-040715 Test Code: SW8270 Units: µg/L Analysis Date: 07/16/04 13:43

Client ID: Run ID: SV-3\_040715A SeqNo: 509090 Prep Date: 7/15/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 35.62  | 10  | 50      | 0             | 71.2 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 77.31  | 10  | 100     | 0             | 77.3 | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 79.88  | 10  | 100     | 0             | 79.9 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 35.45  | 10  | 50      | 0             | 70.9 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 73.21  | 10  | 100     | 0             | 73.2 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 42.11  | 10  | 50      | 0             | 84.2 | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 68.45  | 10  | 100     | 0             | 68.5 | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 37.57  | 10  | 50      | 0             | 75.1 | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 107.4  | 10  | 150     | 0             | 71.6 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 39.74  | 10  | 50      | 0             | 79.5 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 51.42  | 10  | 100     | 0             | 51.4 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 40.63  | 10  | 50      | 0             | 81.3 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 40.03  | 10  | 50      | 0             | 80.1 | 67-116        | 0             |      |           |      |
| Aniline                    | 37.2   | 10  | 50      | 0             | 74.4 | 40-130        | 0             |      |           |      |
| Anthracene                 | 40.69  | 10  | 50      | 0             | 81.4 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 39.15  | 10  | 50      | 0             | 78.3 | 55-131        | 0             |      |           |      |
| Benzidine                  | 44.45  | 10  | 50      | 0             | 88.9 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 38.44  | 10  | 50      | 0             | 76.9 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 48.36  | 10  | 50      | 0             | 96.7 | 42-123        | 0             |      |           |      |
| Isophorone                 | 36.58  | 10  | 50      | 0             | 73.2 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 40.23  | 10  | 50      | 0             | 80.5 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 24.88  | 10  | 50      | 0             | 49.8 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 43.57  | 10  | 50      | 0             | 87.1 | 72-144        | 0             |      |           |      |
| Naphthalene                | 36.34  | 10  | 50      | 0             | 72.7 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 34.29  | 10  | 50      | 0             | 68.6 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 75.74  | 10  | 100     | 0             | 75.7 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 40.55  | 10  | 50      | 0             | 81.1 | 69-119        | 0             |      |           |      |
| Phenol                     | 43.65  | 10  | 100     | 0             | 43.6 | 16-115        | 0             |      |           |      |
| Pyrene                     | 39.35  | 10  | 50      | 0             | 78.7 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 80.76  | 10  | 100     | 0             | 80.8 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 71.21  | 10  | 100     | 0             | 71.2 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 57.65  | 10  | 100     | 0             | 57.6 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 72.58  | 10  | 100     | 0             | 72.6 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 63.47  | 10  | 100     | 0             | 63.5 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 38.09  | 10  | 100     | 0             | 38.1 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9606 InstrumentID: SV-3

LCSD Sample ID: SLCSDW1-040715 Test Code: SW8270 Units: µg/L Analysis Date: 07/16/04 14:09

Client ID: Run ID: SV-3\_040715A SeqNo: 509091 Prep Date: 7/15/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,2,4-Trichlorobenzene     | 36.92  | 10  | 50      | 0             | 73.8 | 50-115        | 35.62         | 3.59  | 30        |      |
| 2,4,5-Trichlorophenol      | 77.97  | 10  | 100     | 0             | 78   | 68-128        | 77.31         | 0.847 | 30        |      |
| 2,4,6-Trichlorophenol      | 81.64  | 10  | 100     | 0             | 81.6 | 66-125        | 79.88         | 2.17  | 30        |      |
| 2-Methylnaphthalene        | 36.97  | 10  | 50      | 0             | 73.9 | 47-122        | 35.45         | 4.18  | 30        |      |
| 2-Methylphenol             | 76.29  | 10  | 100     | 0             | 76.3 | 51-115        | 73.21         | 4.12  | 30        |      |
| 2-Nitroaniline             | 44.54  | 10  | 50      | 0             | 89.1 | 64-128        | 42.11         | 5.61  | 30        |      |
| 2-Nitrophenol              | 73.16  | 10  | 100     | 0             | 73.2 | 60-119        | 68.45         | 6.65  | 30        |      |
| 3-Nitroaniline             | 37.58  | 10  | 50      | 0             | 75.2 | 61-118        | 37.57         | 0.026 | 30        |      |
| 4-Methylphenol             | 111.4  | 10  | 150     | 0             | 74.3 | 44-115        | 107.4         | 3.63  | 30        |      |
| 4-Nitroaniline             | 41.4   | 10  | 50      | 0             | 82.8 | 61-123        | 39.74         | 4.09  | 30        |      |
| 4-Nitrophenol              | 55.58  | 10  | 100     | 0             | 55.6 | 17-100        | 51.42         | 7.78  | 30        |      |
| Acenaphthene               | 41.57  | 10  | 50      | 0             | 83.1 | 68-115        | 40.63         | 2.3   | 30        |      |
| Acenaphthylene             | 40.89  | 10  | 50      | 0             | 81.8 | 67-116        | 40.03         | 2.11  | 30        |      |
| Aniline                    | 38.81  | 10  | 50      | 0             | 77.6 | 40-130        | 37.2          | 4.22  | 30        |      |
| Anthracene                 | 43.11  | 10  | 50      | 0             | 86.2 | 70-129        | 40.69         | 5.79  | 30        |      |
| Benz(a)anthracene          | 41.78  | 10  | 50      | 0             | 83.6 | 55-131        | 39.15         | 6.49  | 30        |      |
| Benzidine                  | 48.72  | 10  | 50      | 0             | 97.4 | 10-115        | 44.45         | 9.15  | 30        |      |
| Hexachloroethane           | 40.86  | 10  | 50      | 0             | 81.7 | 46-115        | 38.44         | 6.1   | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 51.65  | 10  | 50      | 0             | 103  | 42-123        | 48.36         | 6.59  | 30        |      |
| Isophorone                 | 38.42  | 10  | 50      | 0             | 76.8 | 63-117        | 36.58         | 4.9   | 30        |      |
| N-Nitrosodi-n-propylamine  | 42.59  | 10  | 50      | 0             | 85.2 | 67-115        | 40.23         | 5.71  | 30        |      |
| N-Nitrosodimethylamine     | 26.58  | 10  | 50      | 0             | 53.2 | 28-115        | 24.88         | 6.61  | 30        |      |
| N-Nitrosodiphenylamine     | 46.77  | 10  | 50      | 0             | 93.5 | 72-144        | 43.57         | 7.07  | 30        |      |
| Naphthalene                | 38.24  | 10  | 50      | 0             | 76.5 | 52-115        | 36.34         | 5.07  | 30        |      |
| Nitrobenzene               | 32.59  | 10  | 50      | 0             | 65.2 | 65-115        | 34.29         | 5.08  | 30        |      |
| Pentachlorophenol          | 83.2   | 10  | 100     | 0             | 83.2 | 65-123        | 75.74         | 9.39  | 30        |      |
| Phenanthrene               | 41.99  | 10  | 50      | 0             | 84   | 69-119        | 40.55         | 3.5   | 30        |      |
| Phenol                     | 45.21  | 10  | 100     | 0             | 45.2 | 16-115        | 43.65         | 3.51  | 30        |      |
| Pyrene                     | 41.75  | 10  | 50      | 0             | 83.5 | 51-130        | 39.35         | 5.9   | 30        |      |
| Surr: 2,4,6-Tribromophenol | 85.32  | 10  | 100     | 0             | 85.3 | 39-153        | 80.76         | 5.49  | 30        |      |
| Surr: 2-Fluorobiphenyl     | 71.72  | 10  | 100     | 0             | 71.7 | 40-147        | 71.21         | 0.721 | 30        |      |
| Surr: 2-Fluorophenol       | 60.54  | 10  | 100     | 0             | 60.5 | 21-110        | 57.65         | 4.9   | 30        |      |
| Surr: 4-Terphenyl-d14      | 74.6   | 10  | 100     | 0             | 74.6 | 39-141        | 72.58         | 2.75  | 30        |      |
| Surr: Nitrobenzene-d5      | 67.15  | 10  | 100     | 0             | 67.1 | 37-140        | 63.47         | 5.63  | 30        |      |
| Surr: Phenol-d6            | 40.09  | 10  | 100     | 0             | 40.1 | 11-100        | 38.09         | 5.13  | 30        |      |

The following samples were analyzed in this batch:

0407160-01E 0407160-02E 0407160-03E

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21773 InstrumentID: VOA2

MBLK Sample ID: VBLKW-0716 Test Code: SW8260 Units: µg/L Analysis Date: 07/16/04 11:36

Client ID: Run ID: VOA2\_040716A SeqNo: 508933 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.18  | 5.0 | 50      | 0             | 92.4 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 43.45  | 5.0 | 50      | 0             | 86.9 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.91  | 5.0 | 50      | 0             | 93.8 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 46.03  | 5.0 | 50      | 0             | 92.1 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

# QC BATCH REPORT

Batch ID: R21773 InstrumentID: VOA2

LCS Sample ID: VLCSW-0716 Test Code: SW8260 Units: µg/L Analysis Date: 07/16/04 10:45

Client ID: Run ID: VOA2\_040716A SeqNo: 508932 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 48.33  | 5.0 | 50      | 0             | 96.7 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 46.74  | 5.0 | 50      | 0             | 93.5 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 48.19  | 5.0 | 50      | 0             | 96.4 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 46.2   | 5.0 | 50      | 0             | 92.4 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 48.47  | 5.0 | 50      | 0             | 96.9 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 47.47  | 5.0 | 50      | 0             | 94.9 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 96.07  | 10  | 100     | 0             | 96.1 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 98.91  | 10  | 100     | 0             | 98.9 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 107.8  | 10  | 100     | 0             | 108  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 101.1  | 10  | 100     | 0             | 101  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 115.3  | 10  | 100     | 0             | 115  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 46.87  | 5.0 | 50      | 0             | 93.7 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 47.98  | 5.0 | 50      | 0             | 96   | 80-120        | 0             |      |           |      |
| Bromoform                   | 49.06  | 5.0 | 50      | 0             | 98.1 | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 49.31  | 5.0 | 50      | 0             | 98.6 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 91.44  | 10  | 100     | 0             | 91.4 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 48.17  | 5.0 | 50      | 0             | 96.3 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 47.23  | 5.0 | 50      | 0             | 94.5 | 80-120        | 0             |      |           |      |
| Chloroethane                | 47.18  | 5.0 | 50      | 0             | 94.4 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 46.62  | 5.0 | 50      | 0             | 93.2 | 80-120        | 0             |      |           |      |
| Chloromethane               | 46.05  | 5.0 | 50      | 0             | 92.1 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 48.64  | 5.0 | 50      | 0             | 97.3 | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 49.23  | 5.0 | 50      | 0             | 98.5 | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 49.12  | 5.0 | 50      | 0             | 98.2 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 97.84  | 10  | 100     | 0             | 97.8 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 43.19  | 10  | 50      | 0             | 86.4 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 49.32  | 5.0 | 50      | 0             | 98.6 | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 50.79  | 5.0 | 50      | 0             | 102  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 48.1   | 5.0 | 50      | 0             | 96.2 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 49.04  | 5.0 | 50      | 0             | 98.1 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 47.79  | 5.0 | 50      | 0             | 95.6 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 104.7  | 10  | 100     | 0             | 105  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 49.85  | 2.0 | 50      | 0             | 99.7 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 146.7  | 15  | 150     | 0             | 97.8 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 42.42  | 5.0 | 50      | 0             | 84.8 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 45.17  | 5.0 | 50      | 0             | 90.3 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 42.37  | 5.0 | 50      | 0             | 84.7 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 45.54  | 5.0 | 50      | 0             | 91.1 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21773 InstrumentID: VOA2

MS Sample ID: 0407107-21AMS Test Code: SW8260 Units: µg/L Analysis Date: 07/16/04 14:08

Client ID: Run ID: VOA2\_040716A SeqNo: 508941 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 47.13  | 5.0 | 50      | 0             | 94.3 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 54.54  | 5.0 | 50      | 0             | 109  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 54.37  | 5.0 | 50      | 0             | 109  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 44.81  | 5.0 | 50      | 0             | 89.6 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 46.25  | 5.0 | 50      | 0             | 92.5 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 53.47  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 114.4  | 10  | 100     | 0             | 114  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 18.07  | 10  | 100     | 0             | 18.1 | 60-135        | 0             |      |           | S    |
| 2-Hexanone                  | 119.8  | 10  | 100     | 0             | 120  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 118.2  | 10  | 100     | 0             | 118  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 109.1  | 10  | 100     | 0             | 109  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 49.8   | 5.0 | 50      | 0             | 99.6 | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 52.05  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Bromoform                   | 54.64  | 5.0 | 50      | 0             | 109  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 44.65  | 5.0 | 50      | 0             | 89.3 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 89.58  | 10  | 100     | 0             | 89.6 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 45.24  | 5.0 | 50      | 0             | 90.5 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 49.04  | 5.0 | 50      | 0             | 98.1 | 80-120        | 0             |      |           |      |
| Chloroethane                | 47.27  | 5.0 | 50      | 0             | 94.5 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 50.5   | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Chloromethane               | 46.07  | 5.0 | 50      | 0             | 92.1 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 53.51  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 53.41  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 49.13  | 5.0 | 50      | 0             | 98.3 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 98.43  | 10  | 100     | 0             | 98.4 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 46.97  | 10  | 50      | 0             | 93.9 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 51.92  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 47.41  | 5.0 | 50      | 0             | 94.8 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 48.77  | 5.0 | 50      | 0             | 97.5 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 55.31  | 5.0 | 50      | 0             | 111  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 47.77  | 5.0 | 50      | 0             | 95.5 | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 126.1  | 10  | 100     | 0             | 126  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 46.9   | 2.0 | 50      | 0             | 93.8 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 148.8  | 15  | 150     | 0             | 99.2 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44.39  | 5.0 | 50      | 0             | 88.8 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 45.89  | 5.0 | 50      | 0             | 91.8 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 44.31  | 5.0 | 50      | 0             | 88.6 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 45.99  | 5.0 | 50      | 0             | 92   | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21773 InstrumentID: VOA2

MSD Sample ID: 0407107-21AMSD Test Code: SW8260 Units: µg/L Analysis Date: 07/16/04 14:34

Client ID: Run ID: VOA2\_040716A SeqNo: 508943 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 46.55  | 5.0 | 50      | 0             | 93.1 | 75.2-120      | 47.13         | 1.23   | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 54.57  | 5.0 | 50      | 0             | 109  | 72.4-121      | 54.54         | 0.042  | 20        |      |
| 1,1,2-Trichloroethane       | 53.94  | 5.0 | 50      | 0             | 108  | 80-120        | 54.37         | 0.798  | 20        |      |
| 1,1-Dichloroethane          | 40.69  | 5.0 | 50      | 0             | 81.4 | 76.9-120      | 44.81         | 9.63   | 20        |      |
| 1,1-Dichloroethene          | 46.34  | 5.0 | 50      | 0             | 92.7 | 72.6-123      | 46.25         | 0.198  | 20        |      |
| 1,2-Dichloroethane          | 53.85  | 5.0 | 50      | 0             | 108  | 80-120        | 53.47         | 0.704  | 20        |      |
| 2-Butanone                  | 113.9  | 10  | 100     | 0             | 114  | 69-131        | 114.4         | 0.441  | 20        |      |
| 2-Chloroethyl vinyl ether   | 19.78  | 10  | 100     | 0             | 19.8 | 60-135        | 18.07         | 9.07   | 20        | S    |
| 2-Hexanone                  | 121.9  | 10  | 100     | 0             | 122  | 55.6-126      | 119.8         | 1.7    | 20        |      |
| 4-Methyl-2-pentanone        | 120.5  | 10  | 100     | 0             | 120  | 67.4-121      | 118.2         | 1.93   | 20        |      |
| Acetone                     | 107.6  | 10  | 100     | 0             | 108  | 64.4-140      | 109.1         | 1.41   | 20        |      |
| Benzene                     | 50.31  | 5.0 | 50      | 0             | 101  | 80-120        | 49.8          | 1.03   | 20        |      |
| Bromodichloromethane        | 52.91  | 5.0 | 50      | 0             | 106  | 80-120        | 52.05         | 1.63   | 20        |      |
| Bromoform                   | 55.82  | 5.0 | 50      | 0             | 112  | 77.9-121      | 54.64         | 2.14   | 20        |      |
| Bromomethane                | 48.32  | 5.0 | 50      | 0             | 96.6 | 63.3-137      | 44.65         | 7.9    | 20        |      |
| Carbon disulfide            | 84.57  | 10  | 100     | 0             | 84.6 | 74.1-123      | 89.58         | 5.76   | 20        |      |
| Carbon tetrachloride        | 44.95  | 5.0 | 50      | 0             | 89.9 | 74.7-120      | 45.24         | 0.646  | 20        |      |
| Chlorobenzene               | 48.6   | 5.0 | 50      | 0             | 97.2 | 80-120        | 49.04         | 0.904  | 20        |      |
| Chloroethane                | 46.97  | 5.0 | 50      | 0             | 93.9 | 74.7-126      | 47.27         | 0.652  | 20        |      |
| Chloroform                  | 49     | 5.0 | 50      | 0             | 98   | 80-120        | 50.5          | 3.01   | 20        |      |
| Chloromethane               | 46.38  | 5.0 | 50      | 0             | 92.8 | 64.5-132      | 46.07         | 0.675  | 20        |      |
| cis-1,3-Dichloropropene     | 53.55  | 5.0 | 50      | 0             | 107  | 80-120        | 53.51         | 0.0726 | 20        |      |
| Dibromochloromethane        | 53.28  | 5.0 | 50      | 0             | 107  | 80-120        | 53.41         | 0.247  | 20        |      |
| Ethylbenzene                | 47.41  | 5.0 | 50      | 0             | 94.8 | 80-120        | 49.13         | 3.56   | 20        |      |
| m,p-Xylene                  | 95.25  | 10  | 100     | 0             | 95.3 | 80-120        | 98.43         | 3.28   | 20        |      |
| Methylene chloride          | 45.65  | 10  | 50      | 0             | 91.3 | 76.2-120      | 46.97         | 2.84   | 20        |      |
| Styrene                     | 50.81  | 5.0 | 50      | 0             | 102  | 80-120        | 51.92         | 2.16   | 20        |      |
| Tetrachloroethene           | 46.09  | 5.0 | 50      | 0             | 92.2 | 68.5-130      | 47.41         | 2.81   | 20        |      |
| Toluene                     | 48.26  | 5.0 | 50      | 0             | 96.5 | 80-120        | 48.77         | 1.04   | 20        |      |
| trans-1,3-Dichloropropene   | 55.8   | 5.0 | 50      | 0             | 112  | 80-120        | 55.31         | 0.882  | 20        |      |
| Trichloroethene             | 48.38  | 5.0 | 50      | 0             | 96.8 | 78.9-120      | 47.77         | 1.25   | 20        |      |
| Vinyl acetate               | 123.9  | 10  | 100     | 0             | 124  | 62.4-133      | 126.1         | 1.78   | 20        |      |
| Vinyl chloride              | 47.71  | 2.0 | 50      | 0             | 95.4 | 72.7-128      | 46.9          | 1.73   | 20        |      |
| Xylenes, Total              | 144.6  | 15  | 150     | 0             | 96.4 | 80-120        | 148.8         | 2.86   | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 44.75  | 5.0 | 50      | 0             | 89.5 | 71-126        | 44.39         | 0.795  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 46.51  | 5.0 | 50      | 0             | 93   | 74-125        | 45.89         | 1.34   | 20        |      |
| Surr: Dibromofluoromethane  | 43.86  | 5.0 | 50      | 0             | 87.7 | 73-126        | 44.31         | 1.02   | 20        |      |
| Surr: Toluene-d8            | 46.32  | 5.0 | 50      | 0             | 92.6 | 75-125        | 45.99         | 0.7    | 20        |      |

The following samples were analyzed in this batch:

0407160-01A 0407160-02A 0407160-03A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21757 InstrumentID: IC201

MBLK Sample ID: WBLKW1-071504 Test Code: E300 Units: mg/L Analysis Date: 07/15/04 16:52

Client ID: Run ID: IC201\_040715A SeqNo: 508591 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.87   | 0.10 | 5       | 0             | 97.4 | 80-120        | 0             |      |           |      |

LCS Sample ID: WLCSW1-071504 Test Code: E300 Units: mg/L Analysis Date: 07/16/04 2:22

Client ID: Run ID: IC201\_040715A SeqNo: 508607 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.51   | 0.50 | 10      | 0             | 95.1 | 80-120        | 0             |      |           |      |
| Fluoride                         | 1.89   | 0.10 | 2       | 0             | 94.5 | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.42   | 1.0  | 10      | 0             | 94.2 | 80-120        | 0             |      |           |      |
| Nitrate/Nitrite (as N)           | 3.91   | 0.10 | 0       | 0             | 0    | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.33   | 0.10 | 5       | 0             | 107  | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-07150 Test Code: E300 Units: mg/L Analysis Date: 07/15/04 17:49

Client ID: Run ID: IC201\_040715A SeqNo: 508592 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 9.46   | 0.50 | 10      | 0             | 94.6 | 80-120        | 9.51          | 0.527 | 20        |      |
| Fluoride                         | 1.93   | 0.10 | 2       | 0             | 96.5 | 80-120        | 1.89          | 2.09  | 20        |      |
| Sulfate                          | 9.4    | 1.0  | 10      | 0             | 94   | 80-120        | 9.42          | 0.213 | 20        |      |
| Nitrate/Nitrite (as N)           | 3.91   | 0.10 | 0       | 0             | 0    | 80-120        | 3.91          | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.17   | 0.10 | 5       | 0             | 103  | 80-120        | 5.33          | 3.05  | 20        |      |

MS Sample ID: 0407160-01BMS Test Code: E300 Units: mg/L Analysis Date: 07/15/04 19:15

Client ID: MW-53 Run ID: IC201\_040715A SeqNo: 508595 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 74.72  | 0.50 | 10      | 65            | 97.2 | 75-125        | 0             |      |           | EO   |
| Fluoride                         | 3.01   | 0.10 | 2       | 1.17          | 92   | 75-125        | 0             |      |           |      |
| Sulfate                          | 1416   | 1.0  | 10      | 1429          | -129 | 75-125        | 0             |      |           | SEO  |
| Nitrate/Nitrite (as N)           | 3.85   | 0.10 | 4       | 0.23          | 90.5 | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.15   | 0.10 | 5       | 0             | 103  | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407160  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21757 InstrumentID: IC201

|                                  |                           |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| MSD                              | Sample ID: 0407160-01BMSD |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/15/04 19:43 |           |      |
| Client ID: MW-53                 | Run ID: IC201_040715A     |      |         | SeqNo: 508596   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                    | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 74.67                     | 0.50 | 10      | 65              | 96.7 | 75-125        | 74.72         | 0.0669                        | 20        | EO   |
| Fluoride                         | 2.97                      | 0.10 | 2       | 1.17            | 90   | 75-125        | 3.01          | 1.34                          | 20        |      |
| Sulfate                          | 1415                      | 1.0  | 10      | 1429            | -144 | 75-125        | 1416          | 0.111                         | 20        | SEO  |
| Nitrate/Nitrite (as N)           | 3.76                      | 0.10 | 4       | 0.23            | 88.2 | 75-125        | 3.85          | 2.37                          | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.05                      | 0.10 | 5       | 0               | 101  | 80-120        | 5.15          | 1.96                          | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0407160-01BDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/15/04 23:03 |           |      |
| Client ID: MW-53                 | Run ID: IC201_040715A     |     |         | SeqNo: 508601   |      | Prep Date:    |               | DF: 100                       |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 151                       | 50  | 0       | 0               | 0    | 0-0           | 152           | 0.66                          | 20        |      |
| Fluoride                         | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Sulfate                          | 952                       | 100 | 0       | 0               | 0    | 0-0           | 943           | 0.95                          | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 530                       | 10  | 500     | 0               | 106  | 80-120        | 525           | 0.948                         | 20        |      |

|                                  |                           |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0407160-01BDUP |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/15/04 18:46 |           |      |
| Client ID: MW-53                 | Run ID: IC201_040715A     |      |         | SeqNo: 516274   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                    | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 65.14                     | 0.50 | 0       | 0               | 0    | 0-0           | 65            | 0.215                         | 20        | E    |
| Fluoride                         | 1.16                      | 0.10 | 0       | 0               | 0    | 0-0           | 1.17          | 0.858                         | 20        |      |
| Sulfate                          | 1434                      | 1.0  | 0       | 0               | 0    | 0-0           | 1429          | 0.375                         | 20        | E    |
| Nitrate/Nitrite (as N)           | 0.23                      | 0.10 | 0       | 0               | 0    | 0-0           | 0.23          | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.22                      | 0.10 | 5       | 0               | 104  | 80-120        | 5.31          | 1.71                          | 20        |      |

The following samples were analyzed in this batch:

0407160-01B 0407160-02B 0407160-03B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407160  
**Project:** NCL/TEL

## QC BATCH REPORT

Batch ID: **R21788** InstrumentID: **UV-2101PC**

**MBLK** Sample ID: **WBLKW1-071704** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/17/04 0:00**

Client ID: Run ID: **UV-2101PC\_040717A** SeqNo: **509554** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

**LCS** Sample ID: **WLCSW1-071704** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/17/04 0:00**

Client ID: Run ID: **UV-2101PC\_040717A** SeqNo: **509555** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1941 | 0.020 | 0.2     | 0             | 97   | 80-120        | 0             |      |           |      |

**MS** Sample ID: **0407129-03DMS** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/17/04 0:00**

Client ID: Run ID: **UV-2101PC\_040717A** SeqNo: **509573** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1963 | 0.020 | 0.2     | -0.002        | 99.1 | 75-125        | 0             |      |           |      |

**MSD** Sample ID: **0407129-03DMSD** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/17/04 0:00**

Client ID: Run ID: **UV-2101PC\_040717A** SeqNo: **509574** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1936 | 0.020 | 0.2     | -0.002        | 97.8 | 75-125        | 0.1963        | 1.38 | 25        |      |

**DUP** Sample ID: **0407129-03DDUP** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/17/04 0:00**

Client ID: Run ID: **UV-2101PC\_040717A** SeqNo: **509572** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 | 0       | 0             | 0    | 0-0           | -0.002        | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0407160-01D | 0407160-02D | 0407160-03D |
|-------------|-------------|-------------|

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407160  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21916 InstrumentID: WetChem

MBLK Sample ID: WBLKW1-072204 Test Code: E310.1 Units: mg/L Analysis Date: 07/22/04 0:00

Client ID: Run ID: WETCHEM\_040722A SeqNo: 512756 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-072204 Test Code: E310.1 Units: mg/L Analysis Date: 07/22/04 0:00

Client ID: Run ID: WETCHEM\_040722A SeqNo: 512757 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 1000   | 5.0 | 0       | 1             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Total (As CaCO3)       | 1000   | 5.0 | 1000    | 0             | 100  | 80-120        | 0             |      |           |      |

DUP Sample ID: 0407119-02DDUP Test Code: E310.1 Units: mg/L Analysis Date: 07/22/04 0:00

Client ID: Run ID: WETCHEM\_040722A SeqNo: 512775 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 340.1  | 5.0 | 0       | 0             | 0    | 0-0           | 340.1         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 340.1  | 5.0 | 0       | 0             | 0    | 0-0           | 340.1         | 0    | 20        |      |

DUP Sample ID: 0407217-04BDUP Test Code: E310.1 Units: mg/L Analysis Date: 07/22/04 0:00

Client ID: Run ID: WETCHEM\_040722A SeqNo: 512776 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 470.1  | 5.0 | 0       | 0             | 0    | 0-0           | 470.1         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 470.1  | 5.0 | 0       | 0             | 0    | 0-0           | 470.1         | 0    | 20        |      |

The following samples were analyzed in this batch:

0407160-01B 0407160-02B 0407160-03B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



☐ e-Lab, Inc.  
10450 Stancil Rd. #210  
Houston, Texas 77099  
(Tel) 281.530.5656  
(Fax) 281.530.5887

## Chain of Custody Form

☐ e-Lab, Inc.  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

Page      of     

| Customer Information                                                                                                                                                  |                          |         |      | Project Information                          |       |           |   | e-Lab Project Manager: <u>PO110</u>                                                                                                            |   |   |   |   |   |   |   |   |      |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------|------|----------------------------------------------|-------|-----------|---|------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|------|--|--|
| Project Name                                                                                                                                                          |                          |         |      | Parameter/Method Request for Analysis        |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| Purchase Order                                                                                                                                                        | Project Name             |         |      | Volatiles BTEX/MTBE 8260                     |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| Work Order                                                                                                                                                            | Project Number           |         |      | Tot Metals WQCC + Cations 6020/7000          |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| Company Name                                                                                                                                                          | Navajo Refining Company  |         |      | Semi-volatiles Select 8270                   |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| Send Report To                                                                                                                                                        | Jeff Byrd                |         |      | Chloride, Fluoride, Sulfate                  |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| Address                                                                                                                                                               | P.O. Box 159             |         |      | Alkalinity                                   |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
|                                                                                                                                                                       | 509 East Main            |         |      | Cyanide                                      |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| City/State/Zip                                                                                                                                                        | Atasia, New Mexico 86211 |         |      | NCL/TEL                                      |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| Phone                                                                                                                                                                 | (505) 746-3311           |         |      |                                              |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| Fax                                                                                                                                                                   | (505) 746-5421           |         |      |                                              |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| e-Mail Address                                                                                                                                                        |                          |         |      |                                              |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| No.                                                                                                                                                                   | Sample Description       | Date    | Time | Matrix                                       | Pres. | # Bottles | A | B                                                                                                                                              | C | D | E | F | G | H | I | J | Hold |  |  |
| 1                                                                                                                                                                     | MW-53                    | 7/14/04 | 1045 | L                                            | P     | 8         |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| 2                                                                                                                                                                     | MW-54A                   | 7/14/04 | 1110 | L                                            | P     | 8         |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| 3                                                                                                                                                                     | MW-55                    | 7/14/04 | 1330 | L                                            | P     | 8         |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| 4                                                                                                                                                                     |                          |         |      |                                              |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| 5                                                                                                                                                                     |                          |         |      |                                              |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| 6                                                                                                                                                                     |                          |         |      |                                              |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| 7                                                                                                                                                                     |                          |         |      |                                              |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| 8                                                                                                                                                                     |                          |         |      |                                              |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| 9                                                                                                                                                                     |                          |         |      |                                              |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| 10                                                                                                                                                                    |                          |         |      |                                              |       |           |   |                                                                                                                                                |   |   |   |   |   |   |   |   |      |  |  |
| Sampler Please Print & Sign                                                                                                                                           |                          |         |      | Shipment Method                              |       |           |   | Required Turnaround Time: (Check Box)                                                                                                          |   |   |   |   |   |   |   |   |      |  |  |
| Relinquished by: <u>[Signature]</u>                                                                                                                                   |                          |         |      | Fed Ex                                       |       |           |   | <input type="checkbox"/> STD 10 WK Days <input type="checkbox"/> 5 WK Days <input type="checkbox"/> 2 WK Days <input type="checkbox"/> 24 Hour |   |   |   |   |   |   |   |   |      |  |  |
| Relinquished by: <u>[Signature]</u>                                                                                                                                   |                          |         |      | Received by: <u>[Signature]</u>              |       |           |   | Notes: <u>10 Day TAT Standard GC</u>                                                                                                           |   |   |   |   |   |   |   |   |      |  |  |
| Logged by (Laboratory): <u>[Signature]</u>                                                                                                                            |                          |         |      | Received by (Laboratory): <u>[Signature]</u> |       |           |   | QC Package: (Check One Box Below)                                                                                                              |   |   |   |   |   |   |   |   |      |  |  |
| Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>3</sub> 7-Other 8-4°C |                          |         |      | Cooler Temp. <u>    </u>                     |       |           |   | <input checked="" type="checkbox"/> Level III Std QC Raw Data <input type="checkbox"/> TRRP Level IV                                           |   |   |   |   |   |   |   |   |      |  |  |

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.



e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 7/15/2004 8:50:00 AM

Work Order Number 0407160

Received by: FSM

Checklist completed by

[Signature]  
Signature

7/15/04  
Date

Reviewed by

[Signature]  
Initials

7/15/04  
Date

Matrix: W

Carrier name: FedEx

|                                                         |                                         |                             |                                                 |
|---------------------------------------------------------|-----------------------------------------|-----------------------------|-------------------------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| Custody seals intact on shipping container/cooler?      | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Temperature(s)/Thermometer(s):                          | <u>2.2c</u>                             | <u>002</u>                  |                                                 |
| Water - VOA vials have zero headspace?                  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input type="checkbox"/> |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/>                    |

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_



**e-Lab Analytical, Inc.**

10450 Standliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

July 27, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: NCL/TEL

Work Order : **0407179**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 3 samples on 7/16/2004 9:10:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 32.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

**e-Lab Analytical, Inc.**

**Date:** July 27, 2004

**CLIENT:** Navajo Refining Company  
**Project:** NCL/TEL  
**Work Order:** 0407179

## Work Order Sample Summary

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0407179-01           | NCL-49                  | Water         |                   | 7/15/2004 10:00        | 7/16/2004 09:10      | <input type="checkbox"/> |
| 0407179-02           | NCL-32                  | Water         |                   | 7/15/2004 10:15        | 7/16/2004 09:10      | <input type="checkbox"/> |
| 0407179-03           | NCL-44                  | Water         |                   | 7/15/2004 10:45        | 7/16/2004 09:10      | <input type="checkbox"/> |

**e-Lab Analytical, Inc.****Date:** *July 27, 2004***CLIENT:** Navajo Refining Company**Project:** NCL/TEL**Work Order:** 0407179**Case Narrative**

Batch 9655 Semivolatile MS/MSD/RPD was an unrelated sample.

Batch R21864 Volatile MS/MSD was an unrelated sample.

**e-Lab Analytical, Inc.**

Date: July 27, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407179  
**Project:** NCL/TEL  
**Lab ID:** 0407179-01

**Client Sample ID:** NCL-49  
**Collection Date:** 7/15/2004 10:00:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 7/22/2004 4:54:23 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | 0.0256  | 0.0100       |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Barium                                | 0.0119  | 0.00500      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Boron                                 | 0.247   | 0.0200       |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Calcium                               | 451     | 10.0         |      | mg/L  | 20              | 7/22/2004 10:43:00 PM |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Copper                                | ND      | 0.00200      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Iron                                  | ND      | 0.200        |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Magnesium                             | 196     | 4.00         |      | mg/L  | 20              | 7/22/2004 10:43:00 PM |
| Manganese                             | ND      | 0.00500      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Molybdenum                            | ND      | 0.00500      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Nickel                                | ND      | 0.00500      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Potassium                             | 0.670   | 0.200        |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Selenium                              | 0.00806 | 0.00500      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Sodium                                | 110     | 4.00         |      | mg/L  | 20              | 7/22/2004 10:43:00 PM |
| Vanadium                              | 0.00941 | 0.00500      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| Zinc                                  | ND      | 0.00500      |      | mg/L  | 1               | 7/22/2004 8:58:00 AM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 27, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407179  
**Project:** NCL/TEL  
**Lab ID:** 0407179-01

**Client Sample ID:** NCL-49  
**Collection Date:** 7/15/2004 10:00:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:05:00 PM |
| Surr: 2,4,6-Tribromophenol | 104    | 39-153       |      | %REC  | 1               | 7/21/2004 7:05:00 PM |
| Surr: 2-Fluorobiphenyl     | 99.8   | 40-147       |      | %REC  | 1               | 7/21/2004 7:05:00 PM |
| Surr: 2-Fluorophenol       | 41.1   | 21-110       |      | %REC  | 1               | 7/21/2004 7:05:00 PM |
| Surr: 4-Terphenyl-d14      | 99.4   | 39-141       |      | %REC  | 1               | 7/21/2004 7:05:00 PM |
| Surr: Nitrobenzene-d5      | 93.0   | 37-140       |      | %REC  | 1               | 7/21/2004 7:05:00 PM |
| Surr: Phenol-d6            | 23.2   | 11-100       |      | %REC  | 1               | 7/21/2004 7:05:00 PM |

**VOLATILES BY GC/MS****SW8260**Analyst: **PC**

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 7/21/2004 1:21:00 AM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:21:00 AM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

AR Page 2 of 9

**e-Lab Analytical, Inc.**

Date: July 27, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407179  
**Project:** NCL/TEL  
**Lab ID:** 0407179-01

**Client Sample ID:** NCL-49  
**Collection Date:** 7/15/2004 10:00:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed         |
|-------------------------------------|--------|---------------|------|-------|---------------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Toluene                             | ND     | 5.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L  | 1                   | 7/21/2004 1:21:00 AM  |
| Surr: 1,2-Dichloroethane-d4         | 120    | 71-126        |      | %REC  | 1                   | 7/21/2004 1:21:00 AM  |
| Surr: 4-Bromofluorobenzene          | 93.8   | 74-125        |      | %REC  | 1                   | 7/21/2004 1:21:00 AM  |
| Surr: Dibromofluoromethane          | 110    | 73-126        |      | %REC  | 1                   | 7/21/2004 1:21:00 AM  |
| Surr: Toluene-d8                    | 97.0   | 75-125        |      | %REC  | 1                   | 7/21/2004 1:21:00 AM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>MG</b>  |                       |
| Chloride                            | 174    | 5.00          |      | mg/L  | 10                  | 7/17/2004 12:43:00 AM |
| Fluoride                            | 0.860  | 0.100         |      | mg/L  | 1                   | 7/17/2004 12:14:00 AM |
| Sulfate                             | 1,460  | 100           |      | mg/L  | 100                 | 7/17/2004 1:11:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1                   | 7/17/2004 12:14:00 AM |
| Surr: Dichloroacetic acid (surr)    | 97.8   | 80-120        |      | %REC  | 1                   | 7/17/2004 12:14:00 AM |
| Surr: Dichloroacetic acid (surr)    | 107    | 80-120        |      | %REC  | 10                  | 7/17/2004 12:43:00 AM |
| Surr: Dichloroacetic acid (surr)    | 117    | 80-120        |      | %REC  | 100                 | 7/17/2004 1:11:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>LMD</b> |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 220    | 5.00          |      | mg/L  | 1                   | 7/22/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 7/22/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 7/22/2004             |
| Alkalinity, Total (As CaCO3)        | 220    | 5.00          |      | mg/L  | 1                   | 7/22/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: <b>LMD</b> |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1                   | 7/17/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: July 27, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL  
 Lab ID: 0407179-02

Client Sample ID: NCL-32  
 Collection Date: 7/15/2004 10:15:00 AM  
 Matrix: WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor      | Date Analyzed         |
|---------------------------------------|---------|---------------|------|-------|----------------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                      |                       |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: 7/26/2004 | Analyst: JCJ          |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                    | 7/26/2004 4:55:57 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                      |                       |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: 7/19/2004 | Analyst: SA           |
| Aluminum                              | ND      | 0.0100        |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Arsenic                               | ND      | 0.00500       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Barium                                | 0.0146  | 0.00500       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Boron                                 | 0.280   | 0.0200        |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Calcium                               | 532     | 10.0          |      | mg/L  | 20                   | 7/22/2004 10:49:00 PM |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Cobalt                                | 0.00264 | 0.00200       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Copper                                | ND      | 0.00200       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Iron                                  | ND      | 0.200         |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Magnesium                             | 172     | 4.00          |      | mg/L  | 20                   | 7/22/2004 10:49:00 PM |
| Manganese                             | 1.01    | 0.100         |      | mg/L  | 20                   | 7/22/2004 10:49:00 PM |
| Molybdenum                            | 0.00902 | 0.00500       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Nickel                                | 0.00596 | 0.00500       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Potassium                             | 3.30    | 0.200         |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Sodium                                | 84.7    | 4.00          |      | mg/L  | 20                   | 7/22/2004 10:49:00 PM |
| Vanadium                              | 0.0102  | 0.00500       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| Zinc                                  | ND      | 0.00500       |      | mg/L  | 1                    | 7/22/2004 9:03:00 AM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                      |                       |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: 7/19/2004 | Analyst: HV           |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                    | 7/21/2004 7:30:00 PM  |

Qualifiers: ND - Not Detected at the Reporting Limit  
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 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time



**e-Lab Analytical, Inc.**
**Date:** July 27, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407179  
**Project:** NCL/TEL  
**Lab ID:** 0407179-02

**Client Sample ID:** NCL-32  
**Collection Date:** 7/15/2004 10:15:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:30:00 PM |
| Surr: 2,4,6-Tribromophenol | 105    | 39-153       |      | %REC  | 1               | 7/21/2004 7:30:00 PM |
| Surr: 2-Fluorobiphenyl     | 96.7   | 40-147       |      | %REC  | 1               | 7/21/2004 7:30:00 PM |
| Surr: 2-Fluorophenol       | 38.5   | 21-110       |      | %REC  | 1               | 7/21/2004 7:30:00 PM |
| Surr: 4-Terphenyl-d14      | 96.3   | 39-141       |      | %REC  | 1               | 7/21/2004 7:30:00 PM |
| Surr: Nitrobenzene-d5      | 91.1   | 37-140       |      | %REC  | 1               | 7/21/2004 7:30:00 PM |
| Surr: Phenol-d6            | 23.8   | 11-100       |      | %REC  | 1               | 7/21/2004 7:30:00 PM |

**VOLATILES BY GC/MS**
**SW8260**
**Analyst: PC**

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 7/21/2004 1:48:00 AM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 7/21/2004 1:48:00 AM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: July 27, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL  
 Lab ID: 0407179-02

Client Sample ID: NCL-32  
 Collection Date: 7/15/2004 10:15:00 AM  
 Matrix: WATER

| Analyses                            | Result | Report Limit | Qual | Units         | Dilution Factor | Date Analyzed        |
|-------------------------------------|--------|--------------|------|---------------|-----------------|----------------------|
| Chlorobenzene                       | ND     | 5.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Chloroethane                        | ND     | 5.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Chloroform                          | ND     | 5.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Chloromethane                       | ND     | 5.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| cis-1,3-Dichloropropene             | ND     | 5.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Dibromochloromethane                | ND     | 5.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Ethylbenzene                        | ND     | 5.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| m,p-Xylene                          | ND     | 10           |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Methylene chloride                  | ND     | 10           |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Styrene                             | ND     | 5.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Tetrachloroethene                   | ND     | 5.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Toluene                             | ND     | 5.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| trans-1,3-Dichloropropene           | ND     | 5.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Trichloroethene                     | ND     | 5.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Vinyl acetate                       | ND     | 10           |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Vinyl chloride                      | ND     | 2.0          |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Xylenes, Total                      | ND     | 15           |      | µg/L          | 1               | 7/21/2004 1:48:00 AM |
| Surr: 1,2-Dichloroethane-d4         | 118    | 71-126       |      | %REC          | 1               | 7/21/2004 1:48:00 AM |
| Surr: 4-Bromofluorobenzene          | 97.1   | 74-125       |      | %REC          | 1               | 7/21/2004 1:48:00 AM |
| Surr: Dibromofluoromethane          | 111    | 73-126       |      | %REC          | 1               | 7/21/2004 1:48:00 AM |
| Surr: Toluene-d8                    | 94.2   | 75-125       |      | %REC          | 1               | 7/21/2004 1:48:00 AM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        |              |      | <b>E300</b>   |                 | Analyst: <b>MG</b>   |
| Chloride                            | 188    | 5.00         |      | mg/L          | 10              | 7/17/2004 2:08:00 AM |
| Fluoride                            | 1.31   | 0.100        |      | mg/L          | 1               | 7/17/2004 1:40:00 AM |
| Sulfate                             | 1,070  | 100          |      | mg/L          | 100             | 7/17/2004 2:37:00 AM |
| Nitrate/Nitrite (as N)              | ND     | 0.100        |      | mg/L          | 1               | 7/17/2004 1:40:00 AM |
| Surr: Dichloroacetic acid (surr)    | 94.8   | 80-120       |      | %REC          | 1               | 7/17/2004 1:40:00 AM |
| Surr: Dichloroacetic acid (surr)    | 115    | 80-120       |      | %REC          | 10              | 7/17/2004 2:08:00 AM |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120       |      | %REC          | 100             | 7/17/2004 2:37:00 AM |
| <b>ALKALINITY</b>                   |        |              |      | <b>E310.1</b> |                 | Analyst: <b>LMD</b>  |
| Alkalinity, Bicarbonate (As CaCO3)  | 330    | 5.00         |      | mg/L          | 1               | 7/22/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00         |      | mg/L          | 1               | 7/22/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00         |      | mg/L          | 1               | 7/22/2004            |
| Alkalinity, Total (As CaCO3)        | 330    | 5.00         |      | mg/L          | 1               | 7/22/2004            |
| <b>CYANIDE, TOTAL</b>               |        |              |      | <b>E335.3</b> |                 | Analyst: <b>LMD</b>  |
| Cyanide                             | ND     | 0.0200       |      | mg/L          | 1               | 7/17/2004            |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 27, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407179  
Project: NCL/TEL  
Lab ID: 0407179-03

Client Sample ID: NCL-44  
Collection Date: 7/15/2004 10:45:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor      | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|----------------------|-----------------------|
| <hr/>                                 |         |              |      |       |                      |                       |
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                      |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
|                                       |         |              |      |       | Prep Date: 7/26/2004 | Analyst: JCJ          |
|                                       |         |              |      |       |                      | 7/26/2004 4:57:31 PM  |
| <hr/>                                 |         |              |      |       |                      |                       |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                      |                       |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Arsenic                               | 0.0207  | 0.00500      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Barium                                | 0.0263  | 0.00500      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Boron                                 | 0.323   | 0.0200       |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Calcium                               | 314     | 10.0         |      | mg/L  | 20                   | 7/22/2004 10:55:00 PM |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Cobalt                                | 0.00353 | 0.00200      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Copper                                | ND      | 0.00200      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Iron                                  | 0.900   | 0.200        |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Magnesium                             | 125     | 4.00         |      | mg/L  | 20                   | 7/22/2004 10:55:00 PM |
| Manganese                             | 0.723   | 0.100        |      | mg/L  | 20                   | 7/22/2004 10:55:00 PM |
| Molybdenum                            | 0.0146  | 0.00500      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Nickel                                | ND      | 0.00500      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Potassium                             | 2.15    | 0.200        |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Sodium                                | 71.9    | 4.00         |      | mg/L  | 20                   | 7/22/2004 10:55:00 PM |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| Zinc                                  | ND      | 0.00500      |      | mg/L  | 1                    | 7/22/2004 9:09:00 AM  |
| <hr/>                                 |         |              |      |       |                      |                       |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                      |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1                    | 7/21/2004 7:54:00 PM  |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: July 27, 2004

CLIENT: Navajo Refining Company  
Work Order: 0407179  
Project: NCL/TEL  
Lab ID: 0407179-03

Client Sample ID: NCL-44  
Collection Date: 7/15/2004 10:45:00 AM  
Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 7/21/2004 7:54:00 PM |
| Surr: 2,4,6-Tribromophenol | 115    | 39-153       |      | %REC  | 1               | 7/21/2004 7:54:00 PM |
| Surr: 2-Fluorobiphenyl     | 103    | 40-147       |      | %REC  | 1               | 7/21/2004 7:54:00 PM |
| Surr: 2-Fluorophenol       | 42.2   | 21-110       |      | %REC  | 1               | 7/21/2004 7:54:00 PM |
| Surr: 4-Terphenyl-d14      | 97.5   | 39-141       |      | %REC  | 1               | 7/21/2004 7:54:00 PM |
| Surr: Nitrobenzene-d5      | 98.5   | 37-140       |      | %REC  | 1               | 7/21/2004 7:54:00 PM |
| Surr: Phenol-d6            | 25.5   | 11-100       |      | %REC  | 1               | 7/21/2004 7:54:00 PM |

**VOLATILES BY GC/MS****SW8260**

Analyst: PC

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 7/21/2004 2:15:00 AM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 7/21/2004 2:15:00 AM |

**Qualifiers:**

ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**
**Date:** July 27, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407179  
**Project:** NCL/TEL  
**Lab ID:** 0407179-03

**Client Sample ID:** NCL-44  
**Collection Date:** 7/15/2004 10:45:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed        |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 7/21/2004 2:15:00 AM |
| Surr: 1,2-Dichloroethane-d4         | 115    | 71-126        |      | %REC                | 1               | 7/21/2004 2:15:00 AM |
| Surr: 4-Bromofluorobenzene          | 91.3   | 74-125        |      | %REC                | 1               | 7/21/2004 2:15:00 AM |
| Surr: Dibromofluoromethane          | 108    | 73-126        |      | %REC                | 1               | 7/21/2004 2:15:00 AM |
| Surr: Toluene-d8                    | 95.1   | 75-125        |      | %REC                | 1               | 7/21/2004 2:15:00 AM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                      |
| Chloride                            | 207    | 5.00          |      | mg/L                | 10              | 7/17/2004 4:59:00 AM |
| Fluoride                            | 1.65   | 0.100         |      | mg/L                | 1               | 7/17/2004 4:31:00 AM |
| Sulfate                             | 449    | 10.0          |      | mg/L                | 10              | 7/17/2004 4:59:00 AM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 7/17/2004 4:31:00 AM |
| Surr: Dichloroacetic acid (surr)    | 101    | 80-120        |      | %REC                | 1               | 7/17/2004 4:31:00 AM |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC                | 10              | 7/17/2004 4:59:00 AM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                      |
| Alkalinity, Bicarbonate (As CaCO3)  | 530    | 5.00          |      | mg/L                | 1               | 7/22/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 7/22/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 7/22/2004            |
| Alkalinity, Total (As CaCO3)        | 530    | 5.00          |      | mg/L                | 1               | 7/22/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                      |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 7/17/2004            |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab Analytical, Inc.

Date: Jul 27 2004

CLIENT: Navajo Refining Company

Work Order: 0407179

Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9647 InstrumentID: ICP7500

MBLK Sample ID: MBLKW1-071904 Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 5:48

Client ID: Run ID: ICP7500\_040721C SeqNo: 512507 Prep Date: 7/19/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Arsenic    | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Barium     | 0.01107 | 0.0050 |         |               |      |               |               |      |           |      |
| Beryllium  | ND      | 0.0020 |         |               |      |               |               |      |           |      |
| Boron      | ND      | 0.020  |         |               |      |               |               |      |           |      |
| Cadmium    | ND      | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium    | 0.2675  | 0.50   |         |               |      |               |               |      |           | J    |
| Chromium   | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Copper     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Iron       | 0.03845 | 0.20   |         |               |      |               |               |      |           | J    |
| Lead       | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium  | ND      | 0.20   |         |               |      |               |               |      |           |      |
| Manganese  | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Molybdenum | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium  | ND      | 0.20   |         |               |      |               |               |      |           |      |
| Selenium   | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Silver     | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium     | ND      | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium   | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc       | ND      | 0.0050 |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW1-071904 Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 20:54

Client ID: Run ID: ICP7500\_040722A SeqNo: 513164 Prep Date: 7/19/2004 DF: 1

| Analyte  | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum | 0.015  | 0.010 |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is &gt; 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9647 InstrumentID: ICP7500

LCS Sample ID: MLCSW1-071904 Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 5:53

Client ID: Run ID: ICP7500\_040721C SeqNo: 512508 Prep Date: 7/19/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Arsenic   | 0.04952 | 0.0050 | 0.05    | 0             | 99   | 80-121        | 0             |      |           |      |
| Barium    | 0.05617 | 0.0050 | 0.05    | 0             | 112  | 79.8-119      | 0             |      |           |      |
| Beryllium | 0.0484  | 0.0020 | 0.05    | 0             | 96.8 | 78.9-120      | 0             |      |           |      |
| Boron     | 0.5341  | 0.020  | 0       | -0.007959     | 0    | 80-120        | 0             |      |           |      |
| Cadmium   | 0.05664 | 0.0020 | 0.05    | 0             | 113  | 79.1-119      | 0             |      |           |      |
| Calcium   | 5.209   | 0.50   | 5       | 0             | 104  | 80-121        | 0             |      |           |      |
| Chromium  | 0.04752 | 0.0050 | 0.05    | 0             | 95   | 79.3-121      | 0             |      |           |      |
| Cobalt    | 0.04651 | 0.0050 | 0.05    | 0             | 93   | 82-121        | 0             |      |           |      |
| Copper    | 0.04617 | 0.0050 | 0.05    | 0             | 92.3 | 83-121        | 0             |      |           |      |
| Iron      | 5.078   | 0.20   | 5       | 0             | 102  | 80-120        | 0             |      |           |      |
| Lead      | 0.04485 | 0.0050 | 0.05    | 0             | 89.7 | 80-118        | 0             |      |           |      |
| Magnesium | 5.324   | 0.20   | 5       | 0             | 106  | 80-120        | 0             |      |           |      |
| Manganese | 0.04849 | 0.0050 | 0.05    | 0             | 97   | 82-119        | 0             |      |           |      |
| Nickel    | 0.04828 | 0.0050 | 0.05    | 0             | 96.6 | 85-120        | 0             |      |           |      |
| Potassium | 5.306   | 0.20   | 5       | 0             | 106  | 80-120        | 0             |      |           |      |
| Selenium  | 0.0495  | 0.0050 | 0.05    | 0             | 99   | 79.2-118      | 0             |      |           |      |
| Silver    | 0.04313 | 0.0050 | 0.05    | 0             | 86.3 | 83-117        | 0             |      |           |      |
| Sodium    | 5.205   | 0.20   | 5       | 0             | 104  | 82.4-120      | 0             |      |           |      |
| Vanadium  | 0.04807 | 0.0050 | 0.05    | 0             | 96.1 | 82.1-119      | 0             |      |           |      |
| Zinc      | 0.04911 | 0.0050 | 0.05    | 0             | 98.2 | 83-118        | 0             |      |           |      |

LCS Sample ID: MLCSW1-071904 Test Code: SW6020 Units: mg/L Analysis Date: 07/23/04 14:12

Client ID: Run ID: ICP7500\_040723A SeqNo: 513453 Prep Date: 7/19/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.05658 | 0.010  | 0.05    | 0             | 113  | 79-126        | 0             |      |           |      |
| Molybdenum | 0.04801 | 0.0050 | 0.05    | 0             | 96   | 84.6-115      | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9647 InstrumentID: ICP7500

MS Sample ID: 0407174-07CMS Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 7:08

Client ID: Run ID: ICP7500\_040721C SeqNo: 512524 Prep Date: 7/19/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.03899 | 0.010  | 0.05    | -0.002621     | 83.2 | 79-126        | 0             |      |           |      |
| Arsenic    | 0.04914 | 0.0050 | 0.05    | -0.0008387    | 100  | 80-121        | 0             |      |           |      |
| Barium     | 0.03947 | 0.0050 | 0.05    | -0.00421      | 87.4 | 79.8-119      | 0             |      |           |      |
| Boron      | 0.5345  | 0.020  | 0       | 0.01216       | 0    | 80-120        | 0             |      |           |      |
| Cadmium    | 0.04603 | 0.0020 | 0.05    | -0.00004586   | 92.2 | 79.1-119      | 0             |      |           |      |
| Calcium    | 4.784   | 0.50   | 5       | 0.7668        | 80.3 | 80-121        | 0             |      |           |      |
| Chromium   | 0.04477 | 0.0050 | 0.05    | 0.0001007     | 89.3 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04393 | 0.0050 | 0.05    | -0.00001264   | 87.9 | 82-121        | 0             |      |           |      |
| Copper     | 0.04391 | 0.0050 | 0.05    | -0.0001676    | 88.2 | 83-121        | 0             |      |           |      |
| Iron       | 4.772   | 0.20   | 5       | -0.003628     | 95.5 | 80-120        | 0             |      |           |      |
| Lead       | 0.04365 | 0.0050 | 0.05    | -0.00001977   | 87.3 | 80-118        | 0             |      |           |      |
| Magnesium  | 4.622   | 0.20   | 5       | 0.2407        | 87.6 | 80-120        | 0             |      |           |      |
| Manganese  | 0.04549 | 0.0050 | 0.05    | -0.00002527   | 91   | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04382 | 0.0050 | 0.05    | -0.0001675    | 88   | 84.6-115      | 0             |      |           |      |
| Nickel     | 0.04573 | 0.0050 | 0.05    | 0.0002155     | 91   | 85-120        | 0             |      |           |      |
| Potassium  | 4.813   | 0.20   | 5       | 0.005151      | 96.2 | 80-120        | 0             |      |           |      |
| Selenium   | 0.04735 | 0.0050 | 0.05    | -0.001535     | 97.8 | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04778 | 0.0050 | 0.05    | -0.0003609    | 96.3 | 83-117        | 0             |      |           |      |
| Sodium     | 4.498   | 0.20   | 5       | 0.258         | 84.8 | 82.4-120      | 0             |      |           |      |
| Vanadium   | 0.04482 | 0.0050 | 0.05    | 0.0001307     | 89.4 | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.04722 | 0.0050 | 0.05    | -0.0003896    | 95.2 | 83-118        | 0             |      |           |      |

MS Sample ID: 0407174-07CMS Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 22:03

Client ID: Run ID: ICP7500\_040722A SeqNo: 513176 Prep Date: 7/19/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | 0.05073 | 0.0020 | 0.05    | 0             | 101  | 78.9-120      | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9647 InstrumentID: ICP7500

MSD Sample ID: 0407174-07CMSD Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 7:14

Client ID: Run ID: ICP7500\_040721C SeqNo: 512527 Prep Date: 7/19/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.04197 | 0.010  | 0.05    | -0.002621     | 89.2 | 79-126        | 0.03899       | 7.36 | 15        |      |
| Arsenic    | 0.05041 | 0.0050 | 0.05    | -0.0008387    | 102  | 80-121        | 0.04914       | 2.55 | 15        |      |
| Barium     | 0.04255 | 0.0050 | 0.05    | -0.00421      | 93.5 | 79.8-119      | 0.03947       | 7.51 | 15        |      |
| Boron      | 0.5697  | 0.020  | 0       | 0.01216       | 0    | 80-120        | 0.5345        | 6.38 | 15        |      |
| Cadmium    | 0.04762 | 0.0020 | 0.05    | -0.00004586   | 95.3 | 79.1-119      | 0.04603       | 3.4  | 15        |      |
| Calcium    | 4.991   | 0.50   | 5       | 0.7668        | 84.5 | 80-121        | 4.784         | 4.24 | 15        |      |
| Chromium   | 0.04702 | 0.0050 | 0.05    | 0.0001007     | 93.8 | 79.3-121      | 0.04477       | 4.9  | 15        |      |
| Cobalt     | 0.04624 | 0.0050 | 0.05    | -0.00001264   | 92.5 | 82-121        | 0.04393       | 5.12 | 15        |      |
| Copper     | 0.04593 | 0.0050 | 0.05    | -0.0001676    | 92.2 | 83-121        | 0.04391       | 4.5  | 15        |      |
| Iron       | 4.964   | 0.20   | 5       | -0.003628     | 99.4 | 80-120        | 4.772         | 3.94 | 15        |      |
| Lead       | 0.04527 | 0.0050 | 0.05    | -0.00001977   | 90.6 | 80-118        | 0.04365       | 3.64 | 15        |      |
| Magnesium  | 4.822   | 0.20   | 5       | 0.2407        | 91.6 | 80-120        | 4.622         | 4.24 | 15        |      |
| Manganese  | 0.04705 | 0.0050 | 0.05    | -0.00002527   | 94.2 | 82-119        | 0.04549       | 3.37 | 15        |      |
| Molybdenum | 0.04697 | 0.0050 | 0.05    | -0.0001675    | 94.3 | 84.6-115      | 0.04382       | 6.94 | 15        |      |
| Nickel     | 0.04844 | 0.0050 | 0.05    | 0.0002155     | 96.4 | 85-120        | 0.04573       | 5.76 | 15        |      |
| Potassium  | 5.057   | 0.20   | 5       | 0.005151      | 101  | 80-120        | 4.813         | 4.94 | 15        |      |
| Selenium   | 0.04997 | 0.0050 | 0.05    | -0.001535     | 103  | 79.2-118      | 0.04735       | 5.38 | 15        |      |
| Silver     | 0.04813 | 0.0050 | 0.05    | -0.0003609    | 97   | 83-117        | 0.04778       | 0.73 | 15        |      |
| Sodium     | 4.731   | 0.20   | 5       | 0.258         | 89.5 | 82.4-120      | 4.498         | 5.05 | 15        |      |
| Vanadium   | 0.0472  | 0.0050 | 0.05    | 0.0001307     | 94.1 | 82.1-119      | 0.04482       | 5.17 | 15        |      |
| Zinc       | 0.04926 | 0.0050 | 0.05    | -0.0003896    | 99.3 | 83-118        | 0.04722       | 4.23 | 15        |      |

MSD Sample ID: 0407174-07CMSD Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 22:09

Client ID: Run ID: ICP7500\_040722A SeqNo: 513177 Prep Date: 7/19/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | 0.05073 | 0.0020 | 0.05    | 0             | 101  | 78.9-120      | 0.05073       | 0    | 15        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9647 InstrumentID: ICP7500

DUP Sample ID: 0407174-07CDUP Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 7:02

Client ID: Run ID: ICP7500\_040721C SeqNo: 512521 Prep Date: 7/19/2004 DF: 1

| Analyte    | Result   | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | ND       | 0.010  | 0       | 0             | 0    | 0-0           | -0.002621     | 0    | 25        |      |
| Arsenic    | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0008387    | 0    | 25        |      |
| Barium     | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.00421      | 0    | 25        |      |
| Boron      | ND       | 0.020  | 0       | 0             | 0    | 0-0           | 0.01216       | 0    | 25        |      |
| Cadmium    | ND       | 0.0020 | 0       | 0             | 0    | 0-0           | -0.00004586   | 0    | 25        |      |
| Calcium    | 0.225    | 0.50   | 0       | 0             | 0    | 0-0           | 0.7668        | 0    | 25        | J    |
| Chromium   | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0001007     | 0    | 25        |      |
| Cobalt     | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.00001264   | 0    | 25        |      |
| Copper     | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0001676    | 0    | 25        |      |
| Iron       | ND       | 0.20   | 0       | 0             | 0    | 0-0           | -0.003628     | 0    | 25        |      |
| Lead       | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.00001977   | 0    | 25        |      |
| Magnesium  | 0.07947  | 0.20   | 0       | 0             | 0    | 0-0           | 0.2407        | 0    | 25        | J    |
| Manganese  | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.00002527   | 0    | 25        |      |
| Molybdenum | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0001675    | 0    | 25        |      |
| Nickel     | 0.003499 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0002155     | 0    | 25        | J    |
| Potassium  | ND       | 0.20   | 0       | 0             | 0    | 0-0           | 0.005151      | 0    | 25        |      |
| Selenium   | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.001535     | 0    | 25        |      |
| Silver     | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0003609    | 0    | 25        |      |
| Sodium     | 0.08162  | 0.20   | 0       | 0             | 0    | 0-0           | 0.258         | 0    | 25        | J    |
| Vanadium   | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0001307     | 0    | 25        |      |
| Zinc       | 0.002546 | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0003896    | 0    | 25        | J    |

DUP Sample ID: 0407174-07CDUP Test Code: SW6020 Units: mg/L Analysis Date: 07/22/04 21:57

Client ID: Run ID: ICP7500\_040722A SeqNo: 513175 Prep Date: 7/19/2004 DF: 1

| Analyte   | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | ND     | 0.0020 | 0       | 0             | 0    | 0-0           | 0             | 0    | 25        |      |

The following samples were analyzed in this batch:

0407179-01C 0407179-02C 0407179-03C

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

**CLIENT:** Navajo Refining Company  
**Work Order:** 0407179  
**Project:** NCL/TEL

## QC BATCH REPORT

Batch ID: 9741 InstrumentID: Mercury

**MBLK** Sample ID: GBLKW2-072604 Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:25

Client ID: Run ID: MERCURY\_040726B SeqNo: 514829 Prep Date: 7/26/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

**LCS** Sample ID: GLCSW2-072604 Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:26

Client ID: Run ID: MERCURY\_040726B SeqNo: 514830 Prep Date: 7/26/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00499 | 0.00020 | 0.005   | 0             | 99.8 | 83-115        | 0             |      |           |      |

**LCSD** Sample ID: GLCSDW2-072604 Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:28

Client ID: Run ID: MERCURY\_040726B SeqNo: 514831 Prep Date: 7/26/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.0048 | 0.00020 | 0.005   | 0             | 96   | 83-115        | 0.00499       | 3.88 | 20        |      |

**MS** Sample ID: 0407160-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:37

Client ID: Run ID: MERCURY\_040726B SeqNo: 514834 Prep Date: 7/26/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00515 | 0.00020 | 0.005   | 0.000013      | 103  | 83-115        | 0             |      |           |      |

**MSD** Sample ID: 0407160-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:38

Client ID: Run ID: MERCURY\_040726B SeqNo: 514835 Prep Date: 7/26/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00522 | 0.00020 | 0.005   | 0.000013      | 104  | 83-115        | 0.00515       | 1.35 | 20        |      |

**DUP** Sample ID: 0407160-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 07/26/04 16:35

Client ID: Run ID: MERCURY\_040726B SeqNo: 514833 Prep Date: 7/26/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | 0.000013      | 0    | 20        |      |

The following samples were analyzed in this batch:

0407179-01C 0407179-02C 0407179-03C

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B - Analyte detected in assoc. Method Blank

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CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9655 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-040719 Test Code: SW8270 Units: µg/L Analysis Date: 07/20/04 19:58

Client ID: Run ID: SV-3\_040720A SeqNo: 511693 Prep Date: 7/19/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 106.4  | 10  | 100     | 0             | 106  | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 96.67  | 10  | 100     | 0             | 96.7 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 40.03  | 10  | 100     | 0             | 40   | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 96     | 10  | 100     | 0             | 96   | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 96.78  | 10  | 100     | 0             | 96.8 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 25.08  | 10  | 100     | 0             | 25.1 | 11-100        |               | 0    |           |      |

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CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9655 Instrument ID: SV-3

LCS Sample ID: SLCSW1-040719 Test Code: SW8270 Units: µg/L Analysis Date: 07/20/04 20:23

Client ID: Run ID: SV-3\_040720A SeqNo: 511694 Prep Date: 7/19/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 50.52  | 10  | 50      | 0             | 101  | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 111.5  | 10  | 100     | 0             | 112  | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 107.6  | 10  | 100     | 0             | 108  | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 46.56  | 10  | 50      | 0             | 93.1 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 94.13  | 10  | 100     | 0             | 94.1 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 57.06  | 10  | 50      | 0             | 114  | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 100.6  | 10  | 100     | 0             | 101  | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 56.31  | 10  | 50      | 0             | 113  | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 137.4  | 10  | 150     | 0             | 91.6 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 55.49  | 10  | 50      | 0             | 111  | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 71.17  | 10  | 100     | 0             | 71.2 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 53.78  | 10  | 50      | 0             | 108  | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 53.55  | 10  | 50      | 0             | 107  | 67-116        | 0             |      |           |      |
| Aniline                    | 55.14  | 10  | 50      | 0             | 110  | 40-130        | 0             |      |           |      |
| Anthracene                 | 56.8   | 10  | 50      | 0             | 114  | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 56.08  | 10  | 50      | 0             | 112  | 55-131        | 0             |      |           |      |
| Benzidine                  | 49.68  | 10  | 50      | 0             | 99.4 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 51.67  | 10  | 50      | 0             | 103  | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 60.46  | 10  | 50      | 0             | 121  | 42-123        | 0             |      |           |      |
| Isophorone                 | 53.9   | 10  | 50      | 0             | 108  | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 52.45  | 10  | 50      | 0             | 105  | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 34.75  | 10  | 50      | 0             | 69.5 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 57.73  | 10  | 50      | 0             | 115  | 72-144        | 0             |      |           |      |
| Naphthalene                | 50.83  | 10  | 50      | 0             | 102  | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 51.7   | 10  | 50      | 0             | 103  | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 102.1  | 10  | 100     | 0             | 102  | 65-123        | 0             |      |           |      |
| Phenanthrene               | 55.16  | 10  | 50      | 0             | 110  | 69-119        | 0             |      |           |      |
| Phenol                     | 56.22  | 10  | 100     | 0             | 56.2 | 16-115        | 0             |      |           |      |
| Pyrene                     | 52.45  | 10  | 50      | 0             | 105  | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 107.9  | 10  | 100     | 0             | 108  | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 99.63  | 10  | 100     | 0             | 99.6 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 78.73  | 10  | 100     | 0             | 78.7 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 101.5  | 10  | 100     | 0             | 102  | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 98.05  | 10  | 100     | 0             | 98.1 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 53.54  | 10  | 100     | 0             | 53.5 | 11-100        | 0             |      |           |      |

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E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9655 InstrumentID: SV-3

MS Sample ID: 0407192-07DMS Test Code: SW8270 Units: µg/L Analysis Date: 07/20/04 21:38

Client ID: Run ID: SV-3\_040720A SeqNo: 511695 Prep Date: 7/19/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 54.69  | 23  | 56.75   | 0             | 96.4 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 123.1  | 23  | 113.5   | 0             | 108  | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 117.2  | 23  | 113.5   | 0             | 103  | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 52.41  | 23  | 56.75   | 0             | 92.3 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 104.9  | 23  | 113.5   | 0             | 92.4 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 61.84  | 23  | 56.75   | 0             | 109  | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 109.5  | 23  | 113.5   | 0             | 96.5 | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 65.6   | 23  | 56.75   | 0             | 116  | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 152.2  | 23  | 340.5   | 0             | 44.7 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 63.46  | 23  | 56.75   | 0             | 112  | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 68.79  | 23  | 113.5   | 0             | 60.6 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 60.07  | 23  | 56.75   | 0             | 106  | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 60.95  | 23  | 56.75   | 0             | 107  | 67-116        | 0             |      |           |      |
| Aniline                    | 56.42  | 23  | 56.75   | 0             | 99.4 | 40-130        | 0             |      |           |      |
| Anthracene                 | 66.16  | 23  | 56.75   | 0             | 117  | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 60.4   | 23  | 56.75   | 0             | 106  | 55-131        | 0             |      |           |      |
| Benzidine                  | 16.77  | 23  | 56.75   | 0             | 29.5 | 10-115        | 0             |      |           | J    |
| Hexachloroethane           | 51.69  | 23  | 56.75   | 0             | 91.1 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 56.13  | 23  | 56.75   | 0             | 98.9 | 42-123        | 0             |      |           |      |
| Isophorone                 | 58.38  | 23  | 56.75   | 0             | 103  | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 58.22  | 23  | 56.75   | 0             | 103  | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 43.39  | 23  | 56.75   | 0             | 76.5 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 66.67  | 23  | 56.75   | 0             | 117  | 72-144        | 0             |      |           |      |
| Naphthalene                | 55.18  | 23  | 56.75   | 0             | 97.2 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 59.87  | 23  | 56.75   | 0             | 105  | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 114.4  | 23  | 113.5   | 0             | 101  | 65-123        | 0             |      |           |      |
| Phenanthrene               | 64.51  | 23  | 56.75   | 0             | 114  | 69-119        | 0             |      |           |      |
| Phenol                     | 64.78  | 23  | 113.5   | 0             | 57.1 | 16-115        | 0             |      |           |      |
| Pyrene                     | 59.23  | 23  | 56.75   | 0             | 104  | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 125.5  | 23  | 113.5   | 0             | 111  | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 114    | 23  | 113.5   | 0             | 100  | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 81.94  | 23  | 113.5   | 0             | 72.2 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 116.8  | 23  | 113.5   | 0             | 103  | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 107.4  | 23  | 113.5   | 0             | 94.6 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 62.21  | 23  | 113.5   | 0             | 54.8 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 9655 InstrumentID: SV-3

MSD Sample ID: 0407192-07DMSD Test Code: SW8270 Units: µg/L Analysis Date: 07/20/04 22:02

Client ID: Run ID: SV-3\_040720A SeqNo: 511696 Prep Date: 7/19/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 40.04  | 22  | 55.5    | 0             | 72.2 | 50-115        | 54.69         | 30.9 | 30        | R    |
| 2,4,5-Trichlorophenol      | 96.43  | 22  | 111     | 0             | 86.9 | 68-128        | 123.1         | 24.3 | 30        |      |
| 2,4,6-Trichlorophenol      | 94.33  | 22  | 111     | 0             | 85   | 66-125        | 117.2         | 21.6 | 30        |      |
| 2-Methylnaphthalene        | 38.49  | 22  | 55.5    | 0             | 69.3 | 47-122        | 52.41         | 30.6 | 30        | R    |
| 2-Methylphenol             | 83.21  | 22  | 111     | 0             | 75   | 51-115        | 104.9         | 23   | 30        |      |
| 2-Nitroaniline             | 49.15  | 22  | 55.5    | 0             | 88.6 | 64-128        | 61.84         | 22.9 | 30        |      |
| 2-Nitrophenol              | 81.04  | 22  | 111     | 0             | 73   | 60-119        | 109.5         | 29.9 | 30        |      |
| 3-Nitroaniline             | 56.28  | 22  | 55.5    | 0             | 101  | 61-118        | 65.6          | 15.3 | 30        |      |
| 4-Methylphenol             | 124.6  | 22  | 333     | 0             | 37.4 | 44-115        | 152.2         | 19.9 | 30        | S    |
| 4-Nitroaniline             | 53.48  | 22  | 55.5    | 0             | 96.4 | 61-123        | 63.46         | 17.1 | 30        |      |
| 4-Nitrophenol              | 55.7   | 22  | 111     | 0             | 50.2 | 17-100        | 68.79         | 21   | 30        |      |
| Acenaphthene               | 47.17  | 22  | 55.5    | 0             | 85   | 68-115        | 60.07         | 24.1 | 30        |      |
| Acenaphthylene             | 46.6   | 22  | 55.5    | 0             | 84   | 67-116        | 60.95         | 26.7 | 30        |      |
| Aniline                    | 30.74  | 22  | 55.5    | 0             | 55.4 | 40-130        | 56.42         | 58.9 | 30        | R    |
| Anthracene                 | 50.97  | 22  | 55.5    | 0             | 91.8 | 70-129        | 66.16         | 25.9 | 30        |      |
| Benz(a)anthracene          | 45.89  | 22  | 55.5    | 0             | 82.7 | 55-131        | 60.4          | 27.3 | 30        |      |
| Benzidine                  | 25.08  | 22  | 55.5    | 0             | 45.2 | 10-115        | 16.77         | 39.7 | 30        | R    |
| Hexachloroethane           | 37.9   | 22  | 55.5    | 0             | 68.3 | 46-115        | 51.69         | 30.8 | 30        | R    |
| Indeno(1,2,3-cd)pyrene     | 41.48  | 22  | 55.5    | 0             | 74.7 | 42-123        | 56.13         | 30   | 30        | R    |
| Isophorone                 | 44.34  | 22  | 55.5    | 0             | 79.9 | 63-117        | 58.38         | 27.3 | 30        |      |
| N-Nitrosodi-n-propylamine  | 44.83  | 22  | 55.5    | 0             | 80.8 | 67-115        | 58.22         | 26   | 30        |      |
| N-Nitrosodimethylamine     | 38     | 22  | 55.5    | 0             | 68.5 | 28-115        | 43.39         | 13.2 | 30        |      |
| N-Nitrosodiphenylamine     | 53.31  | 22  | 55.5    | 0             | 96.1 | 72-144        | 66.67         | 22.3 | 30        |      |
| Naphthalene                | 41.02  | 22  | 55.5    | 0             | 73.9 | 52-115        | 55.18         | 29.4 | 30        |      |
| Nitrobenzene               | 44.78  | 22  | 55.5    | 0             | 80.7 | 65-115        | 59.87         | 28.8 | 30        |      |
| Pentachlorophenol          | 88.04  | 22  | 111     | 0             | 79.3 | 65-123        | 114.4         | 26.1 | 30        |      |
| Phenanthrene               | 49.83  | 22  | 55.5    | 0             | 89.8 | 69-119        | 64.51         | 25.7 | 30        |      |
| Phenol                     | 52.95  | 22  | 111     | 0             | 47.7 | 16-115        | 64.78         | 20.1 | 30        |      |
| Pyrene                     | 45.39  | 22  | 55.5    | 0             | 81.8 | 51-130        | 59.23         | 26.5 | 30        |      |
| Surr: 2,4,6-Tribromophenol | 98.54  | 22  | 111     | 0             | 88.8 | 39-153        | 125.5         | 24.1 | 30        |      |
| Surr: 2-Fluorobiphenyl     | 88.98  | 22  | 111     | 0             | 80.2 | 40-147        | 114           | 24.6 | 30        |      |
| Surr: 2-Fluorophenol       | 64.87  | 22  | 111     | 0             | 58.4 | 21-110        | 81.94         | 23.3 | 30        |      |
| Surr: 4-Terphenyl-d14      | 96.57  | 22  | 111     | 0             | 87   | 39-141        | 116.8         | 18.9 | 30        |      |
| Surr: Nitrobenzene-d5      | 79.37  | 22  | 111     | 0             | 71.5 | 37-140        | 107.4         | 30   | 30        | R    |
| Surr: Phenol-d6            | 49.3   | 22  | 111     | 0             | 44.4 | 11-100        | 62.21         | 23.1 | 30        |      |

The following samples were analyzed in this batch:

0407179-01E 0407179-02E 0407179-03E

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CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21864 InstrumentID: VOA1

MBLK Sample ID: VBLKW-0720 Test Code: SW8260 Units: µg/L Analysis Date: 07/20/04 19:54

Client ID: Run ID: VOA1\_040720A SeqNo: 511405 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 52.55  | 5.0 | 50      | 0             | 105  | 71-126        |               | 0    |           |      |
| Surr: 4-Bromofluorobenzene  | 49.16  | 5.0 | 50      | 0             | 98.3 | 74-125        |               | 0    |           |      |
| Surr: Dibromofluoromethane  | 50.4   | 5.0 | 50      | 0             | 101  | 73-126        |               | 0    |           |      |
| Surr: Toluene-d8            | 49.04  | 5.0 | 50      | 0             | 98.1 | 75-125        |               | 0    |           |      |

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CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21864 InstrumentID: VOA1

| LCS                         |        | Sample ID: VLCSW-0720 |         | Test Code: SW8260 |      | Units: µg/L   |               | Analysis Date: 07/20/04 19:27 |           |      |
|-----------------------------|--------|-----------------------|---------|-------------------|------|---------------|---------------|-------------------------------|-----------|------|
| Client ID:                  |        | Run ID: VOA1_040720A  |         | SeqNo: 511404     |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                     | Result | PQL                   | SPK Val | SPK Ref Value     | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 51.74  | 5.0                   | 50      | 0                 | 103  | 75.2-120      | 0             |                               |           |      |
| 1,1,2,2-Tetrachloroethane   | 51.31  | 5.0                   | 50      | 0                 | 103  | 72.4-121      | 0             |                               |           |      |
| 1,1,2-Trichloroethane       | 52.84  | 5.0                   | 50      | 0                 | 106  | 80-120        | 0             |                               |           |      |
| 1,1-Dichloroethane          | 51.59  | 5.0                   | 50      | 0                 | 103  | 76.9-120      | 0             |                               |           |      |
| 1,1-Dichloroethene          | 52.93  | 5.0                   | 50      | 0                 | 106  | 72.6-123      | 0             |                               |           |      |
| 1,2-Dichloroethane          | 49.6   | 5.0                   | 50      | 0                 | 99.2 | 80-120        | 0             |                               |           |      |
| 2-Butanone                  | 102    | 10                    | 100     | 0                 | 102  | 69-131        | 0             |                               |           |      |
| 2-Chloroethyl vinyl ether   | 101.1  | 10                    | 100     | 0                 | 101  | 60-135        | 0             |                               |           |      |
| 2-Hexanone                  | 100.7  | 10                    | 100     | 0                 | 101  | 55.6-126      | 0             |                               |           |      |
| 4-Methyl-2-pentanone        | 103.1  | 10                    | 100     | 0                 | 103  | 67.4-121      | 0             |                               |           |      |
| Acetone                     | 100.1  | 10                    | 100     | 0                 | 100  | 64.4-140      | 0             |                               |           |      |
| Benzene                     | 50.41  | 5.0                   | 50      | 0                 | 101  | 80-120        | 0             |                               |           |      |
| Bromodichloromethane        | 50.34  | 5.0                   | 50      | 0                 | 101  | 80-120        | 0             |                               |           |      |
| Bromoform                   | 49.45  | 5.0                   | 50      | 0                 | 98.9 | 77.9-121      | 0             |                               |           |      |
| Bromomethane                | 58.28  | 5.0                   | 50      | 0                 | 117  | 63.3-137      | 0             |                               |           |      |
| Carbon disulfide            | 105    | 10                    | 100     | 0                 | 105  | 74.1-123      | 0             |                               |           |      |
| Carbon tetrachloride        | 47.9   | 5.0                   | 50      | 0                 | 95.8 | 74.7-120      | 0             |                               |           |      |
| Chlorobenzene               | 48.99  | 5.0                   | 50      | 0                 | 98   | 80-120        | 0             |                               |           |      |
| Chloroethane                | 55.81  | 5.0                   | 50      | 0                 | 112  | 74.7-126      | 0             |                               |           |      |
| Chloroform                  | 52.78  | 5.0                   | 50      | 0                 | 106  | 80-120        | 0             |                               |           |      |
| Chloromethane               | 57.62  | 5.0                   | 50      | 0                 | 115  | 64.5-132      | 0             |                               |           |      |
| cis-1,3-Dichloropropene     | 50.78  | 5.0                   | 50      | 0                 | 102  | 80-120        | 0             |                               |           |      |
| Dibromochloromethane        | 51.97  | 5.0                   | 50      | 0                 | 104  | 80-120        | 0             |                               |           |      |
| Ethylbenzene                | 49.16  | 5.0                   | 50      | 0                 | 98.3 | 80-120        | 0             |                               |           |      |
| m,p-Xylene                  | 98.82  | 10                    | 100     | 0                 | 98.8 | 80-120        | 0             |                               |           |      |
| Methylene chloride          | 50.39  | 10                    | 50      | 0                 | 101  | 76.2-120      | 0             |                               |           |      |
| Styrene                     | 50.04  | 5.0                   | 50      | 0                 | 100  | 80-120        | 0             |                               |           |      |
| Tetrachloroethene           | 48.36  | 5.0                   | 50      | 0                 | 96.7 | 68.5-130      | 0             |                               |           |      |
| Toluene                     | 51.11  | 5.0                   | 50      | 0                 | 102  | 80-120        | 0             |                               |           |      |
| trans-1,3-Dichloropropene   | 51.29  | 5.0                   | 50      | 0                 | 103  | 80-120        | 0             |                               |           |      |
| Trichloroethene             | 50.45  | 5.0                   | 50      | 0                 | 101  | 78.9-120      | 0             |                               |           |      |
| Vinyl acetate               | 114.1  | 10                    | 100     | 0                 | 114  | 62.4-133      | 0             |                               |           |      |
| Vinyl chloride              | 57.15  | 2.0                   | 50      | 0                 | 114  | 72.7-128      | 0             |                               |           |      |
| Xylenes, Total              | 149.7  | 15                    | 150     | 0                 | 99.8 | 80-120        | 0             |                               |           |      |
| Surr: 1,2-Dichloroethane-d4 | 50.24  | 5.0                   | 50      | 0                 | 100  | 71-126        | 0             |                               |           |      |
| Surr: 4-Bromofluorobenzene  | 49.3   | 5.0                   | 50      | 0                 | 98.6 | 74-125        | 0             |                               |           |      |
| Surr: Dibromofluoromethane  | 48.5   | 5.0                   | 50      | 0                 | 97   | 73-126        | 0             |                               |           |      |
| Surr: Toluene-d8            | 49.33  | 5.0                   | 50      | 0                 | 98.7 | 75-125        | 0             |                               |           |      |

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CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21864 InstrumentID: VOA1

| MS                          | Sample ID: 0407206-01AMS |              |         | Test Code: SW8260 |        | Units: µg/L   | Analysis Date: 07/20/04 21:43 |         |           |      |
|-----------------------------|--------------------------|--------------|---------|-------------------|--------|---------------|-------------------------------|---------|-----------|------|
| Client ID:                  | Run ID:                  | VOA1_040720A |         | SeqNo:            | 511409 | Prep Date:    |                               | DF: 500 |           |      |
| Analyte                     | Result                   | PQL          | SPK Val | SPK Ref Value     | %REC   | Control Limit | RPD Ref Value                 | %RPD    | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 24580                    | 2,500        | 25000   | 0                 | 98.3   | 75.2-120      | 0                             |         |           |      |
| 1,1,2,2-Tetrachloroethane   | 26570                    | 2,500        | 25000   | 0                 | 106    | 72.4-121      | 0                             |         |           |      |
| 1,1,2-Trichloroethane       | 26270                    | 2,500        | 25000   | 0                 | 105    | 80-120        | 0                             |         |           |      |
| 1,1-Dichloroethane          | 26990                    | 2,500        | 25000   | 0                 | 108    | 76.9-120      | 0                             |         |           |      |
| 1,1-Dichloroethene          | 25550                    | 2,500        | 25000   | 0                 | 102    | 72.6-123      | 0                             |         |           |      |
| 1,2-Dichloroethane          | 25750                    | 2,500        | 25000   | 0                 | 103    | 80-120        | 0                             |         |           |      |
| 2-Butanone                  | 45790                    | 5,000        | 50000   | 0                 | 91.6   | 69-131        | 0                             |         |           |      |
| 2-Chloroethyl vinyl ether   | 51080                    | 5,000        | 50000   | 0                 | 102    | 60-135        | 0                             |         |           |      |
| 2-Hexanone                  | 43470                    | 5,000        | 50000   | 0                 | 86.9   | 55.6-126      | 0                             |         |           |      |
| 4-Methyl-2-pentanone        | 45680                    | 5,000        | 50000   | 0                 | 91.4   | 67.4-121      | 0                             |         |           |      |
| Acetone                     | 51970                    | 5,000        | 50000   | 0                 | 104    | 64.4-140      | 0                             |         |           |      |
| Benzene                     | 41390                    | 2,500        | 25000   | 16450             | 99.8   | 80-120        | 0                             |         |           |      |
| Bromodichloromethane        | 25280                    | 2,500        | 25000   | 0                 | 101    | 80-120        | 0                             |         |           |      |
| Bromoform                   | 25140                    | 2,500        | 25000   | 0                 | 101    | 77.9-121      | 0                             |         |           |      |
| Bromomethane                | 32720                    | 2,500        | 25000   | 0                 | 131    | 63.3-137      | 0                             |         |           |      |
| Carbon disulfide            | 54600                    | 5,000        | 50000   | 0                 | 109    | 74.1-123      | 0                             |         |           |      |
| Carbon tetrachloride        | 43130                    | 2,500        | 25000   | 22910             | 80.9   | 74.7-120      | 0                             |         |           |      |
| Chlorobenzene               | 94470                    | 2,500        | 25000   | 68460             | 104    | 80-120        | 0                             |         |           |      |
| Chloroethane                | 32640                    | 2,500        | 25000   | 0                 | 131    | 74.7-126      | 0                             |         |           | S    |
| Chloroform                  | 40540                    | 2,500        | 25000   | 17270             | 93.1   | 80-120        | 0                             |         |           |      |
| Chloromethane               | 34110                    | 2,500        | 25000   | 0                 | 136    | 64.5-132      | 0                             |         |           | S    |
| cis-1,3-Dichloropropene     | 24940                    | 2,500        | 25000   | 0                 | 99.8   | 80-120        | 0                             |         |           |      |
| Dibromochloromethane        | 26200                    | 2,500        | 25000   | 0                 | 105    | 80-120        | 0                             |         |           |      |
| Ethylbenzene                | 23070                    | 2,500        | 25000   | 0                 | 92.3   | 80-120        | 0                             |         |           |      |
| m,p-Xylene                  | 46010                    | 5,000        | 50000   | 0                 | 92     | 80-120        | 0                             |         |           |      |
| Methylene chloride          | 30380                    | 5,000        | 25000   | 0                 | 122    | 76.2-120      | 0                             |         |           | S    |
| Styrene                     | 24600                    | 2,500        | 25000   | 0                 | 98.4   | 80-120        | 0                             |         |           |      |
| Tetrachloroethene           | 21120                    | 2,500        | 25000   | 0                 | 84.5   | 68.5-130      | 0                             |         |           |      |
| Toluene                     | 24470                    | 2,500        | 25000   | 0                 | 97.9   | 80-120        | 0                             |         |           |      |
| trans-1,3-Dichloropropene   | 26590                    | 2,500        | 25000   | 0                 | 106    | 80-120        | 0                             |         |           |      |
| Trichloroethene             | 22420                    | 2,500        | 25000   | 0                 | 89.7   | 78.9-120      | 0                             |         |           |      |
| Vinyl acetate               | 54820                    | 5,000        | 50000   | 0                 | 110    | 62.4-133      | 0                             |         |           |      |
| Vinyl chloride              | 31980                    | 1,000        | 25000   | 0                 | 128    | 72.7-128      | 0                             |         |           |      |
| Xylenes, Total              | 70410                    | 7,500        | 75000   | 0                 | 93.9   | 80-120        | 0                             |         |           |      |
| Surr: 1,2-Dichloroethane-d4 | 25460                    | 2,500        | 25000   | 0                 | 102    | 71-126        | 0                             |         |           |      |
| Surr: 4-Bromofluorobenzene  | 24610                    | 2,500        | 25000   | 0                 | 98.4   | 74-125        | 0                             |         |           |      |
| Surr: Dibromofluoromethane  | 24240                    | 2,500        | 25000   | 0                 | 97     | 73-126        | 0                             |         |           |      |
| Surr: Toluene-d8            | 24660                    | 2,500        | 25000   | 0                 | 98.6   | 75-125        | 0                             |         |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21864 InstrumentID: VOA1

| MSD                         | Sample ID: 0407206-01AMSD |       |         | Test Code: SW8260 |      | Units: µg/L   |               | Analysis Date: 07/20/04 22:10 |           |      |
|-----------------------------|---------------------------|-------|---------|-------------------|------|---------------|---------------|-------------------------------|-----------|------|
| Client ID:                  | Run ID: VOA1_040720A      |       |         | SeqNo: 511410     |      | Prep Date:    |               | DF: 500                       |           |      |
| Analyte                     | Result                    | PQL   | SPK Val | SPK Ref Value     | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 27420                     | 2,500 | 25000   | 0                 | 110  | 75.2-120      | 24580         | 10.9                          | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 27750                     | 2,500 | 25000   | 0                 | 111  | 72.4-121      | 26570         | 4.33                          | 20        |      |
| 1,1,2-Trichloroethane       | 27050                     | 2,500 | 25000   | 0                 | 108  | 80-120        | 26270         | 2.94                          | 20        |      |
| 1,1-Dichloroethane          | 29270                     | 2,500 | 25000   | 0                 | 117  | 76.9-120      | 26990         | 8.11                          | 20        |      |
| 1,1-Dichloroethene          | 29060                     | 2,500 | 25000   | 0                 | 116  | 72.6-123      | 25550         | 12.9                          | 20        |      |
| 1,2-Dichloroethane          | 27920                     | 2,500 | 25000   | 0                 | 112  | 80-120        | 25750         | 8.11                          | 20        |      |
| 2-Butanone                  | 51890                     | 5,000 | 50000   | 0                 | 104  | 69-131        | 45790         | 12.5                          | 20        |      |
| 2-Chloroethyl vinyl ether   | 52900                     | 5,000 | 50000   | 0                 | 106  | 60-135        | 51080         | 3.51                          | 20        |      |
| 2-Hexanone                  | 46060                     | 5,000 | 50000   | 0                 | 92.1 | 55.6-126      | 43470         | 5.79                          | 20        |      |
| 4-Methyl-2-pentanone        | 52200                     | 5,000 | 50000   | 0                 | 104  | 67.4-121      | 45680         | 13.3                          | 20        |      |
| Acetone                     | 55510                     | 5,000 | 50000   | 0                 | 111  | 64.4-140      | 51970         | 6.59                          | 20        |      |
| Benzene                     | 42920                     | 2,500 | 25000   | 16450             | 106  | 80-120        | 41390         | 3.63                          | 20        |      |
| Bromodichloromethane        | 26620                     | 2,500 | 25000   | 0                 | 106  | 80-120        | 25280         | 5.17                          | 20        |      |
| Bromoform                   | 25310                     | 2,500 | 25000   | 0                 | 101  | 77.9-121      | 25140         | 0.66                          | 20        |      |
| Bromomethane                | 32120                     | 2,500 | 25000   | 0                 | 128  | 63.3-137      | 32720         | 1.86                          | 20        |      |
| Carbon disulfide            | 58880                     | 5,000 | 50000   | 0                 | 118  | 74.1-123      | 54600         | 7.54                          | 20        |      |
| Carbon tetrachloride        | 48750                     | 2,500 | 25000   | 22910             | 103  | 74.7-120      | 43130         | 12.2                          | 20        |      |
| Chlorobenzene               | 95140                     | 2,500 | 25000   | 68460             | 107  | 80-120        | 94470         | 0.711                         | 20        |      |
| Chloroethane                | 32290                     | 2,500 | 25000   | 0                 | 129  | 74.7-126      | 32640         | 1.09                          | 20        | S    |
| Chloroform                  | 45700                     | 2,500 | 25000   | 17270             | 114  | 80-120        | 40540         | 12                            | 20        |      |
| Chloromethane               | 31770                     | 2,500 | 25000   | 0                 | 127  | 64.5-132      | 34110         | 7.1                           | 20        |      |
| cis-1,3-Dichloropropene     | 26040                     | 2,500 | 25000   | 0                 | 104  | 80-120        | 24940         | 4.31                          | 20        |      |
| Dibromochloromethane        | 26520                     | 2,500 | 25000   | 0                 | 106  | 80-120        | 26200         | 1.19                          | 20        |      |
| Ethylbenzene                | 24300                     | 2,500 | 25000   | 0                 | 97.2 | 80-120        | 23070         | 5.2                           | 20        |      |
| m,p-Xylene                  | 50820                     | 5,000 | 50000   | 0                 | 102  | 80-120        | 46010         | 9.95                          | 20        |      |
| Methylene chloride          | 30380                     | 5,000 | 25000   | 0                 | 122  | 76.2-120      | 30380         | 1.2E-05                       | 20        | S    |
| Styrene                     | 25230                     | 2,500 | 25000   | 0                 | 101  | 80-120        | 24600         | 2.54                          | 20        |      |
| Tetrachloroethene           | 23580                     | 2,500 | 25000   | 0                 | 94.3 | 68.5-130      | 21120         | 11                            | 20        |      |
| Toluene                     | 25900                     | 2,500 | 25000   | 0                 | 104  | 80-120        | 24470         | 5.67                          | 20        |      |
| trans-1,3-Dichloropropene   | 26210                     | 2,500 | 25000   | 0                 | 105  | 80-120        | 26590         | 1.41                          | 20        |      |
| Trichloroethene             | 24300                     | 2,500 | 25000   | 0                 | 97.2 | 78.9-120      | 22420         | 8.07                          | 20        |      |
| Vinyl acetate               | 60990                     | 5,000 | 50000   | 0                 | 122  | 62.4-133      | 54820         | 10.7                          | 20        |      |
| Vinyl chloride              | 32780                     | 1,000 | 25000   | 0                 | 131  | 72.7-128      | 31980         | 2.46                          | 20        | S    |
| Xylenes, Total              | 76430                     | 7,500 | 75000   | 0                 | 102  | 80-120        | 70410         | 8.19                          | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 27170                     | 2,500 | 25000   | 0                 | 109  | 71-126        | 25460         | 6.5                           | 20        |      |
| Surr: 4-Bromofluorobenzene  | 24070                     | 2,500 | 25000   | 0                 | 96.3 | 74-125        | 24610         | 2.23                          | 20        |      |
| Surr: Dibromofluoromethane  | 26210                     | 2,500 | 25000   | 0                 | 105  | 73-126        | 24240         | 7.79                          | 20        |      |
| Surr: Toluene-d8            | 25060                     | 2,500 | 25000   | 0                 | 100  | 75-125        | 24660         | 1.61                          | 20        |      |

The following samples were analyzed in this batch:

0407179-01A 0407179-02A 0407179-03A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R21788** InstrumentID: **UV-2101PC**

**MBLK** Sample ID: **WBLKW1-071704** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/17/04 0:00**

Client ID: Run ID: **UV-2101PC\_040717A** SeqNo: **509554** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

**LCS** Sample ID: **WLC SW1-071704** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/17/04 0:00**

Client ID: Run ID: **UV-2101PC\_040717A** SeqNo: **509555** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1941 | 0.020 | 0.2     | 0             | 97   | 80-120        | 0             |      |           |      |

**MS** Sample ID: **0407129-03DMS** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/17/04 0:00**

Client ID: Run ID: **UV-2101PC\_040717A** SeqNo: **509573** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1963 | 0.020 | 0.2     | -0.002        | 99.1 | 75-125        | 0             |      |           |      |

**MSD** Sample ID: **0407129-03DMSD** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/17/04 0:00**

Client ID: Run ID: **UV-2101PC\_040717A** SeqNo: **509574** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1936 | 0.020 | 0.2     | -0.002        | 97.8 | 75-125        | 0.1963        | 1.38 | 25        |      |

**DUP** Sample ID: **0407129-03DDUP** Test Code: **E335.3** Units: **mg/L** Analysis Date: **07/17/04 0:00**

Client ID: Run ID: **UV-2101PC\_040717A** SeqNo: **509572** Prep Date: DF: **1**

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 | 0       | 0             | 0    | 0-0           | -0.002        | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0407179-01D | 0407179-02D | 0407179-03D |
|-------------|-------------|-------------|

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21801 InstrumentID: IC201

MBLK Sample ID: WBLKW1-071604 Test Code: E300 Units: mg/L Analysis Date: 07/16/04 17:35

Client ID: Run ID: IC201\_040716B SeqNo: 509960 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.97   | 0.10 | 5       | 0             | 99.4 | 80-120        | 0             |      |           |      |

LCS Sample ID: WLCSW1-071604 Test Code: E300 Units: mg/L Analysis Date: 07/16/04 18:04

Client ID: Run ID: IC201\_040716B SeqNo: 509961 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.49   | 0.50 | 10      | 0             | 94.9 | 80-120        | 0             |      |           |      |
| Fluoride                         | 1.93   | 0.10 | 2       | 0             | 96.5 | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.41   | 1.0  | 10      | 0             | 94.1 | 80-120        | 0             |      |           |      |
| Nitrate/Nitrite (as N)           | 3.91   | 0.10 | 0       | 0             | 0    | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.15   | 0.10 | 5       | 0             | 103  | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSW1-07160 Test Code: E300 Units: mg/L Analysis Date: 07/16/04 18:32

Client ID: Run ID: IC201\_040716B SeqNo: 509962 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 9.46   | 0.50 | 10      | 0             | 94.6 | 80-120        | 9.49          | 0.317 | 20        |      |
| Fluoride                         | 1.92   | 0.10 | 2       | 0             | 96   | 80-120        | 1.93          | 0.519 | 20        |      |
| Sulfate                          | 9.41   | 1.0  | 10      | 0             | 94.1 | 80-120        | 9.41          | 0     | 20        |      |
| Nitrate/Nitrite (as N)           | 3.92   | 0.10 | 0       | 0             | 0    | 80-120        | 3.91          | 0.255 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.37   | 0.10 | 5       | 0             | 107  | 80-120        | 5.15          | 4.18  | 20        |      |

MS Sample ID: 0407138-02HMS Test Code: E300 Units: mg/L Analysis Date: 07/16/04 19:58

Client ID: Run ID: IC201\_040716B SeqNo: 509965 Prep Date: DF: 10

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 333.2  | 5.0 | 100     | 234.3         | 98.9 | 75-125        | 0             |      |           |      |
| Fluoride                         | 19.5   | 1.0 | 20      | 0             | 97.5 | 75-125        | 0             |      |           |      |
| Sulfate                          | 521.2  | 10  | 100     | 424           | 97.2 | 75-125        | 0             |      |           | EO   |
| Nitrate/Nitrite (as N)           | 38.2   | 1.0 | 40      | 0             | 95.5 | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 52.5   | 1.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0407179  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21801 InstrumentID: IC201

|                                  |                           |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| MSD                              | Sample ID: 0407138-02HMSD |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/16/04 20:26 |           |      |
| Client ID:                       | Run ID: IC201_040716B     |     |         | SeqNo: 509966   |      | Prep Date:    |               | DF: 10                        |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 330.2                     | 5.0 | 100     | 234.3           | 95.9 | 75-125        | 333.2         | 0.904                         | 20        |      |
| Fluoride                         | 19                        | 1.0 | 20      | 0               | 95   | 75-125        | 19.5          | 2.6                           | 20        |      |
| Sulfate                          | 516.6                     | 10  | 100     | 424             | 92.6 | 75-125        | 521.2         | 0.886                         | 20        | EO   |
| Nitrate/Nitrite (as N)           | 37.6                      | 1.0 | 40      | 0               | 94   | 75-125        | 38.2          | 1.58                          | 20        |      |
| Surr: Dichloroacetic acid (surr) | 53.3                      | 1.0 | 50      | 0               | 107  | 80-120        | 52.5          | 1.51                          | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0407138-02HDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/16/04 19:29 |           |      |
| Client ID:                       | Run ID: IC201_040716B     |     |         | SeqNo: 509964   |      | Prep Date:    |               | DF: 10                        |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 232                       | 5.0 | 0       | 0               | 0    | 0-0           | 234.3         | 0.986                         | 20        |      |
| Fluoride                         | ND                        | 1.0 | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Sulfate                          | 419.2                     | 10  | 0       | 0               | 0    | 0-0           | 424           | 1.14                          | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 1.0 | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 53.1                      | 1.0 | 50      | 0               | 106  | 80-120        | 53.1          | 0                             | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                              |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|------------------------------|-----------|------|
| DUP                              | Sample ID: 0407179-02BDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/17/04 3:05 |           |      |
| Client ID: NCL-32                | Run ID: IC201_040716B     |     |         | SeqNo: 509975   |      | Prep Date:    |               | DF: 100                      |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                         | RPD Limit | Qual |
| Chloride                         | 248                       | 50  | 0       | 0               | 0    | 0-0           | 248           | 0                            | 20        |      |
| Fluoride                         | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                            | 20        |      |
| Sulfate                          | 1072                      | 100 | 0       | 0               | 0    | 0-0           | 1068          | 0.374                        | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                            | 20        |      |
| Surr: Dichloroacetic acid (surr) | 553                       | 10  | 500     | 0               | 111  | 80-120        | 545           | 1.46                         | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                              |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|------------------------------|-----------|------|
| DUP                              | Sample ID: 0407076-03BDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 07/17/04 6:25 |           |      |
| Client ID:                       | Run ID: IC201_040716B     |     |         | SeqNo: 509982   |      | Prep Date:    |               | DF: 100                      |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                         | RPD Limit | Qual |
| Chloride                         | 924                       | 50  | 0       | 0               | 0    | 0-0           | 923           | 0.108                        | 20        |      |
| Fluoride                         | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                            | 20        |      |
| Sulfate                          | 1375                      | 100 | 0       | 0               | 0    | 0-0           | 1370          | 0.364                        | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                            | 20        |      |
| Surr: Dichloroacetic acid (surr) | 542                       | 10  | 500     | 0               | 108  | 80-120        | 540           | 0.37                         | 20        |      |

The following samples were analyzed in this batch:

0407179-01B 0407179-02B 0407179-03B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0407179  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R21916 InstrumentID: WetChem

MBLK Sample ID: WBLKW1-072204 Test Code: E310.1 Units: mg/L Analysis Date: 07/22/04 0:00

Client ID: Run ID: WETCHEM\_040722A SeqNo: 512756 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-072204 Test Code: E310.1 Units: mg/L Analysis Date: 07/22/04 0:00

Client ID: Run ID: WETCHEM\_040722A SeqNo: 512757 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 1000   | 5.0 | 0       | 1             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             |      |           |      |
| Alkalinity, Total (As CaCO3)       | 1000   | 5.0 | 1000    | 0             | 100  | 80-120        | 0             |      |           |      |

DUP Sample ID: 0407119-02DDUP Test Code: E310.1 Units: mg/L Analysis Date: 07/22/04 0:00

Client ID: Run ID: WETCHEM\_040722A SeqNo: 512775 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 340.1  | 5.0 | 0       | 0             | 0    | 0-0           | 340.1         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 340.1  | 5.0 | 0       | 0             | 0    | 0-0           | 340.1         | 0    | 20        |      |

DUP Sample ID: 0407217-04BDUP Test Code: E310.1 Units: mg/L Analysis Date: 07/22/04 0:00

Client ID: Run ID: WETCHEM\_040722A SeqNo: 512776 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 470.1  | 5.0 | 0       | 0             | 0    | 0-0           | 470.1         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 470.1  | 5.0 | 0       | 0             | 0    | 0-0           | 470.1         | 0    | 20        |      |

The following samples were analyzed in this batch:

0407179-01B 0407179-02B 0407179-03B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



☐ e-Lab, Inc.  
10450 Stancil Rd. #210  
Houston, Texas 77099  
(Tel) 281.530.5656  
(Fax) 281.530.5887

## Chain of Custody Form

Page 1 of 1

☐ e-Lab, Inc.  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

| Customer Information                                                                                                                                            |                    |         |      | Project Information                   |                   |           |   | e-Lab Project Manager                                                                                                                                                         |   |   |   | e-Lab Work Order # |   |   |   |   |      |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------|------|---------------------------------------|-------------------|-----------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|--------------------|---|---|---|---|------|--|--|
| Project Name                                                                                                                                                    |                    |         |      | Project Number                        |                   |           |   | Parameter/Method Request for Analysis                                                                                                                                         |   |   |   |                    |   |   |   |   |      |  |  |
| Purchase Order                                                                                                                                                  |                    |         |      | Project Name                          |                   |           |   | A                                                                                                                                                                             |   |   |   | NCL/TEL            |   |   |   |   |      |  |  |
| Work Order                                                                                                                                                      |                    |         |      | Project Number                        |                   |           |   | B                                                                                                                                                                             |   |   |   |                    |   |   |   |   |      |  |  |
| Company Name                                                                                                                                                    |                    |         |      | Bill To Company                       |                   |           |   | C                                                                                                                                                                             |   |   |   |                    |   |   |   |   |      |  |  |
| Send Report To                                                                                                                                                  |                    |         |      | Invoice Attn.                         |                   |           |   | D                                                                                                                                                                             |   |   |   |                    |   |   |   |   |      |  |  |
| Address                                                                                                                                                         |                    |         |      | Address                               |                   |           |   | E                                                                                                                                                                             |   |   |   |                    |   |   |   |   |      |  |  |
| City/State/Zip                                                                                                                                                  |                    |         |      | City/State/Zip                        |                   |           |   | F                                                                                                                                                                             |   |   |   |                    |   |   |   |   |      |  |  |
| Phone                                                                                                                                                           |                    |         |      | Phone                                 |                   |           |   | G                                                                                                                                                                             |   |   |   |                    |   |   |   |   |      |  |  |
| Fax                                                                                                                                                             |                    |         |      | Fax                                   |                   |           |   | H                                                                                                                                                                             |   |   |   |                    |   |   |   |   |      |  |  |
| e-Mail Address                                                                                                                                                  |                    |         |      | e-Mail Address                        |                   |           |   | I                                                                                                                                                                             |   |   |   |                    |   |   |   |   |      |  |  |
|                                                                                                                                                                 |                    |         |      |                                       |                   |           |   | J                                                                                                                                                                             |   |   |   |                    |   |   |   |   |      |  |  |
| No.                                                                                                                                                             | Sample Description | Date    | Time | Matrix                                | Pres. Key Numbers | # Bottles | A | B                                                                                                                                                                             | C | D | E | F                  | G | H | I | J | Hold |  |  |
| 1                                                                                                                                                               | NCL-49             | 7/15/04 | 1000 | L                                     |                   | 8         | X |                                                                                                                                                                               |   |   |   |                    |   |   |   |   |      |  |  |
| 2                                                                                                                                                               | NCL-32             | 1       | 1015 | 1                                     |                   | 1         | X |                                                                                                                                                                               |   |   |   |                    |   |   |   |   |      |  |  |
| 3                                                                                                                                                               | NCL-44             | 1       | 1045 | 1                                     |                   |           | X |                                                                                                                                                                               |   |   |   |                    |   |   |   |   |      |  |  |
| 4                                                                                                                                                               |                    |         |      |                                       |                   |           |   |                                                                                                                                                                               |   |   |   |                    |   |   |   |   |      |  |  |
| 5                                                                                                                                                               |                    |         |      |                                       |                   |           |   |                                                                                                                                                                               |   |   |   |                    |   |   |   |   |      |  |  |
| 6                                                                                                                                                               |                    |         |      |                                       |                   |           |   |                                                                                                                                                                               |   |   |   |                    |   |   |   |   |      |  |  |
| 7                                                                                                                                                               |                    |         |      |                                       |                   |           |   |                                                                                                                                                                               |   |   |   |                    |   |   |   |   |      |  |  |
| 8                                                                                                                                                               |                    |         |      |                                       |                   |           |   |                                                                                                                                                                               |   |   |   |                    |   |   |   |   |      |  |  |
| 9                                                                                                                                                               |                    |         |      |                                       |                   |           |   |                                                                                                                                                                               |   |   |   |                    |   |   |   |   |      |  |  |
| 10                                                                                                                                                              |                    |         |      |                                       |                   |           |   |                                                                                                                                                                               |   |   |   |                    |   |   |   |   |      |  |  |
| Sampler(s): Please Print & Sign                                                                                                                                 |                    |         |      | Shipment Method: FedEx                |                   |           |   | Required Turnaround Time: (Check Box)                                                                                                                                         |   |   |   | Results Due Date:  |   |   |   |   |      |  |  |
|                                                                                                                                                                 |                    |         |      |                                       |                   |           |   | <input type="checkbox"/> 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 3 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour |   |   |   |                    |   |   |   |   |      |  |  |
| Relinquished by: [Signature]                                                                                                                                    |                    |         |      | Received by: [Signature]              |                   |           |   | Date: 7/15                                                                                                                                                                    |   |   |   | Time: 1615         |   |   |   |   |      |  |  |
| Relinquished by: [Signature]                                                                                                                                    |                    |         |      | Received by (Laboratory): [Signature] |                   |           |   | Date: 7/16/04                                                                                                                                                                 |   |   |   | Time: 1000         |   |   |   |   |      |  |  |
| Logged by (Laboratory): [Signature]                                                                                                                             |                    |         |      | Checked by (Laboratory): [Signature]  |                   |           |   | Date:                                                                                                                                                                         |   |   |   | Time:              |   |   |   |   |      |  |  |
|                                                                                                                                                                 |                    |         |      |                                       |                   |           |   | e-Lab Cooler ID                                                                                                                                                               |   |   |   | Cooler Temp        |   |   |   |   |      |  |  |
|                                                                                                                                                                 |                    |         |      |                                       |                   |           |   | QC Package: (Check Box Below)                                                                                                                                                 |   |   |   |                    |   |   |   |   |      |  |  |
|                                                                                                                                                                 |                    |         |      |                                       |                   |           |   | <input type="checkbox"/> Level II: Standard QC <input type="checkbox"/> Level III: Raw Data                                                                                   |   |   |   |                    |   |   |   |   |      |  |  |
|                                                                                                                                                                 |                    |         |      |                                       |                   |           |   | <input type="checkbox"/> TRRP LRC <input type="checkbox"/> TRRP Level IV                                                                                                      |   |   |   |                    |   |   |   |   |      |  |  |
|                                                                                                                                                                 |                    |         |      |                                       |                   |           |   | <input type="checkbox"/> Level IV: SWB46 Methods/CLP like                                                                                                                     |   |   |   |                    |   |   |   |   |      |  |  |
|                                                                                                                                                                 |                    |         |      |                                       |                   |           |   | <input type="checkbox"/> Other:                                                                                                                                               |   |   |   |                    |   |   |   |   |      |  |  |
| Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>4</sub> 7-Other |                    |         |      | 8-4°C                                 |                   |           |   | Note: Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.                                                                        |   |   |   |                    |   |   |   |   |      |  |  |



e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 7/16/2004 9:10:00 AM

Work Order Number 0407179

Received by: RSZ

Checklist completed by

Signature

Date

Reviewed by

Initials

Date

Matrix: L

Carrier name: FedEx

|                                                         |                                         |                             |                                                 |
|---------------------------------------------------------|-----------------------------------------|-----------------------------|-------------------------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| Custody seals intact on shipping container/cooler?      | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| Temperature(s)/Thermometer(s):                          | <u>2.7c</u>                             | <u>004</u>                  |                                                 |
| Water - VOA vials have zero headspace?                  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input type="checkbox"/> |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/>                    |

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_



**e-Lab, Inc.**

10450 Standliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

May 05, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: NCL/TEL

Work Order : **0404247**

Dear Jeff Byrd,

e-Lab, Inc. received 5 samples on 4/22/2004 10:05:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Inc. The total number of pages in this report is 50.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

e-Lab, Inc.

Date: May 05, 2004

CLIENT: Navajo Refining Company  
Project: NCL/TEL  
Work Order: 0404247

## Work Order Sample Summary

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0404247-01           | MW-59                   | Water         |                   | 4/21/2004 10:00        | 4/22/2004 10:05      | <input type="checkbox"/> |
| 0404247-02           | TEL-4                   | Water         |                   | 4/21/2004 09:00        | 4/22/2004 10:05      | <input type="checkbox"/> |
| 0404247-03           | TEL-3                   | Water         |                   | 4/21/2004 09:15        | 4/22/2004 10:05      | <input type="checkbox"/> |
| 0404247-04           | TEL-2                   | Water         |                   | 4/21/2004 09:30        | 4/22/2004 10:05      | <input type="checkbox"/> |
| 0404247-05           | TEL-1                   | Water         |                   | 4/21/2004 09:45        | 4/22/2004 10:05      | <input type="checkbox"/> |

**e-Lab, Inc.**

**Date:** May 05, 2004

**CLIENT:** Navajo Refining Company

**Project:** NCL/TEL

**Work Order:** 0404247

**Case Narrative**

Batch 8770 Metals MS/MSD and Duplicate recoveries were outside of control limits on an unrelated sample.

Batch R20173 Volatiles (sample MW-59) MS/MSD recoveries were outside of control limits for several compounds due to matrix effect.

Batch R20199 Volatiles MS/MSD recoveries were outside of control limits on an unrelated sample.

Batch R20204 Volatiles MS/MSD/RPD recoveries were outside of control limits on an unrelated sample.

Batch R20090 Anions MS/MSD/RPD and Duplicte recoveries were outside of control limits on an unrelated sample.

**e-Lab, Inc.**

Date: May 05, 2004

CLIENT: Navajo Refining Company  
Work Order: 0404247  
Project: NCL/TEL  
Lab ID: 0404247-01

Client Sample ID: MW-59  
Collection Date: 4/21/2004 10:00:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|---------------------------------------|---------|--------------|------|-------|-----------------|----------------------|
| <hr/>                                 |         |              |      |       |                 |                      |
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                      |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 4/27/2004 5:01:18 PM |
|                                       |         |              |      |       |                 |                      |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                      |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1               | 4/29/2004 6:22:00 PM |
| Arsenic                               | 0.0306  | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Barium                                | 0.0133  | 0.00500      |      | mg/L  | 1               | 4/29/2004 6:22:00 PM |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Boron                                 | 0.271   | 0.0200       |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 4/29/2004 6:22:00 PM |
| Calcium                               | 429     | 25.0         |      | mg/L  | 50              | 4/28/2004 8:04:00 PM |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Cobalt                                | 0.00318 | 0.00200      |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Copper                                | 0.00612 | 0.00200      |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Iron                                  | 0.954   | 0.200        |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Magnesium                             | 266     | 4.00         |      | mg/L  | 20              | 4/29/2004 1:57:00 PM |
| Manganese                             | 0.346   | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Molybdenum                            | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Nickel                                | 0.00688 | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Potassium                             | 0.498   | 0.200        |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 4/29/2004 6:22:00 PM |
| Sodium                                | 137     | 2.00         |      | mg/L  | 10              | 4/28/2004 8:27:00 PM |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
| Zinc                                  | 0.0129  | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:51:00 PM |
|                                       |         |              |      |       |                 |                      |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                      |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:24:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: May 05, 2004

CLIENT: Navajo Refining Company  
Work Order: 0404247  
Project: NCL/TEL  
Lab ID: 0404247-01

Client Sample ID: MW-59  
Collection Date: 4/21/2004 10:00:00 AM  
Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units              | Dilution Factor | Date Analyzed        |
|----------------------------|--------|---------------|------|--------------------|-----------------|----------------------|
| Aniline                    | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Anthracene                 | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Benz(a)anthracene          | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Benzidine                  | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Hexachloroethane           | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Isophorone                 | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Naphthalene                | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Nitrobenzene               | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Pentachlorophenol          | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Phenanthrene               | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Phenol                     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Pyrene                     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:24:00 PM  |
| Surr: 2,4,6-Tribromophenol | 89.4   | 39-153        |      | %REC               | 1               | 5/3/2004 5:24:00 PM  |
| Surr: 2-Fluorobiphenyl     | 81.0   | 40-147        |      | %REC               | 1               | 5/3/2004 5:24:00 PM  |
| Surr: 2-Fluorophenol       | 34.2   | 21-110        |      | %REC               | 1               | 5/3/2004 5:24:00 PM  |
| Surr: 4-Terphenyl-d14      | 84.2   | 39-141        |      | %REC               | 1               | 5/3/2004 5:24:00 PM  |
| Surr: Nitrobenzene-d5      | 75.5   | 37-140        |      | %REC               | 1               | 5/3/2004 5:24:00 PM  |
| Surr: Phenol-d6            | 20.7   | 11-100        |      | %REC               | 1               | 5/3/2004 5:24:00 PM  |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      | <b>Analyst: PC</b> |                 |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| Acetone                    | ND     | 10            |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| Benzene                    | 190    | 5.0           |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 4:09:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: May 05, 2004

CLIENT: Navajo Refining Company  
Work Order: 0404247  
Project: NCL/TEL  
Lab ID: 0404247-01

Client Sample ID: MW-59  
Collection Date: 4/21/2004 10:00:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Ethylbenzene                        | 15     | 5.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 4/28/2004 4:09:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 84.8   | 71-126        |      | %REC                | 1               | 4/28/2004 4:09:00 PM  |
| Surr: 4-Bromofluorobenzene          | 93.3   | 74-125        |      | %REC                | 1               | 4/28/2004 4:09:00 PM  |
| Surr: Dibromofluoromethane          | 86.4   | 73-126        |      | %REC                | 1               | 4/28/2004 4:09:00 PM  |
| Surr: Toluene-d8                    | 99.5   | 75-125        |      | %REC                | 1               | 4/28/2004 4:09:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                       |
| Chloride                            | 163    | 2.50          |      | mg/L                | 5               | 4/23/2004 11:34:00 AM |
| Fluoride                            | 1.62   | 0.100         |      | mg/L                | 1               | 4/23/2004 11:06:00 AM |
| Sulfate                             | 1,630  | 100           |      | mg/L                | 100             | 4/27/2004 2:11:00 PM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 4/23/2004 11:06:00 AM |
| Surr: Dichloroacetic acid (surr)    | 105    | 80-120        |      | %REC                | 1               | 4/23/2004 11:06:00 AM |
| Surr: Dichloroacetic acid (surr)    | 104    | 80-120        |      | %REC                | 5               | 4/23/2004 11:34:00 AM |
| Surr: Dichloroacetic acid (surr)    | 96.6   | 80-120        |      | %REC                | 100             | 4/27/2004 2:11:00 PM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 420    | 5.00          |      | mg/L                | 1               | 4/28/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/28/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/28/2004             |
| Alkalinity, Total (As CaCO3)        | 420    | 5.00          |      | mg/L                | 1               | 4/28/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 4/24/2004             |

Qualifiers: ND - Not Detected at the Reporting Limit  
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B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: May 05, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404247  
 Project: NCL/TEL  
 Lab ID: 0404247-02

Client Sample ID: TEL-4  
 Collection Date: 4/21/2004 9:00:00 AM  
 Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|---------------------------------------|---------|--------------|------|-------|-----------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                      |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 4/27/2004 5:02:48 PM |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                      |
| Aluminum                              | 0.0446  | 0.0100       |      | mg/L  | 1               | 4/29/2004 6:26:00 PM |
| Arsenic                               | 0.00753 | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Barium                                | 0.156   | 0.00500      |      | mg/L  | 1               | 4/29/2004 6:26:00 PM |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Boron                                 | 0.670   | 0.0200       |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 4/29/2004 6:26:00 PM |
| Calcium                               | 230     | 25.0         |      | mg/L  | 50              | 4/28/2004 8:09:00 PM |
| Chromium                              | 0.00680 | 0.00200      |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Copper                                | 0.00656 | 0.00200      |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Iron                                  | 0.560   | 0.200        |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Magnesium                             | 255     | 4.00         |      | mg/L  | 20              | 4/29/2004 2:02:00 PM |
| Manganese                             | 0.291   | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Molybdenum                            | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Nickel                                | 0.00785 | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Potassium                             | 0.384   | 0.200        |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 4/29/2004 6:26:00 PM |
| Sodium                                | 433     | 10.0         |      | mg/L  | 50              | 4/28/2004 8:09:00 PM |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| Zinc                                  | 0.0132  | 0.00500      |      | mg/L  | 1               | 4/26/2004 9:56:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                      |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 5:56:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time



**e-Lab, Inc.**

Date: May 05, 2004

CLIENT: Navajo Refining Company  
Work Order: 0404247  
Project: NCL/TEL  
Lab ID: 0404247-02

Client Sample ID: TEL-4  
Collection Date: 4/21/2004 9:00:00 AM  
Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units              | Dilution Factor | Date Analyzed        |
|----------------------------|--------|---------------|------|--------------------|-----------------|----------------------|
| Aniline                    | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Anthracene                 | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Benz(a)anthracene          | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Benzidine                  | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Hexachloroethane           | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Isophorone                 | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Naphthalene                | 25     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Nitrobenzene               | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Pentachlorophenol          | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Phenanthrene               | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Phenol                     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Pyrene                     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 5:56:00 PM  |
| Surr: 2,4,6-Tribromophenol | 93.8   | 39-153        |      | %REC               | 1               | 5/3/2004 5:56:00 PM  |
| Surr: 2-Fluorobiphenyl     | 82.3   | 40-147        |      | %REC               | 1               | 5/3/2004 5:56:00 PM  |
| Surr: 2-Fluorophenol       | 34.5   | 21-110        |      | %REC               | 1               | 5/3/2004 5:56:00 PM  |
| Surr: 4-Terphenyl-d14      | 82.7   | 39-141        |      | %REC               | 1               | 5/3/2004 5:56:00 PM  |
| Surr: Nitrobenzene-d5      | 82.8   | 37-140        |      | %REC               | 1               | 5/3/2004 5:56:00 PM  |
| Surr: Phenol-d6            | 22.0   | 11-100        |      | %REC               | 1               | 5/3/2004 5:56:00 PM  |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      | <b>Analyst: PC</b> |                 |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| Acetone                    | 150    | 10            |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| Benzene                    | 3,100  | 120           |      | µg/L               | 25              | 4/29/2004 5:36:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 5:29:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: May 05, 2004

CLIENT: Navajo Refining Company  
Work Order: 0404247  
Project: NCL/TEL  
Lab ID: 0404247-02

Client Sample ID: TEL-4  
Collection Date: 4/21/2004 9:00:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Ethylbenzene                        | 190    | 120           |      | µg/L                | 25              | 4/29/2004 5:36:00 PM  |
| m,p-Xylene                          | 390    | 10            |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Toluene                             | 63     | 5.0           |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Xylenes, Total                      | 390    | 15            |      | µg/L                | 1               | 4/28/2004 5:29:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 83.6   | 71-126        |      | %REC                | 1               | 4/28/2004 5:29:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 92.8   | 71-126        |      | %REC                | 25              | 4/29/2004 5:36:00 PM  |
| Surr: 4-Bromofluorobenzene          | 97.0   | 74-125        |      | %REC                | 1               | 4/28/2004 5:29:00 PM  |
| Surr: 4-Bromofluorobenzene          | 94.6   | 74-125        |      | %REC                | 25              | 4/29/2004 5:36:00 PM  |
| Surr: Dibromofluoromethane          | 88.4   | 73-126        |      | %REC                | 25              | 4/29/2004 5:36:00 PM  |
| Surr: Dibromofluoromethane          | 88.2   | 73-126        |      | %REC                | 1               | 4/28/2004 5:29:00 PM  |
| Surr: Toluene-d8                    | 100    | 75-125        |      | %REC                | 1               | 4/28/2004 5:29:00 PM  |
| Surr: Toluene-d8                    | 95.9   | 75-125        |      | %REC                | 25              | 4/29/2004 5:36:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                       |
| Chloride                            | 601    | 10.0          |      | mg/L                | 20              | 4/27/2004 2:40:00 PM  |
| Fluoride                            | 1.05   | 0.100         |      | mg/L                | 1               | 4/23/2004 12:03:00 PM |
| Sulfate                             | 619    | 20.0          |      | mg/L                | 20              | 4/27/2004 2:40:00 PM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 4/23/2004 12:03:00 PM |
| Surr: Dichloroacetic acid (surr)    | 107    | 80-120        |      | %REC                | 1               | 4/23/2004 12:03:00 PM |
| Surr: Dichloroacetic acid (surr)    | 91.4   | 80-120        |      | %REC                | 20              | 4/27/2004 2:40:00 PM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 970    | 5.00          |      | mg/L                | 1               | 4/28/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/28/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/28/2004             |
| Alkalinity, Total (As CaCO3)        | 970    | 5.00          |      | mg/L                | 1               | 4/28/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 4/24/2004             |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: May 05, 2004

CLIENT: Navajo Refining Company  
Work Order: 0404247  
Project: NCL/TEL  
Lab ID: 0404247-03

Client Sample ID: TEL-3  
Collection Date: 4/21/2004 9:15:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 4/27/2004 5:04:19 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | 0.0320  | 0.0100       |      | mg/L  | 1               | 4/29/2004 6:31:00 PM  |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Barium                                | 0.0120  | 0.00500      |      | mg/L  | 1               | 4/29/2004 6:31:00 PM  |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Boron                                 | 0.589   | 0.0200       |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 4/29/2004 6:31:00 PM  |
| Calcium                               | 608     | 25.0         |      | mg/L  | 50              | 4/28/2004 8:14:00 PM  |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Copper                                | 0.00538 | 0.00200      |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Iron                                  | 1.03    | 0.200        |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Magnesium                             | 207     | 4.00         |      | mg/L  | 20              | 4/29/2004 2:06:00 PM  |
| Manganese                             | 0.00784 | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Molybdenum                            | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Nickel                                | 0.00681 | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Potassium                             | 2.93    | 0.200        |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 4/29/2004 6:31:00 PM  |
| Sodium                                | 79.9    | 2.00         |      | mg/L  | 10              | 4/28/2004 8:36:00 PM  |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| Zinc                                  | 0.00928 | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:01:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |
| 2,4,5-Trichlorophenol                 | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |
| 2,4,6-Trichlorophenol                 | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |
| 2-Methylnaphthalene                   | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |
| 2-Methylphenol                        | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |
| 2-Nitroaniline                        | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |
| 2-Nitrophenol                         | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |
| 3-Nitroaniline                        | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |
| 4-Methylphenol                        | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |
| 4-Nitroaniline                        | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |
| 4-Nitrophenol                         | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |
| Acenaphthene                          | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |
| Acenaphthylene                        | ND      | 11           |      | µg/L  | 1               | 5/3/2004 6:27:00 PM   |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: May 05, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404247  
 Project: NCL/TEL  
 Lab ID: 0404247-03

Client Sample ID: TEL-3  
 Collection Date: 4/21/2004 9:15:00 AM  
 Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units              | Dilution Factor | Date Analyzed        |
|----------------------------|--------|---------------|------|--------------------|-----------------|----------------------|
| Aniline                    | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Anthracene                 | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Benz(a)anthracene          | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Benzidine                  | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Hexachloroethane           | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Indeno(1,2,3-cd)pyrene     | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Isophorone                 | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| N-Nitrosodi-n-propylamine  | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| N-Nitrosodimethylamine     | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| N-Nitrosodiphenylamine     | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Naphthalene                | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Nitrobenzene               | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Pentachlorophenol          | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Phenanthrene               | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Phenol                     | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Pyrene                     | ND     | 11            |      | µg/L               | 1               | 5/3/2004 6:27:00 PM  |
| Surr: 2,4,6-Tribromophenol | 97.5   | 39-153        |      | %REC               | 1               | 5/3/2004 6:27:00 PM  |
| Surr: 2-Fluorobiphenyl     | 83.9   | 40-147        |      | %REC               | 1               | 5/3/2004 6:27:00 PM  |
| Surr: 2-Fluorophenol       | 35.3   | 21-110        |      | %REC               | 1               | 5/3/2004 6:27:00 PM  |
| Surr: 4-Terphenyl-d14      | 91.9   | 39-141        |      | %REC               | 1               | 5/3/2004 6:27:00 PM  |
| Surr: Nitrobenzene-d5      | 83.9   | 37-140        |      | %REC               | 1               | 5/3/2004 6:27:00 PM  |
| Surr: Phenol-d6            | 22.1   | 11-100        |      | %REC               | 1               | 5/3/2004 6:27:00 PM  |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      | <b>Analyst: PC</b> |                 |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| Acetone                    | 84     | 10            |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| Benzene                    | 120    | 5.0           |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L               | 1               | 4/30/2004 1:22:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
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 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: May 05, 2004

CLIENT: Navajo Refining Company  
Work Order: 0404247  
Project: NCL/TEL  
Lab ID: 0404247-03

Client Sample ID: TEL-3  
Collection Date: 4/21/2004 9:15:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed        |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Ethylbenzene                        | 11     | 5.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| m,p-Xylene                          | 79     | 10            |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Toluene                             | 8.9    | 5.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Xylenes, Total                      | 84     | 15            |      | µg/L                | 1               | 4/30/2004 1:22:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 78.5   | 71-126        |      | %REC                | 1               | 4/30/2004 1:22:00 PM |
| Surr: 4-Bromofluorobenzene          | 95.2   | 74-125        |      | %REC                | 1               | 4/30/2004 1:22:00 PM |
| Surr: Dibromofluoromethane          | 79.9   | 73-126        |      | %REC                | 1               | 4/30/2004 1:22:00 PM |
| Surr: Toluene-d8                    | 100    | 75-125        |      | %REC                | 1               | 4/30/2004 1:22:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                      |
| Chloride                            | 80.6   | 2.50          |      | mg/L                | 5               | 4/23/2004 1:28:00 PM |
| Fluoride                            | 3.10   | 0.100         |      | mg/L                | 1               | 4/23/2004 1:00:00 PM |
| Sulfate                             | 1,560  | 100           |      | mg/L                | 100             | 4/27/2004 3:08:00 PM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 4/23/2004 1:00:00 PM |
| Surr: Dichloroacetic acid (surr)    | 103    | 80-120        |      | %REC                | 1               | 4/23/2004 1:00:00 PM |
| Surr: Dichloroacetic acid (surr)    | 102    | 80-120        |      | %REC                | 5               | 4/23/2004 1:28:00 PM |
| Surr: Dichloroacetic acid (surr)    | 107    | 80-120        |      | %REC                | 100             | 4/27/2004 3:08:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                      |
| Alkalinity, Bicarbonate (As CaCO3)  | 480    | 5.00          |      | mg/L                | 1               | 4/28/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/28/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/28/2004            |
| Alkalinity, Total (As CaCO3)        | 480    | 5.00          |      | mg/L                | 1               | 4/28/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                      |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 4/24/2004            |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: May 05, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404247  
 Project: NCL/TEL  
 Lab ID: 0404247-04

Client Sample ID: TEL-2  
 Collection Date: 4/21/2004 9:30:00 AM  
 Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 4/27/2004 5:05:50 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1               | 4/29/2004 6:36:00 PM  |
| Arsenic                               | 0.0114  | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Barium                                | 0.195   | 0.00500      |      | mg/L  | 1               | 4/29/2004 6:36:00 PM  |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Boron                                 | 0.664   | 0.0200       |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 4/29/2004 6:36:00 PM  |
| Calcium                               | 157     | 5.00         |      | mg/L  | 10              | 4/28/2004 8:41:00 PM  |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Copper                                | 0.00382 | 0.00200      |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Iron                                  | 0.354   | 0.200        |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Magnesium                             | 163     | 2.00         |      | mg/L  | 10              | 4/29/2004 2:11:00 PM  |
| Manganese                             | 0.0306  | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Molybdenum                            | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Nickel                                | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Potassium                             | 0.805   | 0.200        |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 4/29/2004 6:36:00 PM  |
| Sodium                                | 414     | 10.0         |      | mg/L  | 50              | 4/28/2004 8:18:00 PM  |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| Zinc                                  | 0.00658 | 0.00500      |      | mg/L  | 1               | 4/26/2004 10:06:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 5/3/2004 6:59:00 PM   |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: May 05, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404247  
 Project: NCL/TEL  
 Lab ID: 0404247-04

Client Sample ID: TEL-2  
 Collection Date: 4/21/2004 9:30:00 AM  
 Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units              | Dilution Factor | Date Analyzed        |
|----------------------------|--------|---------------|------|--------------------|-----------------|----------------------|
| Aniline                    | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Anthracene                 | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Benz(a)anthracene          | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Benzidine                  | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Hexachloroethane           | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Isophorone                 | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Naphthalene                | 22     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Nitrobenzene               | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Pentachlorophenol          | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Phenanthrene               | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Phenol                     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Pyrene                     | ND     | 10            |      | µg/L               | 1               | 5/3/2004 6:59:00 PM  |
| Surr: 2,4,6-Tribromophenol | 101    | 39-153        |      | %REC               | 1               | 5/3/2004 6:59:00 PM  |
| Surr: 2-Fluorobiphenyl     | 85.1   | 40-147        |      | %REC               | 1               | 5/3/2004 6:59:00 PM  |
| Surr: 2-Fluorophenol       | 44.4   | 21-110        |      | %REC               | 1               | 5/3/2004 6:59:00 PM  |
| Surr: 4-Terphenyl-d14      | 91.6   | 39-141        |      | %REC               | 1               | 5/3/2004 6:59:00 PM  |
| Surr: Nitrobenzene-d5      | 91.5   | 37-140        |      | %REC               | 1               | 5/3/2004 6:59:00 PM  |
| Surr: Phenol-d6            | 31.3   | 11-100        |      | %REC               | 1               | 5/3/2004 6:59:00 PM  |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      | <b>Analyst: PC</b> |                 |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| Acetone                    | ND     | 10            |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| Benzene                    | 1,900  | 50            |      | µg/L               | 10              | 4/29/2004 6:03:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L               | 1               | 4/28/2004 6:23:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: May 05, 2004

CLIENT: Navajo Refining Company  
Work Order: 0404247  
Project: NCL/TEL  
Lab ID: 0404247-04

Client Sample ID: TEL-2  
Collection Date: 4/21/2004 9:30:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed        |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Ethylbenzene                        | 54     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| m,p-Xylene                          | 230    | 10            |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Toluene                             | 140    | 5.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Xylenes, Total                      | 260    | 15            |      | µg/L                | 1               | 4/28/2004 6:23:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 80.3   | 71-126        |      | %REC                | 1               | 4/28/2004 6:23:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 92.6   | 71-126        |      | %REC                | 10              | 4/29/2004 6:03:00 PM |
| Surr: 4-Bromofluorobenzene          | 92.9   | 74-125        |      | %REC                | 1               | 4/28/2004 6:23:00 PM |
| Surr: 4-Bromofluorobenzene          | 93.9   | 74-125        |      | %REC                | 10              | 4/29/2004 6:03:00 PM |
| Surr: Dibromofluoromethane          | 82.0   | 73-126        |      | %REC                | 1               | 4/28/2004 6:23:00 PM |
| Surr: Dibromofluoromethane          | 89.0   | 73-126        |      | %REC                | 10              | 4/29/2004 6:03:00 PM |
| Surr: Toluene-d8                    | 95.2   | 75-125        |      | %REC                | 1               | 4/28/2004 6:23:00 PM |
| Surr: Toluene-d8                    | 97.6   | 75-125        |      | %REC                | 10              | 4/29/2004 6:03:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                      |
| Chloride                            | 196    | 5.00          |      | mg/L                | 10              | 4/27/2004 3:37:00 PM |
| Fluoride                            | 1.33   | 0.100         |      | mg/L                | 1               | 4/23/2004 1:57:00 PM |
| Sulfate                             | 779    | 20.0          |      | mg/L                | 20              | 4/27/2004 4:05:00 PM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 4/23/2004 1:57:00 PM |
| Surr: Dichloroacetic acid (surr)    | 103    | 80-120        |      | %REC                | 1               | 4/23/2004 1:57:00 PM |
| Surr: Dichloroacetic acid (surr)    | 97.4   | 80-120        |      | %REC                | 10              | 4/27/2004 3:37:00 PM |
| Surr: Dichloroacetic acid (surr)    | 95.2   | 80-120        |      | %REC                | 20              | 4/27/2004 4:05:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                      |
| Alkalinity, Bicarbonate (As CaCO3)  | 860    | 5.00          |      | mg/L                | 1               | 4/28/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/28/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/28/2004            |
| Alkalinity, Total (As CaCO3)        | 860    | 5.00          |      | mg/L                | 1               | 4/28/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                      |

Qualifiers: ND - Not Detected at the Reporting Limit  
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\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab, Inc.**

**Date:** May 05, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404247  
**Project:** NCL/TEL  
**Lab ID:** 0404247-04

**Client Sample ID:** TEL-2  
**Collection Date:** 4/21/2004 9:30:00 AM  
**Matrix:** WATER

| Analyses | Result | Report<br>Limit | Qual | Units | Dilution<br>Factor | Date Analyzed |
|----------|--------|-----------------|------|-------|--------------------|---------------|
| Cyanide  | ND     | 0.0200          |      | mg/L  | 1                  | 4/24/2004     |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: May 05, 2004

CLIENT: Navajo Refining Company  
Work Order: 0404247  
Project: NCL/TEL  
Lab ID: 0404247-05

Client Sample ID: TEL-1  
Collection Date: 4/21/2004 9:45:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor      | Date Analyzed         |
|---------------------------------------|---------|---------------|------|-------|----------------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                      |                       |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: 4/27/2004 | Analyst: JCJ          |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                    | 4/27/2004 5:07:21 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                      |                       |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: 4/25/2004 | Analyst: ALR          |
| Aluminum                              | ND      | 0.0100        |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Arsenic                               | ND      | 0.00500       |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Barium                                | 0.0125  | 0.00500       |      | mg/L  | 1                    | 4/29/2004 6:41:00 PM  |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Boron                                 | 0.568   | 0.0200        |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                    | 4/29/2004 6:41:00 PM  |
| Calcium                               | 530     | 25.0          |      | mg/L  | 50                   | 4/28/2004 8:23:00 PM  |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Cobalt                                | ND      | 0.00200       |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Copper                                | 0.00409 | 0.00200       |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Iron                                  | 0.868   | 0.200         |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Magnesium                             | 164     | 2.00          |      | mg/L  | 10                   | 4/29/2004 2:25:00 PM  |
| Manganese                             | 0.132   | 0.00500       |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Molybdenum                            | ND      | 0.00500       |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Nickel                                | 0.00576 | 0.00500       |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Potassium                             | 1.12    | 0.200         |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                    | 4/29/2004 6:41:00 PM  |
| Sodium                                | 445     | 10.0          |      | mg/L  | 50                   | 4/28/2004 8:23:00 PM  |
| Vanadium                              | ND      | 0.00500       |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| Zinc                                  | ND      | 0.00500       |      | mg/L  | 1                    | 4/26/2004 10:10:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                      |                       |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: 4/22/2004 | Analyst: HV           |
| 1,2,4-Trichlorobenzene                | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |
| 2,4,5-Trichlorophenol                 | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |
| 2,4,6-Trichlorophenol                 | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |
| 2-Methylnaphthalene                   | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |
| 2-Methylphenol                        | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |
| 2-Nitroaniline                        | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |
| 2-Nitrophenol                         | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |
| 3-Nitroaniline                        | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |
| 4-Methylphenol                        | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |
| 4-Nitroaniline                        | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |
| 4-Nitrophenol                         | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |
| Acenaphthene                          | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |
| Acenaphthylene                        | ND      | 11            |      | µg/L  | 1                    | 5/3/2004 7:31:00 PM   |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: May 05, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404247  
 Project: NCL/TEL  
 Lab ID: 0404247-05

Client Sample ID: TEL-1  
 Collection Date: 4/21/2004 9:45:00 AM  
 Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed       |
|----------------------------|--------|--------------|------|-------|-----------------|---------------------|
| Aniline                    | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Anthracene                 | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Benz(a)anthracene          | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Benzidine                  | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Hexachloroethane           | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Isophorone                 | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| N-Nitrosodimethylamine     | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| N-Nitrosodiphenylamine     | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Naphthalene                | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Nitrobenzene               | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Pentachlorophenol          | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Phenanthrene               | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Phenol                     | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Pyrene                     | ND     | 11           |      | µg/L  | 1               | 5/3/2004 7:31:00 PM |
| Surr: 2,4,6-Tribromophenol | 107    | 39-153       |      | %REC  | 1               | 5/3/2004 7:31:00 PM |
| Surr: 2-Fluorobiphenyl     | 97.0   | 40-147       |      | %REC  | 1               | 5/3/2004 7:31:00 PM |
| Surr: 2-Fluorophenol       | 51.7   | 21-110       |      | %REC  | 1               | 5/3/2004 7:31:00 PM |
| Surr: 4-Terphenyl-d14      | 100    | 39-141       |      | %REC  | 1               | 5/3/2004 7:31:00 PM |
| Surr: Nitrobenzene-d5      | 95.0   | 37-140       |      | %REC  | 1               | 5/3/2004 7:31:00 PM |
| Surr: Phenol-d6            | 32.7   | 11-100       |      | %REC  | 1               | 5/3/2004 7:31:00 PM |

## VOLATILES BY GC/MS

SW8260

Analyst: PC

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| Benzene                   | 39 | 5.0 |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 4/28/2004 6:50:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 4/28/2004 6:50:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
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## e-Lab, Inc.

Date: May 05, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404247  
 Project: NCL/TEL  
 Lab ID: 0404247-05

Client Sample ID: TEL-1  
 Collection Date: 4/21/2004 9:45:00 AM  
 Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed        |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Ethylbenzene                        | 6.8    | 5.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| m,p-Xylene                          | 17     | 10            |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Toluene                             | 7.4    | 5.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Xylenes, Total                      | 24     | 15            |      | µg/L                | 1               | 4/28/2004 6:50:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 79.3   | 71-126        |      | %REC                | 1               | 4/28/2004 6:50:00 PM |
| Surr: 4-Bromofluorobenzene          | 90.3   | 74-125        |      | %REC                | 1               | 4/28/2004 6:50:00 PM |
| Surr: Dibromofluoromethane          | 80.3   | 73-126        |      | %REC                | 1               | 4/28/2004 6:50:00 PM |
| Surr: Toluene-d8                    | 94.7   | 75-125        |      | %REC                | 1               | 4/28/2004 6:50:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                      |
| Chloride                            | 195    | 2.50          |      | mg/L                | 5               | 4/23/2004 3:43:00 PM |
| Fluoride                            | 1.85   | 0.100         |      | mg/L                | 1               | 4/23/2004 3:15:00 PM |
| Sulfate                             | 1,770  | 100           |      | mg/L                | 100             | 4/27/2004 5:31:00 PM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 4/23/2004 3:15:00 PM |
| Surr: Dichloroacetic acid (surr)    | 102    | 80-120        |      | %REC                | 1               | 4/23/2004 3:15:00 PM |
| Surr: Dichloroacetic acid (surr)    | 103    | 80-120        |      | %REC                | 5               | 4/23/2004 3:43:00 PM |
| Surr: Dichloroacetic acid (surr)    | 98.0   | 80-120        |      | %REC                | 100             | 4/27/2004 5:31:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                      |
| Alkalinity, Bicarbonate (As CaCO3)  | 455    | 5.00          |      | mg/L                | 1               | 4/28/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/28/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/28/2004            |
| Alkalinity, Total (As CaCO3)        | 455    | 5.00          |      | mg/L                | 1               | 4/28/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                      |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 4/24/2004            |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: May 05 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404247  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8753 InstrumentID: Mercury

MBLK Sample ID: GBLKW1-042704 Test Code: SW7470 Units: mg/L Analysis Date: 04/27/04 16:11

Client ID: Run ID: MERCURY\_040427A SeqNo: 462206 Prep Date: 4/27/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW1-042704 Test Code: SW7470 Units: mg/L Analysis Date: 04/27/04 16:12

Client ID: Run ID: MERCURY\_040427A SeqNo: 462207 Prep Date: 4/27/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00506 | 0.00020 | 0.005   | 0             | 101  | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW1-042704 Test Code: SW7470 Units: mg/L Analysis Date: 04/27/04 16:22

Client ID: Run ID: MERCURY\_040427A SeqNo: 462208 Prep Date: 4/27/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Mercury | 0.00505 | 0.00020 | 0.005   | 0             | 101  | 83-115        | 0.00506       | 0.198 | 20        |      |

MS Sample ID: 0404224-01BMS Test Code: SW7470 Units: mg/L Analysis Date: 04/27/04 16:36

Client ID: Run ID: MERCURY\_040427A SeqNo: 462211 Prep Date: 4/27/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00457 | 0.00020 | 0.005   | 0.000015      | 91.1 | 83-115        | 0             |      |           |      |

MSD Sample ID: 0404224-01BMSD Test Code: SW7470 Units: mg/L Analysis Date: 04/27/04 16:38

Client ID: Run ID: MERCURY\_040427A SeqNo: 462212 Prep Date: 4/27/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Mercury | 0.00454 | 0.00020 | 0.005   | 0.000015      | 90.5 | 83-115        | 0.00457       | 0.659 | 20        |      |

DUP Sample ID: 0404224-01BDUP Test Code: SW7470 Units: mg/L Analysis Date: 04/27/04 16:27

Client ID: Run ID: MERCURY\_040427A SeqNo: 462210 Prep Date: 4/27/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | 0.000015      | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0404247-01C | 0404247-02C | 0404247-03C |
| 0404247-04C | 0404247-05C |             |

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in assoc. Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

U - Analyzed for but not detected

O - Referenced analyte value is &gt; 4 times amount spiked

P - Dual Column results percent difference &gt; 40%

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0404247  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8770 InstrumentID: ICP4500

MBLK Sample ID: MBLKW1-042504 Test Code: SW6020 Units: mg/L Analysis Date: 04/26/04 19:13

Client ID: Run ID: ICP4500\_040426A SeqNo: 461616 Prep Date: 4/25/2004 DF: 1

| Analyte   | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | ND     | 0.0020 |         |               |      |               |               |      |           |      |
| Boron     | ND     | 0.020  |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW1-042504 Test Code: SW6020 Units: mg/L Analysis Date: 04/27/04 12:58

Client ID: Run ID: ICP4500\_040427A SeqNo: 461931 Prep Date: 4/25/2004 DF: 1

| Analyte    | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|-----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.001911  | 0.010  |         |               |      |               |               |      |           | J    |
| Arsenic    | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Barium     | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Cadmium    | 0.0002938 | 0.0020 |         |               |      |               |               |      |           | J    |
| Calcium    | ND        | 0.50   |         |               |      |               |               |      |           |      |
| Chromium   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt     | 0.0003446 | 0.0050 |         |               |      |               |               |      |           | J    |
| Copper     | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Iron       | 0.02792   | 0.20   |         |               |      |               |               |      |           | J    |
| Lead       | 0.0003975 | 0.0050 |         |               |      |               |               |      |           | J    |
| Magnesium  | 0.0267    | 0.20   |         |               |      |               |               |      |           | J    |
| Manganese  | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Molybdenum | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel     | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium  | 0.02614   | 0.20   |         |               |      |               |               |      |           | J    |
| Selenium   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Silver     | 0.0003358 | 0.0050 |         |               |      |               |               |      |           | J    |
| Sodium     | 0.03231   | 0.20   |         |               |      |               |               |      |           | J    |
| Vanadium   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc       | ND        | 0.0050 |         |               |      |               |               |      |           |      |

LCS Sample ID: MLCSW1-042504 Test Code: SW6020 Units: mg/L Analysis Date: 04/26/04 19:18

Client ID: Run ID: ICP4500\_040426A SeqNo: 461617 Prep Date: 4/25/2004 DF: 1

| Analyte   | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium |        |     | 0.05    | 0             | 98.1 | 78.9-120      |               | 0    |           |      |



**e-Lab, Inc.**

10450 Standliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

April 28, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: NCL/TEL

Work Order : **0404140**

Dear Jeff Byrd,

e-Lab, Inc. received 3 samples on 4/14/2004 9:00:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Inc. The total number of pages in this report is 38.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

e-Lab, Inc.

Date: April 28, 2004

CLIENT: Navajo Refining Company

Project: NCL/TEL

Work Order: 0404140

## Work Order Sample Summary

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0404140-01           | MW-60                   | Water         |                   | 4/13/2004 13:30        | 4/14/2004 09:00      | <input type="checkbox"/> |
| 0404140-02           | NCL-33                  | Water         |                   | 4/13/2004 14:15        | 4/14/2004 09:00      | <input type="checkbox"/> |
| 0404140-03           | NCL-34                  | Water         |                   | 4/13/2004 15:00        | 4/14/2004 09:00      | <input type="checkbox"/> |



**e-Lab, Inc.**

**Date:** April 28, 2004

**CLIENT:** Navajo Refining Company

**Project:** NCL/TEL

**Work Order:** 0404140

**Case Narrative**

Batch 8655 Semivolatile LCS/LCSD RPD recoveries were outside control limits for Aniline (30.2%) and Benzidine (58%). Both compounds were within QC criteria in the LCS/LCSD, therefore the data was accepted.

Batch R20118 Volatiles MS/MSD recoveries were outside of control limits for 2-Chloroethyl vinyl ether (29.8% and 23.2%) and Benzene (126% in MSD only). 2-Chloroethyl vinyl ether rapidly decomposes when it reacts with an acid matrix, and Benzene had acceptable criteria in the method blank, LCS and MS.

## e-Lab, Inc.

Date: April 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404140  
**Project:** NCL/TEL  
**Lab ID:** 0404140-01

**Client Sample ID:** MW-60  
**Collection Date:** 4/13/2004 1:30:00 PM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                                             |
|---------------------------------------|---------|---------------|------|-------|-----------------|-----------------------------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                                           |
|                                       |         | <b>SW7470</b> |      |       |                 |                                                           |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | Prep Date: 4/20/2004 Analyst: JCJ<br>4/22/2004 3:25:17 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                                           |
|                                       |         | <b>SW6020</b> |      |       |                 |                                                           |
| Aluminum                              | 0.0367  | 0.0100        |      | mg/L  | 1               | Prep Date: 4/19/2004 Analyst: ALR<br>4/20/2004 5:01:00 PM |
| Arsenic                               | 0.0359  | 0.00500       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Barium                                | 0.0114  | 0.00500       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Boron                                 | 0.525   | 0.0400        |      | mg/L  | 2               | 4/20/2004 4:19:00 PM                                      |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Calcium                               | 336     | 10.0          |      | mg/L  | 20              | 4/21/2004 12:24:00 PM                                     |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Cobalt                                | 0.00660 | 0.00200       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Copper                                | 0.00795 | 0.00200       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Iron                                  | 2.57    | 0.200         |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Magnesium                             | 283     | 4.00          |      | mg/L  | 20              | 4/21/2004 12:24:00 PM                                     |
| Manganese                             | 0.702   | 0.0100        |      | mg/L  | 2               | 4/20/2004 4:19:00 PM                                      |
| Molybdenum                            | 0.00630 | 0.00500       |      | mg/L  | 1               | 4/21/2004 1:52:00 PM                                      |
| Nickel                                | 0.0105  | 0.00500       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Potassium                             | 0.432   | 0.200         |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Sodium                                | 203     | 4.00          |      | mg/L  | 20              | 4/21/2004 12:24:00 PM                                     |
| Vanadium                              | ND      | 0.00500       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| Zinc                                  | 0.0168  | 0.00500       |      | mg/L  | 1               | 4/20/2004 5:01:00 PM                                      |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                                           |
|                                       |         | <b>SW8270</b> |      |       |                 |                                                           |
| 1,2,4-Trichlorobenzene                | ND      | 11            |      | µg/L  | 1               | Prep Date: 4/15/2004 Analyst: HV<br>4/23/2004 8:24:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 11            |      | µg/L  | 1               | 4/23/2004 8:24:00 PM                                      |
| 2,4,6-Trichlorophenol                 | ND      | 11            |      | µg/L  | 1               | 4/23/2004 8:24:00 PM                                      |
| 2-Methylnaphthalene                   | ND      | 11            |      | µg/L  | 1               | 4/23/2004 8:24:00 PM                                      |
| 2-Methylphenol                        | ND      | 11            |      | µg/L  | 1               | 4/23/2004 8:24:00 PM                                      |
| 2-Nitroaniline                        | ND      | 11            |      | µg/L  | 1               | 4/23/2004 8:24:00 PM                                      |
| 2-Nitrophenol                         | ND      | 11            |      | µg/L  | 1               | 4/23/2004 8:24:00 PM                                      |
| 3-Nitroaniline                        | ND      | 11            |      | µg/L  | 1               | 4/23/2004 8:24:00 PM                                      |
| 4-Methylphenol                        | ND      | 11            |      | µg/L  | 1               | 4/23/2004 8:24:00 PM                                      |
| 4-Nitroaniline                        | ND      | 11            |      | µg/L  | 1               | 4/23/2004 8:24:00 PM                                      |
| 4-Nitrophenol                         | ND      | 11            |      | µg/L  | 1               | 4/23/2004 8:24:00 PM                                      |
| Acenaphthene                          | ND      | 11            |      | µg/L  | 1               | 4/23/2004 8:24:00 PM                                      |
| Acenaphthylene                        | ND      | 11            |      | µg/L  | 1               | 4/23/2004 8:24:00 PM                                      |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: April 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404140  
**Project:** NCL/TEL  
**Lab ID:** 0404140-01

**Client Sample ID:** MW-60  
**Collection Date:** 4/13/2004 1:30:00 PM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Anthracene                 | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Benz(a)anthracene          | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Benzidine                  | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Hexachloroethane           | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Isophorone                 | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| N-Nitrosodimethylamine     | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| N-Nitrosodiphenylamine     | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Naphthalene                | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Nitrobenzene               | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Pentachlorophenol          | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Phenanthrene               | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Phenol                     | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Pyrene                     | ND     | 11           |      | µg/L  | 1               | 4/23/2004 8:24:00 PM |
| Surr: 2,4,6-Tribromophenol | 103    | 39-153       |      | %REC  | 1               | 4/23/2004 8:24:00 PM |
| Surr: 2-Fluorobiphenyl     | 88.8   | 40-147       |      | %REC  | 1               | 4/23/2004 8:24:00 PM |
| Surr: 2-Fluorophenol       | 50.7   | 21-110       |      | %REC  | 1               | 4/23/2004 8:24:00 PM |
| Surr: 4-Terphenyl-d14      | 96.6   | 39-141       |      | %REC  | 1               | 4/23/2004 8:24:00 PM |
| Surr: Nitrobenzene-d5      | 81.9   | 37-140       |      | %REC  | 1               | 4/23/2004 8:24:00 PM |
| Surr: Phenol-d6            | 31.3   | 11-100       |      | %REC  | 1               | 4/23/2004 8:24:00 PM |

**VOLATILES BY GC/MS****SW8260**Analyst: **PC**

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| Benzene                   | 13 | 5.0 |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 4/26/2004 4:37:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 4/26/2004 4:37:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: April 28, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL  
 Lab ID: 0404140-01

Client Sample ID: MW-60  
 Collection Date: 4/13/2004 1:30:00 PM  
 Matrix: WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|-----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Ethylbenzene                | 5.4    | 5.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 4/26/2004 4:37:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 93.1   | 71-126       |      | %REC  | 1               | 4/26/2004 4:37:00 PM |
| Surr: 4-Bromofluorobenzene  | 93.4   | 74-125       |      | %REC  | 1               | 4/26/2004 4:37:00 PM |
| Surr: Dibromofluoromethane  | 93.2   | 73-126       |      | %REC  | 1               | 4/26/2004 4:37:00 PM |
| Surr: Toluene-d8            | 103    | 75-125       |      | %REC  | 1               | 4/26/2004 4:37:00 PM |

## ANIONS BY ION CHROMATOGRAPHY

E300

Analyst: MG

|                                  |       |        |  |      |     |                       |
|----------------------------------|-------|--------|--|------|-----|-----------------------|
| Chloride                         | 186   | 5.00   |  | mg/L | 10  | 4/17/2004 12:58:00 AM |
| Fluoride                         | 1.11  | 0.100  |  | mg/L | 1   | 4/15/2004 5:36:00 PM  |
| Sulfate                          | 1,670 | 100    |  | mg/L | 100 | 4/17/2004 1:27:00 AM  |
| Nitrate/Nitrite (as N)           | ND    | 0.100  |  | mg/L | 1   | 4/15/2004 5:36:00 PM  |
| Surr: Dichloroacetic acid (surr) | 98.0  | 80-120 |  | %REC | 1   | 4/15/2004 5:36:00 PM  |
| Surr: Dichloroacetic acid (surr) | 103   | 80-120 |  | %REC | 10  | 4/17/2004 12:58:00 AM |
| Surr: Dichloroacetic acid (surr) | 107   | 80-120 |  | %REC | 100 | 4/17/2004 1:27:00 AM  |

## ALKALINITY

E310.1

Analyst: LMD

|                                    |     |      |  |      |   |           |
|------------------------------------|-----|------|--|------|---|-----------|
| Alkalinity, Bicarbonate (As CaCO3) | 525 | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Total (As CaCO3)       | 525 | 5.00 |  | mg/L | 1 | 4/15/2004 |

## CYANIDE, TOTAL

E335.3

Analyst: LMD

|         |    |        |  |      |   |           |
|---------|----|--------|--|------|---|-----------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 4/17/2004 |
|---------|----|--------|--|------|---|-----------|

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: April 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404140  
**Project:** NCL/TEL  
**Lab ID:** 0404140-02

**Client Sample ID:** NCL-33  
**Collection Date:** 4/13/2004 2:15:00 PM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 4/22/2004 3:26:47 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | 0.0177  | 0.0100       |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Barium                                | 0.0534  | 0.00500      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Boron                                 | 0.597   | 0.0400       |      | mg/L  | 2               | 4/20/2004 4:24:00 PM  |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Calcium                               | 308     | 10.0         |      | mg/L  | 20              | 4/21/2004 12:29:00 PM |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Copper                                | 0.00253 | 0.00200      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Iron                                  | 2.08    | 0.200        |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Magnesium                             | 99.0    | 4.00         |      | mg/L  | 20              | 4/21/2004 12:29:00 PM |
| Manganese                             | 0.0740  | 0.00500      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Molybdenum                            | ND      | 0.00500      |      | mg/L  | 1               | 4/21/2004 1:57:00 PM  |
| Nickel                                | 0.00526 | 0.00500      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Potassium                             | 3.54    | 0.200        |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Sodium                                | 89.9    | 4.00         |      | mg/L  | 20              | 4/21/2004 12:29:00 PM |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| Zinc                                  | 0.00565 | 0.00500      |      | mg/L  | 1               | 4/20/2004 5:06:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: April 28, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL  
 Lab ID: 0404140-02

Client Sample ID: NCL-33  
 Collection Date: 4/13/2004 2:15:00 PM  
 Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 4/23/2004 8:56:00 PM |
| Surr: 2,4,6-Tribromophenol | 102    | 39-153       |      | %REC  | 1               | 4/23/2004 8:56:00 PM |
| Surr: 2-Fluorobiphenyl     | 84.8   | 40-147       |      | %REC  | 1               | 4/23/2004 8:56:00 PM |
| Surr: 2-Fluorophenol       | 35.5   | 21-110       |      | %REC  | 1               | 4/23/2004 8:56:00 PM |
| Surr: 4-Terphenyl-d14      | 93.1   | 39-141       |      | %REC  | 1               | 4/23/2004 8:56:00 PM |
| Surr: Nitrobenzene-d5      | 77.4   | 37-140       |      | %REC  | 1               | 4/23/2004 8:56:00 PM |
| Surr: Phenol-d6            | 19.4   | 11-100       |      | %REC  | 1               | 4/23/2004 8:56:00 PM |

## VOLATILES BY GC/MS

SW8260

Analyst: PC

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 4/26/2004 5:57:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 4/26/2004 5:57:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: April 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404140  
**Project:** NCL/TEL  
**Lab ID:** 0404140-02

**Client Sample ID:** NCL-33  
**Collection Date:** 4/13/2004 2:15:00 PM  
**Matrix:** WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|-----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Chlorobenzene               | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 4/26/2004 5:57:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 88.6   | 71-126       |      | %REC  | 1               | 4/26/2004 5:57:00 PM |
| Surr: 4-Bromofluorobenzene  | 87.4   | 74-125       |      | %REC  | 1               | 4/26/2004 5:57:00 PM |
| Surr: Dibromofluoromethane  | 90.6   | 73-126       |      | %REC  | 1               | 4/26/2004 5:57:00 PM |
| Surr: Toluene-d8            | 100    | 75-125       |      | %REC  | 1               | 4/26/2004 5:57:00 PM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |      |        |  |      |    |                      |
|----------------------------------|------|--------|--|------|----|----------------------|
| Chloride                         | 314  | 5.00   |  | mg/L | 10 | 4/17/2004 1:55:00 AM |
| Fluoride                         | 2.02 | 0.100  |  | mg/L | 1  | 4/15/2004 6:05:00 PM |
| Sulfate                          | 315  | 10.0   |  | mg/L | 10 | 4/17/2004 1:55:00 AM |
| Nitrate/Nitrite (as N)           | ND   | 0.100  |  | mg/L | 1  | 4/15/2004 6:05:00 PM |
| Surr: Dichloroacetic acid (surr) | 93.2 | 80-120 |  | %REC | 1  | 4/15/2004 6:05:00 PM |
| Surr: Dichloroacetic acid (surr) | 109  | 80-120 |  | %REC | 10 | 4/17/2004 1:55:00 AM |

**ALKALINITY****E310.1**Analyst: **LMD**

|                                    |     |      |  |      |   |           |
|------------------------------------|-----|------|--|------|---|-----------|
| Alkalinity, Bicarbonate (As CaCO3) | 633 | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Total (As CaCO3)       | 633 | 5.00 |  | mg/L | 1 | 4/15/2004 |

**CYANIDE, TOTAL****E335.3**Analyst: **LMD**

|         |    |        |  |      |   |           |
|---------|----|--------|--|------|---|-----------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 4/17/2004 |
|---------|----|--------|--|------|---|-----------|

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: April 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404140  
**Project:** NCL/TEL  
**Lab ID:** 0404140-03

**Client Sample ID:** NCL-34  
**Collection Date:** 4/13/2004 3:00:00 PM  
**Matrix:** WATER

| Analyses                              | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |        |              |      |       |                 |                       |
| Mercury                               | ND     | 0.000200     |      | mg/L  | 1               | 4/22/2004 3:28:18 PM  |
| <b>ICP METALS, TOTAL</b>              |        |              |      |       |                 |                       |
| Aluminum                              | 0.0142 | 0.0100       |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Arsenic                               | ND     | 0.00500      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Barium                                | 0.631  | 0.100        |      | mg/L  | 20              | 4/21/2004 3:08:00 PM  |
| Beryllium                             | ND     | 0.00200      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Boron                                 | 0.413  | 0.0200       |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Cadmium                               | ND     | 0.00100      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Calcium                               | 229    | 10.0         |      | mg/L  | 20              | 4/21/2004 3:08:00 PM  |
| Chromium                              | ND     | 0.00200      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Cobalt                                | ND     | 0.00200      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Copper                                | ND     | 0.00200      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Iron                                  | 0.323  | 0.200        |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Lead                                  | ND     | 0.00500      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Magnesium                             | 82.6   | 4.00         |      | mg/L  | 20              | 4/21/2004 3:08:00 PM  |
| Manganese                             | 0.117  | 0.00500      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Molybdenum                            | ND     | 0.00500      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Nickel                                | ND     | 0.00500      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Potassium                             | 0.818  | 0.200        |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Selenium                              | ND     | 0.00500      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Silver                                | ND     | 0.00500      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Sodium                                | 128    | 4.00         |      | mg/L  | 20              | 4/21/2004 3:08:00 PM  |
| Vanadium                              | ND     | 0.00500      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| Zinc                                  | 0.0296 | 0.00500      |      | mg/L  | 1               | 4/19/2004 10:26:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |        |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |
| 2,4,5-Trichlorophenol                 | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |
| 2,4,6-Trichlorophenol                 | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |
| 2-Methylnaphthalene                   | 10     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |
| 2-Methylphenol                        | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |
| 2-Nitroaniline                        | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |
| 2-Nitrophenol                         | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |
| 3-Nitroaniline                        | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |
| 4-Methylphenol                        | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |
| 4-Nitroaniline                        | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |
| 4-Nitrophenol                         | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |
| Acenaphthene                          | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |
| Acenaphthylene                        | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab, Inc.**

Date: April 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404140  
**Project:** NCL/TEL  
**Lab ID:** 0404140-03

**Client Sample ID:** NCL-34  
**Collection Date:** 4/13/2004 3:00:00 PM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Aniline                    | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Naphthalene                | 18     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 4/23/2004 9:28:00 PM |
| Surr: 2,4,6-Tribromophenol | 103    | 39-153       |      | %REC  | 1               | 4/23/2004 9:28:00 PM |
| Surr: 2-Fluorobiphenyl     | 87.2   | 40-147       |      | %REC  | 1               | 4/23/2004 9:28:00 PM |
| Surr: 2-Fluorophenol       | 38.4   | 21-110       |      | %REC  | 1               | 4/23/2004 9:28:00 PM |
| Surr: 4-Terphenyl-d14      | 93.3   | 39-141       |      | %REC  | 1               | 4/23/2004 9:28:00 PM |
| Surr: Nitrobenzene-d5      | 82.1   | 37-140       |      | %REC  | 1               | 4/23/2004 9:28:00 PM |
| Surr: Phenol-d6            | 21.8   | 11-100       |      | %REC  | 1               | 4/23/2004 9:28:00 PM |

**VOLATILES BY GC/MS****SW8260**Analyst: **PC**

|                           |       |     |  |      |    |                       |
|---------------------------|-------|-----|--|------|----|-----------------------|
| 1,1,1-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| 1,1,2,2-Tetrachloroethane | ND    | 5.0 |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| 1,1,2-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| 1,1-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| 1,1-Dichloroethene        | ND    | 5.0 |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| 1,2-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| 2-Butanone                | ND    | 10  |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| 2-Chloroethyl vinyl ether | ND    | 10  |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| 2-Hexanone                | ND    | 10  |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| 4-Methyl-2-pentanone      | ND    | 10  |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| Acetone                   | ND    | 10  |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| Benzene                   | 1,400 | 50  |  | µg/L | 10 | 4/27/2004 10:32:00 AM |
| Bromodichloromethane      | ND    | 5.0 |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| Bromoform                 | ND    | 5.0 |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| Bromomethane              | ND    | 5.0 |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| Carbon disulfide          | ND    | 10  |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |
| Carbon tetrachloride      | ND    | 5.0 |  | µg/L | 1  | 4/26/2004 6:24:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: April 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404140  
**Project:** NCL/TEL  
**Lab ID:** 0404140-03

**Client Sample ID:** NCL-34  
**Collection Date:** 4/13/2004 3:00:00 PM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chlorobenzene                       | ND     | 5.0           |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Ethylbenzene                        | 230    | 50            |      | µg/L                | 10              | 4/27/2004 10:32:00 AM |
| m,p-Xylene                          | 130    | 10            |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Xylenes, Total                      | 130    | 15            |      | µg/L                | 1               | 4/26/2004 6:24:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 85.5   | 71-126        |      | %REC                | 1               | 4/26/2004 6:24:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 84.3   | 71-126        |      | %REC                | 10              | 4/27/2004 10:32:00 AM |
| Surr: 4-Bromofluorobenzene          | 97.9   | 74-125        |      | %REC                | 1               | 4/26/2004 6:24:00 PM  |
| Surr: 4-Bromofluorobenzene          | 91.8   | 74-125        |      | %REC                | 10              | 4/27/2004 10:32:00 AM |
| Surr: Dibromofluoromethane          | 85.1   | 73-126        |      | %REC                | 10              | 4/27/2004 10:32:00 AM |
| Surr: Dibromofluoromethane          | 83.9   | 73-126        |      | %REC                | 1               | 4/26/2004 6:24:00 PM  |
| Surr: Toluene-d8                    | 103    | 75-125        |      | %REC                | 1               | 4/26/2004 6:24:00 PM  |
| Surr: Toluene-d8                    | 103    | 75-125        |      | %REC                | 10              | 4/27/2004 10:32:00 AM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                       |
| Chloride                            | 324    | 5.00          |      | mg/L                | 10              | 4/17/2004 2:24:00 AM  |
| Fluoride                            | 1.32   | 0.100         |      | mg/L                | 1               | 4/15/2004 6:34:00 PM  |
| Sulfate                             | 181    | 10.0          |      | mg/L                | 10              | 4/17/2004 2:24:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 4/15/2004 6:34:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 95.0   | 80-120        |      | %REC                | 1               | 4/15/2004 6:34:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC                | 10              | 4/17/2004 2:24:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 637    | 5.00          |      | mg/L                | 1               | 4/15/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/15/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/15/2004             |
| Alkalinity, Total (As CaCO3)        | 637    | 5.00          |      | mg/L                | 1               | 4/15/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 4/17/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

e-Lab, Inc.

CLIENT: Navajo Refining Company  
Work Order: 0404140  
Project: NCL/TEL

Date: Apr 28 2004

## QC BATCH REPORT

Batch ID: 8685 InstrumentID: ICP4500

MBLK Sample ID: MBLKW1-041904 Test Code: SW6020 Units: mg/L Analysis Date: 04/20/04 16:10  
Client ID: Run ID: ICP4500\_040420A SeqNo: 458717 Prep Date: 4/19/2004 DF: 1

| Analyte    | Result   | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.006197 | 0.010  |         |               |      |               |               |      |           | J    |
| Arsenic    | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Barium     | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Beryllium  | ND       | 0.0020 |         |               |      |               |               |      |           |      |
| Boron      | ND       | 0.020  |         |               |      |               |               |      |           |      |
| Cadmium    | ND       | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium    | ND       | 0.50   |         |               |      |               |               |      |           |      |
| Chromium   | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt     | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Copper     | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Iron       | ND       | 0.20   |         |               |      |               |               |      |           |      |
| Lead       | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium  | ND       | 0.20   |         |               |      |               |               |      |           |      |
| Manganese  | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Molybdenum | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel     | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium  | ND       | 0.20   |         |               |      |               |               |      |           |      |
| Selenium   | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Silver     | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium     | ND       | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium   | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc       | ND       | 0.0050 |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8685 InstrumentID: ICP4500

LCS Sample ID: MLCSW1-041904 Test Code: SW6020 Units: mg/L Analysis Date: 04/20/04 16:15

Client ID: Run ID: ICP4500\_040420A SeqNo: 458718 Prep Date: 4/19/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum   | 0.05912 | 0.010  | 0.05    | 0             | 118  | 79-126        | 0             |      |           |      |
| Arsenic    | 0.0477  | 0.0050 | 0.05    | 0             | 95.4 | 80-121        | 0             |      |           |      |
| Barium     | 0.04706 | 0.0050 | 0.05    | 0             | 94.1 | 79.8-119      | 0             |      |           |      |
| Beryllium  | 0.0488  | 0.0020 | 0.05    | 0             | 97.6 | 78.9-120      | 0             |      |           |      |
| Boron      | 0.528   | 0.020  | 0.5     | 0             | 106  | 80-120        | 0             |      |           |      |
| Cadmium    | 0.04981 | 0.0020 | 0.05    | 0             | 99.6 | 79.1-119      | 0             |      |           |      |
| Calcium    | 5.068   | 0.50   | 5       | 0             | 101  | 80-121        | 0             |      |           |      |
| Chromium   | 0.04742 | 0.0050 | 0.05    | 0             | 94.8 | 79.3-121      | 0             |      |           |      |
| Cobalt     | 0.04818 | 0.0050 | 0.05    | 0             | 96.4 | 82-121        | 0             |      |           |      |
| Copper     | 0.04732 | 0.0050 | 0.05    | 0             | 94.6 | 83-121        | 0             |      |           |      |
| Iron       | 5.109   | 0.20   | 5       | 0             | 102  | 80-120        | 0             |      |           |      |
| Lead       | 0.04579 | 0.0050 | 0.05    | 0             | 91.6 | 80-118        | 0             |      |           |      |
| Magnesium  | 5.227   | 0.20   | 5       | 0             | 105  | 80-120        | 0             |      |           |      |
| Manganese  | 0.0482  | 0.0050 | 0.05    | 0             | 96.4 | 82-119        | 0             |      |           |      |
| Molybdenum | 0.04544 | 0.0050 | 0.05    | 0             | 90.9 | 84.6-115      | 0             |      |           |      |
| Nickel     | 0.04786 | 0.0050 | 0.05    | 0             | 95.7 | 85-120        | 0             |      |           |      |
| Potassium  | 4.999   | 0.20   | 5       | 0             | 100  | 80-120        | 0             |      |           |      |
| Selenium   | 0.04711 | 0.0050 | 0.05    | 0             | 94.2 | 79.2-118      | 0             |      |           |      |
| Silver     | 0.04784 | 0.0050 | 0.05    | 0             | 95.7 | 83-117        | 0             |      |           |      |
| Sodium     | 5.087   | 0.20   | 5       | 0             | 102  | 82.4-120      | 0             |      |           |      |
| Vanadium   | 0.04748 | 0.0050 | 0.05    | 0             | 95   | 82.1-119      | 0             |      |           |      |
| Zinc       | 0.04832 | 0.0050 | 0.05    | 0             | 96.6 | 83-118        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8685 InstrumentID: ICP4500

MS Sample ID: 0404182-07CMS Test Code: SW6020 Units: mg/L Analysis Date: 04/20/04 17:47

Client ID: Run ID: ICP4500\_040420A SeqNo: 458736 Prep Date: 4/19/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 0.06962 | 0.010  | 0.05    | 0.0251        | 89   | 79-126        | 0             |      |           |      |
| Arsenic   | 0.04743 | 0.0050 | 0.05    | 0             | 94.9 | 80-121        | 0             |      |           |      |
| Barium    | 0.04766 | 0.0050 | 0.05    | 0             | 95.3 | 79.8-119      | 0             |      |           |      |
| Beryllium | 0.05087 | 0.0020 | 0.05    | 0             | 102  | 78.9-120      | 0             |      |           |      |
| Boron     | 0.5511  | 0.020  | 0.5     | 0.01989       | 106  | 80-120        | 0             |      |           |      |
| Cadmium   | 0.04894 | 0.0020 | 0.05    | 0             | 97.9 | 79.1-119      | 0             |      |           |      |
| Calcium   | 5.296   | 0.50   | 5       | 0.1571        | 103  | 80-121        | 0             |      |           |      |
| Chromium  | 0.04802 | 0.0050 | 0.05    | 0.0008466     | 94.3 | 79.3-121      | 0             |      |           |      |
| Cobalt    | 0.0485  | 0.0050 | 0.05    | 0             | 97   | 82-121        | 0             |      |           |      |
| Copper    | 0.0467  | 0.0050 | 0.05    | 0.0005075     | 92.4 | 83-121        | 0             |      |           |      |
| Iron      | 5.118   | 0.20   | 5       | 0.09651       | 100  | 80-120        | 0             |      |           |      |
| Lead      | 0.04549 | 0.0050 | 0.05    | 0             | 91   | 80-118        | 0             |      |           |      |
| Manganese | 0.04864 | 0.0050 | 0.05    | 0.001041      | 95.2 | 82-119        | 0             |      |           |      |
| Nickel    | 0.04871 | 0.0050 | 0.05    | 0             | 97.4 | 85-120        | 0             |      |           |      |
| Potassium | 5.162   | 0.20   | 5       | 0.03161       | 103  | 80-120        | 0             |      |           |      |
| Selenium  | 0.04315 | 0.0050 | 0.05    | 0             | 86.3 | 79.2-118      | 0             |      |           |      |
| Silver    | 0.04756 | 0.0050 | 0.05    | 0             | 95.1 | 83-117        | 0             |      |           |      |
| Sodium    | 5.389   | 0.20   | 5       | 0.1689        | 104  | 82.4-120      | 0             |      |           |      |
| Vanadium  | 0.04747 | 0.0050 | 0.05    | 0             | 94.9 | 82.1-119      | 0             |      |           |      |
| Zinc      | 0.04672 | 0.0050 | 0.05    | 0.001622      | 90.2 | 83-118        | 0             |      |           |      |

MS Sample ID: 0404182-07CMS Test Code: SW6020 Units: mg/L Analysis Date: 04/21/04 15:31

Client ID: Run ID: ICP4500\_040421A SeqNo: 459340 Prep Date: 4/19/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Magnesium  | 5.212   | 0.20   | 5       | 0.0352        | 104  | 80-120        | 0             |      |           |      |
| Molybdenum | 0.04458 | 0.0050 | 0.05    | 0.0003097     | 88.5 | 84.6-115      | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8685 InstrumentID: ICP4500

MSD Sample ID: 0404182-07CMSD Test Code: SW6020 Units: mg/L Analysis Date: 04/20/04 17:52

Client ID: Run ID: ICP4500\_040420A SeqNo: 458737 Prep Date: 4/19/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Aluminum  | 0.06991 | 0.010  | 0.05    | 0.0251        | 89.6 | 79-126        | 0.06962       | 0.416  | 15        |      |
| Arsenic   | 0.04719 | 0.0050 | 0.05    | 0             | 94.4 | 80-121        | 0.04743       | 0.507  | 15        |      |
| Barium    | 0.04732 | 0.0050 | 0.05    | 0             | 94.6 | 79.8-119      | 0.04766       | 0.716  | 15        |      |
| Beryllium | 0.04799 | 0.0020 | 0.05    | 0             | 96   | 78.9-120      | 0.05087       | 5.83   | 15        |      |
| Boron     | 0.5379  | 0.020  | 0.5     | 0.01989       | 104  | 80-120        | 0.5511        | 2.42   | 15        |      |
| Cadmium   | 0.04873 | 0.0020 | 0.05    | 0             | 97.5 | 79.1-119      | 0.04894       | 0.43   | 15        |      |
| Calcium   | 5.233   | 0.50   | 5       | 0.1571        | 102  | 80-121        | 5.296         | 1.2    | 15        |      |
| Chromium  | 0.04742 | 0.0050 | 0.05    | 0.0008466     | 93.1 | 79.3-121      | 0.04802       | 1.26   | 15        |      |
| Cobalt    | 0.04795 | 0.0050 | 0.05    | 0             | 95.9 | 82-121        | 0.0485        | 1.14   | 15        |      |
| Copper    | 0.0464  | 0.0050 | 0.05    | 0.0005075     | 91.8 | 83-121        | 0.0467        | 0.644  | 15        |      |
| Iron      | 5.136   | 0.20   | 5       | 0.09651       | 101  | 80-120        | 5.118         | 0.351  | 15        |      |
| Lead      | 0.04553 | 0.0050 | 0.05    | 0             | 91.1 | 80-118        | 0.04549       | 0.0879 | 15        |      |
| Manganese | 0.04934 | 0.0050 | 0.05    | 0.001041      | 96.6 | 82-119        | 0.04864       | 1.43   | 15        |      |
| Nickel    | 0.04856 | 0.0050 | 0.05    | 0             | 97.1 | 85-120        | 0.04871       | 0.308  | 15        |      |
| Potassium | 5.029   | 0.20   | 5       | 0.03161       | 99.9 | 80-120        | 5.162         | 2.61   | 15        |      |
| Selenium  | 0.04338 | 0.0050 | 0.05    | 0             | 86.8 | 79.2-118      | 0.04315       | 0.532  | 15        |      |
| Silver    | 0.04786 | 0.0050 | 0.05    | 0             | 95.7 | 83-117        | 0.04756       | 0.629  | 15        |      |
| Sodium    | 5.47    | 0.20   | 5       | 0.1689        | 106  | 82.4-120      | 5.389         | 1.49   | 15        |      |
| Vanadium  | 0.04709 | 0.0050 | 0.05    | 0             | 94.2 | 82.1-119      | 0.04747       | 0.804  | 15        |      |
| Zinc      | 0.04683 | 0.0050 | 0.05    | 0.001622      | 90.4 | 83-118        | 0.04672       | 0.235  | 15        |      |

MSD Sample ID: 0404182-07CMSD Test Code: SW6020 Units: mg/L Analysis Date: 04/21/04 15:36

Client ID: Run ID: ICP4500\_040421A SeqNo: 459341 Prep Date: 4/19/2004 DF: 1

| Analyte    | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Magnesium  | 5.15    | 0.20   | 5       | 0.0352        | 102  | 80-120        | 5.212         | 1.2  | 15        |      |
| Molybdenum | 0.04549 | 0.0050 | 0.05    | 0.0003097     | 90.4 | 84.6-115      | 0.04458       | 2.02 | 15        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8685 InstrumentID: ICP4500

DUP Sample ID: 0404182-07CDUP Test Code: SW6020 Units: mg/L Analysis Date: 04/20/04 17:43

Client ID: Run ID: ICP4500\_040420A SeqNo: 458735 Prep Date: 4/19/2004 DF: 1

| Analyte   | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|-----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 0.01993   | 0.010  | 0       | 0             | 0    | 0-0           | 0.0251        | 23   | 25        |      |
| Arsenic   | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0008186     | 0    | 25        |      |
| Barium    | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0005035     | 0    | 25        |      |
| Beryllium | ND        | 0.0020 | 0       | 0             | 0    | 0-0           | 0.00003403    | 0    | 25        |      |
| Boron     | 0.01134   | 0.020  | 0       | 0             | 0    | 0-0           | 0.01989       | 0    | 25        | J    |
| Cadmium   | ND        | 0.0020 | 0       | 0             | 0    | 0-0           | 0.00003854    | 0    | 25        |      |
| Calcium   | 0.1341    | 0.50   | 0       | 0             | 0    | 0-0           | 0.1571        | 0    | 25        | J    |
| Chromium  | 0.0005101 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0008466     | 0    | 25        | J    |
| Cobalt    | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00006778    | 0    | 25        |      |
| Copper    | 0.0004539 | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0005075     | 0    | 25        | J    |
| Iron      | 0.06511   | 0.20   | 0       | 0             | 0    | 0-0           | 0.09651       | 0    | 25        | J    |
| Lead      | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00009129    | 0    | 25        |      |
| Manganese | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.001041      | 0    | 25        |      |
| Nickel    | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0002571     | 0    | 25        |      |
| Potassium | 0.02571   | 0.20   | 0       | 0             | 0    | 0-0           | 0.03161       | 0    | 25        | J    |
| Selenium  | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | -0.0001496    | 0    | 25        |      |
| Silver    | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0000283     | 0    | 25        |      |
| Sodium    | 0.1637    | 0.20   | 0       | 0             | 0    | 0-0           | 0.1689        | 0    | 25        | J    |
| Vanadium  | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.000009401   | 0    | 25        |      |
| Zinc      | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.001622      | 0    | 25        |      |

DUP Sample ID: 0404182-07CDUP Test Code: SW6020 Units: mg/L Analysis Date: 04/21/04 15:27

Client ID: Run ID: ICP4500\_040421A SeqNo: 459339 Prep Date: 4/19/2004 DF: 1

| Analyte    | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Magnesium  | ND     | 0.20   | 0       | 0             | 0    | 0-0           | 0.0352        | 0    | 25        |      |
| Molybdenum | ND     | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0003097     | 0    | 25        |      |

The following samples were analyzed in this batch:

0404140-01C 0404140-02C 0404140-03C

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8655 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-040415 Test Code: SW8270 Units: µg/L Analysis Date: 04/16/04 18:28

Client ID: Run ID: SV-3\_040416A SeqNo: 457880 Prep Date: 4/15/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 96.59  | 0   | 100     | 0             | 96.6 | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 81.06  | 0   | 100     | 0             | 81.1 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 50.6   | 0   | 100     | 0             | 50.6 | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 91.4   | 0   | 100     | 0             | 91.4 | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 80.7   | 0   | 100     | 0             | 80.7 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 32.92  | 0   | 100     | 0             | 32.9 | 11-100        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



**CLIENT:** Navajo Refining Company  
**Work Order:** 0404140  
**Project:** NCL/TEL

## QC BATCH REPORT

Batch ID: 8713 InstrumentID: Mercury

**MBLK** Sample ID: **GBLKW1-042004** Test Code: **SW7470** Units: **mg/L** Analysis Date: **04/22/04 14:48**

Client ID: Run ID: **MERCURY\_040422A** SeqNo: **459866** Prep Date: **4/20/2004** DF: **1**

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

**LCS** Sample ID: **GLCSW1-042004** Test Code: **SW7470** Units: **mg/L** Analysis Date: **04/22/04 15:10**

Client ID: Run ID: **MERCURY\_040422A** SeqNo: **459867** Prep Date: **4/20/2004** DF: **1**

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00474 | 0.00020 | 0.005   | 0             | 94.8 | 83-115        | 0             |      |           |      |

**LCSD** Sample ID: **GLCSDW1-042004** Test Code: **SW7470** Units: **mg/L** Analysis Date: **04/22/04 15:11**

Client ID: Run ID: **MERCURY\_040422A** SeqNo: **459868** Prep Date: **4/20/2004** DF: **1**

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Mercury | 0.00476 | 0.00020 | 0.005   | 0             | 95.2 | 83-115        | 0.00474       | 0.421 | 20        |      |

**MS** Sample ID: **0404211-02AMS** Test Code: **SW7470** Units: **mg/L** Analysis Date: **04/22/04 15:16**

Client ID: Run ID: **MERCURY\_040422A** SeqNo: **459871** Prep Date: **4/20/2004** DF: **1**

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00551 | 0.00020 | 0.005   | 0.000021      | 110  | 83-115        | 0             |      |           |      |

**MSD** Sample ID: **0404211-02AMSD** Test Code: **SW7470** Units: **mg/L** Analysis Date: **04/22/04 15:17**

Client ID: Run ID: **MERCURY\_040422A** SeqNo: **459872** Prep Date: **4/20/2004** DF: **1**

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Mercury | 0.00549 | 0.00020 | 0.005   | 0.000021      | 109  | 83-115        | 0.00551       | 0.364 | 20        |      |

**DUP** Sample ID: **0404211-02ADUP** Test Code: **SW7470** Units: **mg/L** Analysis Date: **04/22/04 15:14**

Client ID: Run ID: **MERCURY\_040422A** SeqNo: **459870** Prep Date: **4/20/2004** DF: **1**

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | 0.000021      | 0    | 20        |      |

The following samples were analyzed in this batch:

0404140-01C 0404140-02C 0404140-03C

ND - Not Detected at the Reporting Limit

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R - RPD outside accepted recovery limits

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E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8655 InstrumentID: SV-3

LCS Sample ID: SLCSW1-040415 Test Code: SW8270 Units: µg/L Analysis Date: 04/16/04 18:56

Client ID: Run ID: SV-3\_040416A SeqNo: 457881 Prep Date: 4/15/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 47.7   | 10  | 50      | 0             | 95.4 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 102    | 10  | 100     | 0             | 102  | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 98.08  | 10  | 100     | 0             | 98.1 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 48.04  | 10  | 50      | 0             | 96.1 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 93.33  | 10  | 100     | 0             | 93.3 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 51.39  | 10  | 50      | 0             | 103  | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 95.15  | 10  | 100     | 0             | 95.1 | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 44.41  | 10  | 50      | 0             | 88.8 | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 128.1  | 10  | 150     | 0             | 85.4 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 49.26  | 10  | 50      | 0             | 98.5 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 69.84  | 10  | 100     | 0             | 69.8 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 56.9   | 10  | 50      | 0             | 114  | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 49.5   | 10  | 50      | 0             | 99   | 67-116        | 0             |      |           |      |
| Aniline                    | 39.6   | 10  | 50      | 0             | 79.2 | 40-130        | 0             |      |           |      |
| Anthracene                 | 51.9   | 10  | 50      | 0             | 104  | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 49.71  | 10  | 50      | 0             | 99.4 | 55-131        | 0             |      |           |      |
| Benzidine                  | 29.38  | 10  | 50      | 0             | 58.8 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 47.51  | 10  | 50      | 0             | 95   | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 49.17  | 10  | 50      | 0             | 98.3 | 42-123        | 0             |      |           |      |
| Isophorone                 | 50     | 10  | 50      | 0             | 100  | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 49.7   | 10  | 50      | 0             | 99.4 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 28.12  | 10  | 50      | 0             | 56.2 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 55.73  | 10  | 50      | 0             | 111  | 72-144        | 0             |      |           |      |
| Naphthalene                | 48.43  | 10  | 50      | 0             | 96.9 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 48.17  | 10  | 50      | 0             | 96.3 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 99.11  | 10  | 100     | 0             | 99.1 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 49.55  | 10  | 50      | 0             | 99.1 | 69-119        | 0             |      |           |      |
| Phenol                     | 56.22  | 10  | 100     | 0             | 56.2 | 16-115        | 0             |      |           |      |
| Pyrene                     | 51.18  | 10  | 50      | 0             | 102  | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 99.03  | 0   | 100     | 0             | 99   | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 85.47  | 0   | 100     | 0             | 85.5 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 70.99  | 0   | 100     | 0             | 71   | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 92.79  | 0   | 100     | 0             | 92.8 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 87.36  | 0   | 100     | 0             | 87.4 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 52     | 0   | 100     | 0             | 52   | 11-100        | 0             |      |           |      |

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P - Dual Column results percent difference > 40%

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E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8655 InstrumentID: SV-3

LCSD Sample ID: SLCSDW1-040415 Test Code: SW8270 Units: µg/L Analysis Date: 04/16/04 19:24

Client ID: Run ID: SV-3\_040416A SeqNo: 457882 Prep Date: 4/15/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,2,4-Trichlorobenzene     | 46.62  | 10  | 50      | 0             | 93.2 | 50-115        | 47.7          | 2.28   | 30        |      |
| 2,4,5-Trichlorophenol      | 99.14  | 10  | 100     | 0             | 99.1 | 68-128        | 102           | 2.84   | 30        |      |
| 2,4,6-Trichlorophenol      | 95.05  | 10  | 100     | 0             | 95   | 66-125        | 98.08         | 3.14   | 30        |      |
| 2-Methylnaphthalene        | 47.12  | 10  | 50      | 0             | 94.2 | 47-122        | 48.04         | 1.93   | 30        |      |
| 2-Methylphenol             | 89.11  | 10  | 100     | 0             | 89.1 | 51-115        | 93.33         | 4.63   | 30        |      |
| 2-Nitroaniline             | 49.81  | 10  | 50      | 0             | 99.6 | 64-128        | 51.39         | 3.12   | 30        |      |
| 2-Nitrophenol              | 92.84  | 10  | 100     | 0             | 92.8 | 60-119        | 95.15         | 2.46   | 30        |      |
| 3-Nitroaniline             | 39.87  | 10  | 50      | 0             | 79.7 | 61-118        | 44.41         | 10.8   | 30        |      |
| 4-Methylphenol             | 124.9  | 10  | 150     | 0             | 83.3 | 44-115        | 128.1         | 2.52   | 30        |      |
| 4-Nitroaniline             | 47.61  | 10  | 50      | 0             | 95.2 | 61-123        | 49.26         | 3.4    | 30        |      |
| 4-Nitrophenol              | 71.6   | 10  | 100     | 0             | 71.6 | 17-100        | 69.84         | 2.5    | 30        |      |
| Acenaphthene               | 55.73  | 10  | 50      | 0             | 111  | 68-115        | 56.9          | 2.07   | 30        |      |
| Acenaphthylene             | 47.88  | 10  | 50      | 0             | 95.8 | 67-116        | 49.5          | 3.32   | 30        |      |
| Aniline                    | 29.21  | 10  | 50      | 0             | 58.4 | 40-130        | 39.6          | 30.2   | 30        | R    |
| Anthracene                 | 51.48  | 10  | 50      | 0             | 103  | 70-129        | 51.9          | 0.804  | 30        |      |
| Benz(a)anthracene          | 49.7   | 10  | 50      | 0             | 99.4 | 55-131        | 49.71         | 0.0323 | 30        |      |
| Benzidine                  | 16.18  | 10  | 50      | 0             | 32.4 | 10-115        | 29.38         | 58     | 30        | R    |
| Hexachloroethane           | 47.19  | 10  | 50      | 0             | 94.4 | 46-115        | 47.51         | 0.686  | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 48.32  | 10  | 50      | 0             | 96.6 | 42-123        | 49.17         | 1.74   | 30        |      |
| Isophorone                 | 48.52  | 10  | 50      | 0             | 97   | 63-117        | 50            | 3      | 30        |      |
| N-Nitrosodi-n-propylamine  | 46.29  | 10  | 50      | 0             | 92.6 | 67-115        | 49.7          | 7.11   | 30        |      |
| N-Nitrosodimethylamine     | 28.51  | 10  | 50      | 0             | 57   | 28-115        | 28.12         | 1.39   | 30        |      |
| N-Nitrosodiphenylamine     | 54.85  | 10  | 50      | 0             | 110  | 72-144        | 55.73         | 1.6    | 30        |      |
| Naphthalene                | 47.59  | 10  | 50      | 0             | 95.2 | 52-115        | 48.43         | 1.74   | 30        |      |
| Nitrobenzene               | 47.45  | 10  | 50      | 0             | 94.9 | 65-115        | 48.17         | 1.5    | 30        |      |
| Pentachlorophenol          | 97.21  | 10  | 100     | 0             | 97.2 | 65-123        | 99.11         | 1.94   | 30        |      |
| Phenanthrene               | 49.4   | 10  | 50      | 0             | 98.8 | 69-119        | 49.55         | 0.296  | 30        |      |
| Phenol                     | 55.82  | 10  | 100     | 0             | 55.8 | 16-115        | 56.22         | 0.72   | 30        |      |
| Pyrene                     | 49.13  | 10  | 50      | 0             | 98.3 | 51-130        | 51.18         | 4.08   | 30        |      |
| Surr: 2,4,6-Tribromophenol | 96.85  | 0   | 100     | 0             | 96.9 | 39-153        | 99.03         | 2.22   | 30        |      |
| Surr: 2-Fluorobiphenyl     | 84.51  | 0   | 100     | 0             | 84.5 | 40-147        | 85.47         | 1.12   | 30        |      |
| Surr: 2-Fluorophenol       | 70.36  | 0   | 100     | 0             | 70.4 | 21-110        | 70.99         | 0.887  | 30        |      |
| Surr: 4-Terphenyl-d14      | 89.69  | 0   | 100     | 0             | 89.7 | 39-141        | 92.79         | 3.39   | 30        |      |
| Surr: Nitrobenzene-d5      | 86.39  | 0   | 100     | 0             | 86.4 | 37-140        | 87.36         | 1.12   | 30        |      |
| Surr: Phenol-d6            | 51.76  | 0   | 100     | 0             | 51.8 | 11-100        | 52            | 0.46   | 30        |      |

The following samples were analyzed in this batch:

0404140-01E 0404140-02E 0404140-03E

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20118 InstrumentID: VOA\_I

MBLK Sample ID: VBLKW-0426 Test Code: SW8260 Units: µg/L Analysis Date: 04/26/04 16:10

Client ID: Run ID: VOA\_I\_040426A SeqNo: 461696 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 43.15  | 5.0 | 50      | 0             | 86.3 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 41.57  | 5.0 | 50      | 0             | 83.1 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 44.88  | 5.0 | 50      | 0             | 89.8 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 48.66  | 5.0 | 50      | 0             | 97.3 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20118 InstrumentID: VOA\_I

LCS Sample ID: VLCSW-0426 Test Code: SW8260 Units: µg/L Analysis Date: 04/26/04 15:43

Client ID: Run ID: VOA\_I\_040426A SeqNo: 461695 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 49.86  | 5.0 | 50      | 0             | 99.7 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 50.86  | 5.0 | 50      | 0             | 102  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 52.15  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 49.93  | 5.0 | 50      | 0             | 99.9 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 49.39  | 5.0 | 50      | 0             | 98.8 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 50.49  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 99.63  | 10  | 100     | 0             | 99.6 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 99.8   | 10  | 100     | 0             | 99.8 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 97.97  | 10  | 100     | 0             | 98   | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 97.33  | 10  | 100     | 0             | 97.3 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 99.72  | 10  | 100     | 0             | 99.7 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 54.77  | 5.0 | 50      | 0             | 110  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 51.45  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Bromoform                   | 52.72  | 5.0 | 50      | 0             | 105  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 52.18  | 5.0 | 50      | 0             | 104  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 97.47  | 10  | 100     | 0             | 97.5 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 49.18  | 5.0 | 50      | 0             | 98.4 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 52.56  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Chloroethane                | 49.06  | 5.0 | 50      | 0             | 98.1 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 49.98  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Chloromethane               | 52.35  | 5.0 | 50      | 0             | 105  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 51.16  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 52.1   | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 51.56  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 109    | 10  | 100     | 0             | 109  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 49.11  | 10  | 50      | 0             | 98.2 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 52.36  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 52.55  | 5.0 | 50      | 0             | 105  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 56.67  | 5.0 | 50      | 0             | 113  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 52.02  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 53.22  | 5.0 | 50      | 0             | 106  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 103.3  | 10  | 100     | 0             | 103  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 52.37  | 2.0 | 50      | 0             | 105  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 161.3  | 15  | 150     | 0             | 108  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44.07  | 5.0 | 50      | 0             | 88.1 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.33  | 5.0 | 50      | 0             | 96.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.93  | 5.0 | 50      | 0             | 93.9 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 51.73  | 5.0 | 50      | 0             | 103  | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20118 InstrumentID: VOA\_I

MS Sample ID: 0404140-01AMS Test Code: SW8260 Units: µg/L Analysis Date: 04/26/04 17:04

Client ID: MW-60 Run ID: VOA\_I\_040426A SeqNo: 461698 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 46.99  | 5.0 | 50      | 0             | 94   | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 55.71  | 5.0 | 50      | 0             | 111  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 56.18  | 5.0 | 50      | 0             | 112  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 50.64  | 5.0 | 50      | 0             | 101  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 45.53  | 5.0 | 50      | 0             | 91.1 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 56.23  | 5.0 | 50      | 0             | 112  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 113.1  | 10  | 100     | 0             | 113  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 29.77  | 10  | 100     | 0             | 29.8 | 60-135        | 0             |      |           | S    |
| 2-Hexanone                  | 103.6  | 10  | 100     | 0             | 104  | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 107.3  | 10  | 100     | 0             | 107  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 122.7  | 10  | 100     | 0             | 123  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 68.48  | 5.0 | 50      | 13.29         | 110  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 54.16  | 5.0 | 50      | 0             | 108  | 80-120        | 0             |      |           |      |
| Bromoform                   | 57.02  | 5.0 | 50      | 0             | 114  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 48.3   | 5.0 | 50      | 0             | 96.6 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 92.16  | 10  | 100     | 0             | 92.2 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 44.33  | 5.0 | 50      | 0             | 88.7 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 52.92  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Chloroethane                | 49.87  | 5.0 | 50      | 0             | 99.7 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 52.4   | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Chloromethane               | 40.76  | 5.0 | 50      | 0             | 81.5 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 53.59  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 56.69  | 5.0 | 50      | 0             | 113  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 53.81  | 5.0 | 50      | 5.363         | 96.9 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 108    | 10  | 100     | 0             | 108  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 51.99  | 10  | 50      | 0             | 104  | 76.2-120      | 0             |      |           |      |
| Styrene                     | 53.04  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 47.56  | 5.0 | 50      | 0             | 95.1 | 68.5-130      | 0             |      |           |      |
| Toluene                     | 57.7   | 5.0 | 50      | 0             | 115  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 54.22  | 5.0 | 50      | 0             | 108  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 51.82  | 5.0 | 50      | 0             | 104  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 115.6  | 10  | 100     | 0             | 116  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 46.65  | 2.0 | 50      | 0             | 93.3 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 159.4  | 15  | 150     | 0             | 106  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.28  | 5.0 | 50      | 0             | 90.6 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 46.72  | 5.0 | 50      | 0             | 93.4 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 45.67  | 5.0 | 50      | 0             | 91.3 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.6   | 5.0 | 50      | 0             | 99.2 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20118 InstrumentID: VOA\_I

MSD Sample ID: 0404140-01AMSD Test Code: SW8260 Units: µg/L Analysis Date: 04/26/04 17:31

Client ID: MW-60 Run ID: VOA\_I\_040426A SeqNo: 461699 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,1,1-Trichloroethane       | 47.61  | 5.0 | 50      | 0             | 95.2 | 75.2-120      | 46.99         | 1.3   | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 58.66  | 5.0 | 50      | 0             | 117  | 72.4-121      | 55.71         | 5.15  | 20        |      |
| 1,1,2-Trichloroethane       | 57.07  | 5.0 | 50      | 0             | 114  | 80-120        | 56.18         | 1.57  | 20        |      |
| 1,1-Dichloroethane          | 52.15  | 5.0 | 50      | 0             | 104  | 76.9-120      | 50.64         | 2.93  | 20        |      |
| 1,1-Dichloroethene          | 47.56  | 5.0 | 50      | 0             | 95.1 | 72.6-123      | 45.53         | 4.37  | 20        |      |
| 1,2-Dichloroethane          | 56.12  | 5.0 | 50      | 0             | 112  | 80-120        | 56.23         | 0.194 | 20        |      |
| 2-Butanone                  | 123.6  | 10  | 100     | 0             | 124  | 69-131        | 113.1         | 8.82  | 20        |      |
| 2-Chloroethyl vinyl ether   | 23.17  | 10  | 100     | 0             | 23.2 | 60-135        | 29.77         | 25    | 20        | SR   |
| 2-Hexanone                  | 117.7  | 10  | 100     | 0             | 118  | 55.6-126      | 103.6         | 12.7  | 20        |      |
| 4-Methyl-2-pentanone        | 113.2  | 10  | 100     | 0             | 113  | 67.4-121      | 107.3         | 5.34  | 20        |      |
| Acetone                     | 121    | 10  | 100     | 0             | 121  | 64.4-140      | 122.7         | 1.35  | 20        |      |
| Benzene                     | 76.21  | 5.0 | 50      | 13.29         | 126  | 80-120        | 68.48         | 10.7  | 20        | S    |
| Bromodichloromethane        | 55.67  | 5.0 | 50      | 0             | 111  | 80-120        | 54.16         | 2.76  | 20        |      |
| Bromoform                   | 58     | 5.0 | 50      | 0             | 116  | 77.9-121      | 57.02         | 1.7   | 20        |      |
| Bromomethane                | 52.67  | 5.0 | 50      | 0             | 105  | 63.3-137      | 48.3          | 8.66  | 20        |      |
| Carbon disulfide            | 97.42  | 10  | 100     | 0             | 97.4 | 74.1-123      | 92.16         | 5.55  | 20        |      |
| Carbon tetrachloride        | 48.19  | 5.0 | 50      | 0             | 96.4 | 74.7-120      | 44.33         | 8.33  | 20        |      |
| Chlorobenzene               | 54.6   | 5.0 | 50      | 0             | 109  | 80-120        | 52.92         | 3.12  | 20        |      |
| Chloroethane                | 48.51  | 5.0 | 50      | 0             | 97   | 74.7-126      | 49.87         | 2.77  | 20        |      |
| Chloroform                  | 51.44  | 5.0 | 50      | 0             | 103  | 80-120        | 52.4          | 1.86  | 20        |      |
| Chloromethane               | 39.8   | 5.0 | 50      | 0             | 79.6 | 64.5-132      | 40.76         | 2.39  | 20        |      |
| cis-1,3-Dichloropropene     | 54.6   | 5.0 | 50      | 0             | 109  | 80-120        | 53.59         | 1.87  | 20        |      |
| Dibromochloromethane        | 57.63  | 5.0 | 50      | 0             | 115  | 80-120        | 56.69         | 1.66  | 20        |      |
| Ethylbenzene                | 59.41  | 5.0 | 50      | 5.363         | 108  | 80-120        | 53.81         | 9.89  | 20        |      |
| m,p-Xylene                  | 113.6  | 10  | 100     | 0             | 114  | 80-120        | 108           | 5.11  | 20        |      |
| Methylene chloride          | 51.27  | 10  | 50      | 0             | 103  | 76.2-120      | 51.99         | 1.39  | 20        |      |
| Styrene                     | 53.78  | 5.0 | 50      | 0             | 108  | 80-120        | 53.04         | 1.38  | 20        |      |
| Tetrachloroethene           | 51.92  | 5.0 | 50      | 0             | 104  | 68.5-130      | 47.56         | 8.76  | 20        |      |
| Toluene                     | 58.21  | 5.0 | 50      | 0             | 116  | 80-120        | 57.7          | 0.887 | 20        |      |
| trans-1,3-Dichloropropene   | 55.32  | 5.0 | 50      | 0             | 111  | 80-120        | 54.22         | 2.02  | 20        |      |
| Trichloroethene             | 54.68  | 5.0 | 50      | 0             | 109  | 78.9-120      | 51.82         | 5.36  | 20        |      |
| Vinyl acetate               | 122.1  | 10  | 100     | 0             | 122  | 62.4-133      | 115.6         | 5.48  | 20        |      |
| Vinyl chloride              | 49.69  | 2.0 | 50      | 0             | 99.4 | 72.7-128      | 46.65         | 6.32  | 20        |      |
| Xylenes, Total              | 166.7  | 15  | 150     | 0             | 111  | 80-120        | 159.4         | 4.5   | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 44.05  | 5.0 | 50      | 0             | 88.1 | 71-126        | 45.28         | 2.75  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 46.87  | 5.0 | 50      | 0             | 93.7 | 74-125        | 46.72         | 0.319 | 20        |      |
| Surr: Dibromofluoromethane  | 44.77  | 5.0 | 50      | 0             | 89.5 | 73-126        | 45.67         | 1.99  | 20        |      |
| Surr: Toluene-d8            | 48.96  | 5.0 | 50      | 0             | 97.9 | 75-125        | 49.6          | 1.31  | 20        |      |

The following samples were analyzed in this batch:

0404140-01A 0404140-02A 0404140-03A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20122 InstrumentID: VOA\_I

MBLK Sample ID: VBLKW-0426 Test Code: SW8260 Units: µg/L Analysis Date: 04/27/04 0:39

Client ID: Run ID: VOA\_I\_040426B SeqNo: 461896 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.61  | 5.0 | 50      | 0             | 91.2 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 42.33  | 5.0 | 50      | 0             | 84.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46     | 5.0 | 50      | 0             | 92   | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 48.78  | 5.0 | 50      | 0             | 97.6 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20122 InstrumentID: VOA\_I

LCS Sample ID: VLCSW-0426 Test Code: SW8260 Units: µg/L Analysis Date: 04/27/04 0:12

Client ID: Run ID: VOA\_I\_040426B SeqNo: 461895 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 49.12  | 5.0 | 50      | 0             | 98.2 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 46.19  | 5.0 | 50      | 0             | 92.4 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 46.23  | 5.0 | 50      | 0             | 92.5 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 48.75  | 5.0 | 50      | 0             | 97.5 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 49.49  | 5.0 | 50      | 0             | 99   | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 52.59  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 95.12  | 10  | 100     | 0             | 95.1 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 95.25  | 10  | 100     | 0             | 95.2 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 93.48  | 10  | 100     | 0             | 93.5 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 88.74  | 10  | 100     | 0             | 88.7 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 103.2  | 10  | 100     | 0             | 103  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 53.94  | 5.0 | 50      | 0             | 108  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 52.12  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Bromoform                   | 51.49  | 5.0 | 50      | 0             | 103  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 49.23  | 5.0 | 50      | 0             | 98.5 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 98.06  | 10  | 100     | 0             | 98.1 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 50.63  | 5.0 | 50      | 0             | 101  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 50.09  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Chloroethane                | 50.12  | 5.0 | 50      | 0             | 100  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 49.72  | 5.0 | 50      | 0             | 99.4 | 80-120        | 0             |      |           |      |
| Chloromethane               | 46.58  | 5.0 | 50      | 0             | 93.2 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 49.2   | 5.0 | 50      | 0             | 98.4 | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 50.87  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 48.38  | 5.0 | 50      | 0             | 96.8 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 107.1  | 10  | 100     | 0             | 107  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 48.09  | 10  | 50      | 0             | 96.2 | 76.2-120      | 0             |      |           |      |
| Styrene                     | 49.78  | 5.0 | 50      | 0             | 99.6 | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 50.93  | 5.0 | 50      | 0             | 102  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 54.65  | 5.0 | 50      | 0             | 109  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 49.2   | 5.0 | 50      | 0             | 98.4 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 54.37  | 5.0 | 50      | 0             | 109  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 77     | 10  | 100     | 0             | 77   | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 53.02  | 2.0 | 50      | 0             | 106  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 156.7  | 15  | 150     | 0             | 104  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44.2   | 5.0 | 50      | 0             | 88.4 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.01  | 5.0 | 50      | 0             | 96   | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 45.58  | 5.0 | 50      | 0             | 91.2 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 50.56  | 5.0 | 50      | 0             | 101  | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20122 InstrumentID: VOA\_I

MS Sample ID: 0404148-01ZMS Test Code: SW8260 Units: µg/L Analysis Date: 04/27/04 2:00

Client ID: Run ID: VOA\_I\_040426B SeqNo: 461898 Prep Date: DF: 20

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 1048   | 100 | 1000    | 0             | 105  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 990.2  | 100 | 1000    | 0             | 99   | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 1047   | 100 | 1000    | 0             | 105  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 1024   | 100 | 1000    | 0             | 102  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 1009   | 100 | 1000    | 0             | 101  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 1116   | 100 | 1000    | 0             | 112  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 1957   | 200 | 2000    | 0             | 97.8 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 1252   | 200 | 2000    | 0             | 62.6 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 1837   | 200 | 2000    | 0             | 91.9 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 1828   | 200 | 2000    | 0             | 91.4 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 1896   | 200 | 2000    | 0             | 94.8 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 1097   | 100 | 1000    | 0             | 110  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 1114   | 100 | 1000    | 0             | 111  | 80-120        | 0             |      |           |      |
| Bromoform                   | 1083   | 100 | 1000    | 0             | 108  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 984.3  | 100 | 1000    | 0             | 98.4 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 2061   | 200 | 2000    | 0             | 103  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 1053   | 100 | 1000    | 0             | 105  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 1074   | 100 | 1000    | 0             | 107  | 80-120        | 0             |      |           |      |
| Chloroethane                | 1065   | 100 | 1000    | 0             | 107  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 1065   | 100 | 1000    | 0             | 107  | 80-120        | 0             |      |           |      |
| Chloromethane               | 1021   | 100 | 1000    | 0             | 102  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 989.9  | 100 | 1000    | 0             | 99   | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 1064   | 100 | 1000    | 0             | 106  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 1028   | 100 | 1000    | 0             | 103  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 2261   | 200 | 2000    | 0             | 113  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 1076   | 200 | 1000    | 0             | 108  | 76.2-120      | 0             |      |           |      |
| Styrene                     | 1067   | 100 | 1000    | 0             | 107  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 1023   | 100 | 1000    | 0             | 102  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 1118   | 100 | 1000    | 0             | 112  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 982.1  | 100 | 1000    | 0             | 98.2 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 1054   | 100 | 1000    | 0             | 105  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 2069   | 200 | 2000    | 0             | 103  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 1083   | 40  | 1000    | 0             | 108  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 3307   | 300 | 3000    | 0             | 110  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 964.4  | 100 | 1000    | 0             | 96.4 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 980.2  | 100 | 1000    | 0             | 98   | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 953.3  | 100 | 1000    | 0             | 95.3 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 1031   | 100 | 1000    | 0             | 103  | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20122 InstrumentID: VOA\_I

MSD Sample ID: 0404148-01ZMSD Test Code: SW8260 Units: µg/L Analysis Date: 04/27/04 2:27

Client ID: Run ID: VOA\_I\_040426B SeqNo: 461899 Prep Date: DF: 20

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 1003   | 100 | 1000    | 0             | 100  | 75.2-120      | 1048          | 4.32   | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 993    | 100 | 1000    | 0             | 99.3 | 72.4-121      | 990.2         | 0.283  | 20        |      |
| 1,1,2-Trichloroethane       | 1035   | 100 | 1000    | 0             | 104  | 80-120        | 1047          | 1.08   | 20        |      |
| 1,1-Dichloroethane          | 1040   | 100 | 1000    | 0             | 104  | 76.9-120      | 1024          | 1.56   | 20        |      |
| 1,1-Dichloroethene          | 955.6  | 100 | 1000    | 0             | 95.6 | 72.6-123      | 1009          | 5.48   | 20        |      |
| 1,2-Dichloroethane          | 1084   | 100 | 1000    | 0             | 108  | 80-120        | 1116          | 2.9    | 20        |      |
| 2-Butanone                  | 1975   | 200 | 2000    | 0             | 98.8 | 69-131        | 1957          | 0.935  | 20        |      |
| 2-Chloroethyl vinyl ether   | 1217   | 200 | 2000    | 0             | 60.8 | 60-135        | 1252          | 2.9    | 20        |      |
| 2-Hexanone                  | 1745   | 200 | 2000    | 0             | 87.3 | 55.6-126      | 1837          | 5.14   | 20        |      |
| 4-Methyl-2-pentanone        | 1805   | 200 | 2000    | 0             | 90.3 | 67.4-121      | 1828          | 1.24   | 20        |      |
| Acetone                     | 1940   | 200 | 2000    | 0             | 97   | 64.4-140      | 1896          | 2.27   | 20        |      |
| Benzene                     | 1086   | 100 | 1000    | 0             | 109  | 80-120        | 1097          | 0.996  | 20        |      |
| Bromodichloromethane        | 1088   | 100 | 1000    | 0             | 109  | 80-120        | 1114          | 2.38   | 20        |      |
| Bromoform                   | 1059   | 100 | 1000    | 0             | 106  | 77.9-121      | 1083          | 2.18   | 20        |      |
| Bromomethane                | 1041   | 100 | 1000    | 0             | 104  | 63.3-137      | 984.3         | 5.61   | 20        |      |
| Carbon disulfide            | 1959   | 200 | 2000    | 0             | 97.9 | 74.1-123      | 2061          | 5.1    | 20        |      |
| Carbon tetrachloride        | 950.3  | 100 | 1000    | 0             | 95   | 74.7-120      | 1053          | 10.3   | 20        |      |
| Chlorobenzene               | 1057   | 100 | 1000    | 0             | 106  | 80-120        | 1074          | 1.6    | 20        |      |
| Chloroethane                | 1023   | 100 | 1000    | 0             | 102  | 74.7-126      | 1065          | 4.02   | 20        |      |
| Chloroform                  | 1068   | 100 | 1000    | 0             | 107  | 80-120        | 1065          | 0.192  | 20        |      |
| Chloromethane               | 1032   | 100 | 1000    | 0             | 103  | 64.5-132      | 1021          | 1.09   | 20        |      |
| cis-1,3-Dichloropropene     | 997.9  | 100 | 1000    | 0             | 99.8 | 80-120        | 989.9         | 0.807  | 20        |      |
| Dibromochloromethane        | 1064   | 100 | 1000    | 0             | 106  | 80-120        | 1064          | 0.0363 | 20        |      |
| Ethylbenzene                | 995.4  | 100 | 1000    | 0             | 99.5 | 80-120        | 1028          | 3.22   | 20        |      |
| m,p-Xylene                  | 2185   | 200 | 2000    | 0             | 109  | 80-120        | 2261          | 3.41   | 20        |      |
| Methylene chloride          | 1074   | 200 | 1000    | 0             | 107  | 76.2-120      | 1076          | 0.209  | 20        |      |
| Styrene                     | 1046   | 100 | 1000    | 0             | 105  | 80-120        | 1067          | 1.94   | 20        |      |
| Tetrachloroethene           | 943.6  | 100 | 1000    | 0             | 94.4 | 68.5-130      | 1023          | 8.12   | 20        |      |
| Toluene                     | 1108   | 100 | 1000    | 0             | 111  | 80-120        | 1118          | 0.858  | 20        |      |
| trans-1,3-Dichloropropene   | 995.3  | 100 | 1000    | 0             | 99.5 | 80-120        | 982.1         | 1.33   | 20        |      |
| Trichloroethene             | 1025   | 100 | 1000    | 0             | 103  | 78.9-120      | 1054          | 2.81   | 20        |      |
| Vinyl acetate               | 2129   | 200 | 2000    | 0             | 106  | 62.4-133      | 2069          | 2.84   | 20        |      |
| Vinyl chloride              | 999.2  | 40  | 1000    | 0             | 99.9 | 72.7-128      | 1083          | 8.03   | 20        |      |
| Xylenes, Total              | 3206   | 300 | 3000    | 0             | 107  | 80-120        | 3307          | 3.08   | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 950.8  | 100 | 1000    | 0             | 95.1 | 71-126        | 964.4         | 1.42   | 20        |      |
| Surr: 4-Bromofluorobenzene  | 959    | 100 | 1000    | 0             | 95.9 | 74-125        | 980.2         | 2.19   | 20        |      |
| Surr: Dibromofluoromethane  | 953.1  | 100 | 1000    | 0             | 95.3 | 73-126        | 953.3         | 0.0256 | 20        |      |
| Surr: Toluene-d8            | 1033   | 100 | 1000    | 0             | 103  | 75-125        | 1031          | 0.202  | 20        |      |

The following samples were analyzed in this batch: 0404140-03A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0404140  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R19930** InstrumentID: **Wet Chemistry**

**MBLK** Sample ID: **WMBW1-041504** Test Code: **E310.1** Units: **mg/L** Analysis Date: **04/15/04 0:00**

Client ID: Run ID: **WET CHEMISTRY\_0404** SeqNo: **456584** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

**LCS** Sample ID: **WLCSW1-041504** Test Code: **E310.1** Units: **mg/L** Analysis Date: **04/15/04 0:00**

Client ID: Run ID: **WET CHEMISTRY\_0404** SeqNo: **456585** Prep Date: DF: **1**

| Analyte                      | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Total (As CaCO3) | 980.6  | 5.0 | 1000    | 0             | 98.1 | 80-120        | 0             |      |           |      |

**DUP** Sample ID: **0404115-03BDUP** Test Code: **E310.1** Units: **mg/L** Analysis Date: **04/15/04 0:00**

Client ID: Run ID: **WET CHEMISTRY\_0404** SeqNo: **456596** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 323.6  | 5.0 | 0       | 0             | 0    | 0-0           | 323.6         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 323.6  | 5.0 | 0       | 0             | 0    | 0-0           | 323.6         | 0    | 20        |      |

The following samples were analyzed in this batch:

0404140-01B 0404140-02B 0404140-03B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19935 InstrumentID: IC201

MBLK Sample ID: WBLKW1-041404 Test Code: E300 Units: mg/L Analysis Date: 04/14/04 17:22

Client ID: Run ID: IC201\_040414A SeqNo: 456851 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.98   | 0.10 | 5       | 0             | 99.6 | 80-120        | 0             |      |           |      |

LCS Sample ID: WLC SW1-041404 Test Code: E300 Units: mg/L Analysis Date: 04/14/04 17:51

Client ID: Run ID: IC201\_040414A SeqNo: 456852 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9      | 0.50 | 10      | 0             | 90   | 80-120        | 0             |      |           |      |
| Fluoride                         | 2.06   | 0.10 | 2       | 0             | 103  | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.5    | 1.0  | 10      | 0             | 95   | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.94   | 0.10 | 5       | 0             | 98.8 | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-04140 Test Code: E300 Units: mg/L Analysis Date: 04/14/04 18:19

Client ID: Run ID: IC201\_040414A SeqNo: 456853 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 8.99   | 0.50 | 10      | 0             | 89.9 | 80-120        | 9             | 0.111 | 20        |      |
| Fluoride                         | 1.87   | 0.10 | 2       | 0             | 93.5 | 80-120        | 2.06          | 9.67  | 20        |      |
| Sulfate                          | 9.54   | 1.0  | 10      | 0             | 95.4 | 80-120        | 9.5           | 0.42  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5      | 0.10 | 5       | 0             | 100  | 80-120        | 4.94          | 1.21  | 20        |      |

MS Sample ID: 0404115-01BMS Test Code: E300 Units: mg/L Analysis Date: 04/15/04 11:54

Client ID: Run ID: IC201\_040414A SeqNo: 456874 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 1032   | 50  | 1000    | 163           | 86.9 | 75-125        | 0             |      |           |      |
| Fluoride                         | 229    | 10  | 200     | 0             | 114  | 75-125        | 0             |      |           |      |
| Sulfate                          | 2145   | 100 | 1000    | 1113          | 103  | 75-125        | 0             |      |           |      |
| Nitrate/Nitrite (as N)           | 408    | 10  | 400     | 0             | 102  | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 499    | 10  | 500     | 0             | 99.8 | 80-120        | 0             |      |           |      |

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J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19935 InstrumentID: IC201

|                                  |                           |     |               |                 |            |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------------|-----------------|------------|---------------|---------------|-------------------------------|-----------|------|
| MSD                              | Sample ID: 0404115-01BMSD |     |               | Test Code: E300 |            | Units: mg/L   |               | Analysis Date: 04/15/04 12:23 |           |      |
| Client ID:                       | Run ID: IC201_040414A     |     | SeqNo: 456875 |                 | Prep Date: |               | DF: 100       |                               |           |      |
| Analyte                          | Result                    | PQL | SPK Val       | SPK Ref Value   | %REC       | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 1004                      | 50  | 1000          | 163             | 84.1       | 75-125        | 1032          | 2.75                          | 20        |      |
| Fluoride                         | 219                       | 10  | 200           | 0               | 110        | 75-125        | 229           | 4.46                          | 20        |      |
| Sulfate                          | 2101                      | 100 | 1000          | 1113            | 98.8       | 75-125        | 2145          | 2.07                          | 20        |      |
| Nitrate/Nitrite (as N)           | 397                       | 10  | 400           | 0               | 99.2       | 75-125        | 408           | 2.73                          | 20        |      |
| Surr: Dichloroacetic acid (surr) | 514                       | 10  | 500           | 0               | 103        | 80-120        | 499           | 2.96                          | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                              |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|------------------------------|-----------|------|
| DUP                              | Sample ID: 0404077-01BDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 04/15/04 1:55 |           |      |
| Client ID:                       | Run ID: IC201_040414A     |     |         | SeqNo: 456869   |      | Prep Date:    |               | DF: 100                      |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                         | RPD Limit | Qual |
| Chloride                         | 646                       | 50  | 0       | 0               | 0    | 0-0           | 646           | 0                            | 20        |      |
| Fluoride                         | 49                        | 10  | 0       | 0               | 0    | 0-0           | 50            | 2.02                         | 20        |      |
| Sulfate                          | 1995                      | 100 | 0       | 0               | 0    | 0-0           | 1998          | 0.15                         | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                            | 20        |      |
| Surr: Dichloroacetic acid (surr) | 517                       | 10  | 500     | 0               | 103  | 80-120        | 522           | 0.962                        | 20        |      |

|                                  |                           |     |               |                 |            |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------------|-----------------|------------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0404115-01BDUP |     |               | Test Code: E300 |            | Units: mg/L   |               | Analysis Date: 04/15/04 11:26 |           |      |
| Client ID:                       | Run ID: IC201_040414A     |     | SeqNo: 456873 |                 | Prep Date: |               | DF: 100       |                               |           |      |
| Analyte                          | Result                    | PQL | SPK Val       | SPK Ref Value   | %REC       | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 165                       | 50  | 0             | 0               | 0          | 0-0           | 163           | 1.22                          | 20        |      |
| Fluoride                         | ND                        | 10  | 0             | 0               | 0          | 0-0           | 0             | 0                             | 20        |      |
| Sulfate                          | 1112                      | 100 | 0             | 0               | 0          | 0-0           | 1113          | 0.0899                        | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0             | 0               | 0          | 0-0           | 0             | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 519                       | 10  | 500           | 0               | 104        | 80-120        | 530           | 2.1                           | 20        |      |

|                                  |                           |     |               |                 |            |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------------|-----------------|------------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0404115-06BDUP |     |               | Test Code: E300 |            | Units: mg/L   |               | Analysis Date: 04/15/04 17:08 |           |      |
| Client ID:                       | Run ID: IC201_040414A     |     | SeqNo: 456898 |                 | Prep Date: |               | DF: 100       |                               |           |      |
| Analyte                          | Result                    | PQL | SPK Val       | SPK Ref Value   | %REC       | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 323                       | 50  | 0             | 0               | 0          | 0-0           | 324           | 0.309                         | 20        |      |
| Fluoride                         | ND                        | 10  | 0             | 0               | 0          | 0-0           | 0             | 0                             | 20        |      |
| Sulfate                          | 1862                      | 100 | 0             | 0               | 0          | 0-0           | 1866          | 0.215                         | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0             | 0               | 0          | 0-0           | 0             | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 507                       | 10  | 500           | 0               | 101        | 80-120        | 498           | 1.79                          | 20        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0404140  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19935 InstrumentID: IC201

DUP Sample ID: 0404099-03ADUP Test Code: E300 Units: mg/L Analysis Date: 04/15/04 7:38

Client ID: Run ID: IC201\_040414A SeqNo: 456933 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 605    | 50  | 0       | 0             | 0    | 0-0           | 606           | 0.165 | 20        |      |
| Fluoride                         | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Sulfate                          | 4123   | 100 | 0       | 0             | 0    | 0-0           | 4144          | 0.508 | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 519    | 10  | 500     | 0             | 104  | 80-120        | 513           | 1.16  | 20        |      |

The following samples were analyzed in this batch:

0404140-01B 0404140-02B 0404140-03B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0404140  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19956 InstrumentID: UV-2101PC

MBLK Sample ID: WMBW1-041704 Test Code: E335.3 Units: mg/L Analysis Date: 04/17/04 0:00

Client ID: Run ID: UV-2101PC\_040417A SeqNo: 457309 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-041704 Test Code: E335.3 Units: mg/L Analysis Date: 04/17/04 0:00

Client ID: Run ID: UV-2101PC\_040417A SeqNo: 457310 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2039 | 0.020 | 0.2     | 0             | 102  | 80-120        | 0             |      |           |      |

MS Sample ID: 0404115-06DMS Test Code: E335.3 Units: mg/L Analysis Date: 04/17/04 0:00

Client ID: Run ID: UV-2101PC\_040417A SeqNo: 457326 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2    | 0.020 | 0.2     | 0.001         | 99.5 | 75-125        | 0             |      |           |      |

MSD Sample ID: 0404115-06DMSD Test Code: E335.3 Units: mg/L Analysis Date: 04/17/04 0:00

Client ID: Run ID: UV-2101PC\_040417A SeqNo: 457327 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Cyanide | 0.1987 | 0.020 | 0.2     | 0.001         | 98.8 | 75-125        | 0.2           | 0.652 | 25        |      |

DUP Sample ID: 0404115-06DDUP Test Code: E335.3 Units: mg/L Analysis Date: 04/17/04 0:00

Client ID: Run ID: UV-2101PC\_040417A SeqNo: 457325 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 | 0       | 0             | 0    | 0-0           | 0.001         | 0    | 20        |      |

The following samples were analyzed in this batch:

0404140-01D 0404140-02D 0404140-03D

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0404140  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19971 InstrumentID: IC201

|                                  |                          |      |               |                 |            |               |               |                               |           |      |
|----------------------------------|--------------------------|------|---------------|-----------------|------------|---------------|---------------|-------------------------------|-----------|------|
| MBLK                             | Sample ID: WBLKW1-041604 |      |               | Test Code: E300 |            | Units: mg/L   |               | Analysis Date: 04/16/04 21:39 |           |      |
| Client ID:                       | Run ID: IC201_040417A    |      | SeqNo: 457663 |                 | Prep Date: |               | DF: 1         |                               |           |      |
| Analyte                          | Result                   | PQL  | SPK Val       | SPK Ref Value   | %REC       | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | ND                       | 0.50 |               |                 |            |               |               |                               |           |      |
| Fluoride                         | ND                       | 0.10 |               |                 |            |               |               |                               |           |      |
| Sulfate                          | ND                       | 1.0  |               |                 |            |               |               |                               |           |      |
| Nitrate/Nitrite (as N)           | ND                       | 0.10 |               |                 |            |               |               |                               |           |      |
| Surr: Dichloroacetic acid (surr) | 4.83                     | 0.10 | 5             | 0               | 96.6       | 80-120        | 0             |                               |           |      |

|                                  |                          |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|--------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| LCS                              | Sample ID: WLCSW1-041604 |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 04/16/04 22:07 |           |      |
| Client ID:                       | Run ID: IC201_040417A    |      |         | SeqNo: 457664   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                   | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 9.07                     | 0.50 | 10      | 0               | 90.7 | 80-120        |               | 0                             |           |      |
| Fluoride                         | 1.82                     | 0.10 | 2       | 0               | 91   | 80-120        |               | 0                             |           |      |
| Sulfate                          | 9.62                     | 1.0  | 10      | 0               | 96.2 | 80-120        |               | 0                             |           |      |
| Surr: Dichloroacetic acid (surr) | 4.89                     | 0.10 | 5       | 0               | 97.8 | 80-120        |               | 0                             |           |      |

|                                  |                          |      |               |                 |            |               |               |                               |           |      |
|----------------------------------|--------------------------|------|---------------|-----------------|------------|---------------|---------------|-------------------------------|-----------|------|
| LCSD                             | Sample ID: WLCSDW1-04160 |      |               | Test Code: E300 |            | Units: mg/L   |               | Analysis Date: 04/16/04 22:36 |           |      |
| Client ID:                       | Run ID: IC201_040417A    |      | SeqNo: 457665 |                 | Prep Date: |               | DF: 1         |                               |           |      |
| Analyte                          | Result                   | PQL  | SPK Val       | SPK Ref Value   | %REC       | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 9.07                     | 0.50 | 10            | 0               | 90.7       | 80-120        | 9.07          | 0                             | 20        |      |
| Fluoride                         | 1.88                     | 0.10 | 2             | 0               | 94         | 80-120        | 1.82          | 3.24                          | 20        |      |
| Sulfate                          | 9.57                     | 1.0  | 10            | 0               | 95.7       | 80-120        | 9.62          | 0.521                         | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.03                     | 0.10 | 5             | 0               | 101        | 80-120        | 4.89          | 2.82                          | 20        |      |

|                                  |                          |      |               |                 |            |               |               |                              |           |      |
|----------------------------------|--------------------------|------|---------------|-----------------|------------|---------------|---------------|------------------------------|-----------|------|
| MS                               | Sample ID: 0404150-02CMS |      |               | Test Code: E300 |            | Units: mg/L   |               | Analysis Date: 04/17/04 5:15 |           |      |
| Client ID:                       | Run ID: IC201_040417A    |      | SeqNo: 457689 |                 | Prep Date: |               | DF: 1         |                              |           |      |
| Analyte                          | Result                   | PQL  | SPK Val       | SPK Ref Value   | %REC       | Control Limit | RPD Ref Value | %RPD                         | RPD Limit | Qual |
| Chloride                         | 23.43                    | 0.50 | 10            | 13.02           | 104        | 75-125        |               | 0                            |           |      |
| Fluoride                         | 2.23                     | 0.10 | 2             | 0.33            | 95         | 75-125        |               | 0                            |           |      |
| Sulfate                          | 40.76                    | 1.0  | 10            | 29.93           | 108        | 75-125        |               | 0                            |           |      |
| Nitrate/Nitrite (as N)           | 4.17                     | 0.10 | 4             | 0               | 104        | 75-125        |               | 0                            |           |      |
| Surr: Dichloroacetic acid (surr) | 5.49                     | 0.10 | 5             | 0               | 110        | 80-120        |               | 0                            |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0404140  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19971 InstrumentID: IC201

MSD Sample ID: 0404150-02CMSD Test Code: E300 Units: mg/L Analysis Date: 04/17/04 5:44

Client ID: Run ID: IC201\_040417A SeqNo: 457690 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 23.09  | 0.50 | 10      | 13.02         | 101  | 75-125        | 23.43         | 1.46  | 20        |      |
| Fluoride                         | 2.28   | 0.10 | 2       | 0.33          | 97.5 | 75-125        | 2.23          | 2.22  | 20        |      |
| Sulfate                          | 40.36  | 1.0  | 10      | 29.93         | 104  | 75-125        | 40.76         | 0.986 | 20        |      |
| Nitrate/Nitrite (as N)           | 3.91   | 0.10 | 4       | 0             | 97.8 | 75-125        | 4.17          | 6.44  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.13   | 0.10 | 5       | 0             | 103  | 80-120        | 5.49          | 6.78  | 20        |      |

DUP Sample ID: 0404150-11CDUP Test Code: E300 Units: mg/L Analysis Date: 04/17/04 11:26

Client ID: Run ID: IC201\_040417A SeqNo: 457676 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 40.97  | 0.50 | 0       | 0             | 0    | 0-0           | 40.9          | 0.171 | 20        |      |
| Fluoride                         | 0.36   | 0.10 | 0       | 0             | 0    | 0-0           | 0.38          | 5.41  | 20        |      |
| Sulfate                          | 35.21  | 1.0  | 0       | 0             | 0    | 0-0           | 35.07         | 0.398 | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.25   | 0.10 | 5       | 0             | 105  | 80-120        | 5.35          | 1.89  | 20        |      |

DUP Sample ID: 0404150-02CDUP Test Code: E300 Units: mg/L Analysis Date: 04/17/04 4:47

Client ID: Run ID: IC201\_040417A SeqNo: 457688 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 13.07  | 0.50 | 0       | 0             | 0    | 0-0           | 13.02         | 0.383 | 20        |      |
| Fluoride                         | 0.34   | 0.10 | 0       | 0             | 0    | 0-0           | 0.33          | 2.99  | 20        |      |
| Sulfate                          | 29.8   | 1.0  | 0       | 0             | 0    | 0-0           | 29.93         | 0.435 | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.36   | 0.10 | 5       | 0             | 107  | 80-120        | 5.54          | 3.3   | 20        |      |

The following samples were analyzed in this batch:

0404140-01B 0404140-02B 0404140-03B

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

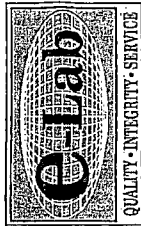
R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



☐ e-Lab, Inc.  
10450 Stancil Rd. #210  
Houston, Texas 77099  
(Tel) 281.530.5656  
(Fax) 281.530.5887

## Chain of Custody Form

Page 1 of 1

☐ e-Lab, Inc.  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

| Customer Information |                    |                |                 | Project Information |       |           |   | Parameter/Method Request for Analysis |   |   |   |   |   |   |   |   |      |  |  |
|----------------------|--------------------|----------------|-----------------|---------------------|-------|-----------|---|---------------------------------------|---|---|---|---|---|---|---|---|------|--|--|
| Purchase Order       | Project Name       | Project Number | Project Manager | e-Lab Work Order #  |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| Work Order           | Project Name       | Project Number | Project Manager | e-Lab Work Order #  |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| Company Name         | Project Name       | Project Number | Project Manager | e-Lab Work Order #  |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| Send Report To       | Project Name       | Project Number | Project Manager | e-Lab Work Order #  |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| Address              | Project Name       | Project Number | Project Manager | e-Lab Work Order #  |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| City/State/Zip       | Project Name       | Project Number | Project Manager | e-Lab Work Order #  |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| Phone                | Project Name       | Project Number | Project Manager | e-Lab Work Order #  |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| Fax                  | Project Name       | Project Number | Project Manager | e-Lab Work Order #  |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| e-Mail Address       | Project Name       | Project Number | Project Manager | e-Lab Work Order #  |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| No.                  | Sample Description | Date           | Time            | Matrix              | Pres. | # Bottles | A | B                                     | C | D | E | F | G | H | I | J | Hold |  |  |
| 1                    | MW-60              | 4/13/04        | 1330            | L                   | 4     | 8         | X |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 2                    | NCL-33             | 1              | 1415            | 1                   | 1     | 1         | X |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 3                    | NCL-34             | 1              | 1500            | 1                   | 1     | 1         | X |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 4                    |                    |                |                 |                     |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 5                    |                    |                |                 |                     |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 6                    |                    |                |                 |                     |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 7                    |                    |                |                 |                     |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 8                    |                    |                |                 |                     |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 9                    |                    |                |                 |                     |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 10                   |                    |                |                 |                     |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |

| Sampler(s): Please Print & Sign |               | Shipment Method: |                           | Required Turnaround Time: |            | Results Due Date: |               |
|---------------------------------|---------------|------------------|---------------------------|---------------------------|------------|-------------------|---------------|
| Relinquished by:                | Date: 4/13/04 | Time: 1615       | Received by (Laboratory): | Date: 4/13/04             | Time: 0900 | Relinquished by:  | Date: 4/13/04 |
| Relinquished by:                | Date: 4/13/04 | Time: 1615       | Received by (Laboratory): | Date: 4/13/04             | Time: 0900 | Relinquished by:  | Date: 4/13/04 |
| Relinquished by:                | Date: 4/13/04 | Time: 1615       | Received by (Laboratory): | Date: 4/13/04             | Time: 0900 | Relinquished by:  | Date: 4/13/04 |

| QC Package: (Check Box Below)     |                          |
|-----------------------------------|--------------------------|
| Level II: Standard QC             | <input type="checkbox"/> |
| Level III: Standard QC + Raw Data | <input type="checkbox"/> |
| Level IV: SW846 Methods/CLP       | <input type="checkbox"/> |
| Other:                            |                          |

e-Lab, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 4/14/2004 9:00:00 AM

Work Order Number 0404140

Received by: FSM

Checklist completed by

RICARDO SANCHEZ 4.14.04  
Signature Date

Reviewed by

JS 4/15/04  
Initials Date

Matrix:

W

Carrier name FedEx

|                                                         |                                         |                                        |                                                 |
|---------------------------------------------------------|-----------------------------------------|----------------------------------------|-------------------------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | Not Present <input type="checkbox"/>            |
| Custody seals intact on shipping container/cooler?      | Yes <input type="checkbox"/>            | No <input type="checkbox"/>            | Not Present <input checked="" type="checkbox"/> |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/>            | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Temperature(s)/Thermometer(s):                          | <u>3.7c</u>                             | <u>002</u>                             |                                                 |
| Water - VOA vials have zero headspace?                  | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | No VOA vials submitted <input type="checkbox"/> |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | N/A <input type="checkbox"/>                    |

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Login Notes: One vial for MW-60 and two vials for NCL-34 have excessive headspace.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_



**e-Lab, Inc.**

10450 Standliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

April 26, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: NCL/TEL

Work Order : **0404115**

Dear Jeff Byrd,

e-Lab, Inc. received 6 samples on 4/13/2004 9:00:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Inc. The total number of pages in this report is 47.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

*Jeffrey L Croston*

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

**e-Lab, Inc.**

**Date:** April 26, 2004

**CLIENT:** Navajo Refining Company  
**Project:** NCL/TEL  
**Work Order:** 0404115

## Work Order Sample Summary

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0404115-01           | MW-53                   | Water         |                   | 4/12/2004 08:45        | 4/13/2004 09:00      | <input type="checkbox"/> |
| 0404115-02           | NCL-49                  | Water         |                   | 4/12/2004 09:30        | 4/13/2004 09:00      | <input type="checkbox"/> |
| 0404115-03           | NCL-32                  | Water         |                   | 4/12/2004 10:10        | 4/13/2004 09:00      | <input type="checkbox"/> |
| 0404115-04           | NCL-44                  | Water         |                   | 4/12/2004 10:30        | 4/13/2004 09:00      | <input type="checkbox"/> |
| 0404115-05           | MW-55                   | Water         |                   | 4/12/2004 13:30        | 4/13/2004 09:00      | <input type="checkbox"/> |
| 0404115-06           | MW-54A                  | Water         |                   | 4/12/2004 14:00        | 4/13/2004 09:00      | <input type="checkbox"/> |

**e-Lab, Inc.**

**Date:** April 26, 2004

**CLIENT:** Navajo Refining Company

**Project:** NCL/TEL

**Work Order:** 0404115

## **Case Narrative**

Batch R20057 Volatiles LCS recoveries were marginally outside of control limits for Methylene chloride (122%). The recovery was biased high and all the associated samples were ND, therefore the data was accepted.

Batch R20062 Volatiles MS/MSD recoveries were outside of control limits on an unrelated sample.

Batch R19878 Anions MS/MSD recoveries were outside of control limits for Chloride and Sulfate. The recoveries should not be evaluated because the background concentrations exceed the working linear calibration range and was >4 times the spike amount.

## e-Lab, Inc.

Date: April 26, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL  
 Lab ID: 0404115-01

Client Sample ID: MW-53  
 Collection Date: 4/12/2004 8:45:00 AM  
 Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|---------------------------------------|---------|--------------|------|-------|-----------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                      |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 4/16/2004 4:25:21 PM |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                      |
| Aluminum                              | 0.0412  | 0.0100       |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Barium                                | 0.0239  | 0.00500      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Boron                                 | 0.287   | 0.0200       |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Calcium                               | 293     | 5.00         |      | mg/L  | 10              | 4/19/2004 1:22:00 PM |
| Chromium                              | 0.00203 | 0.00200      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Cobalt                                | 0.00448 | 0.00200      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Copper                                | ND      | 0.00200      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Iron                                  | ND      | 0.200        |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Magnesium                             | 164     | 2.00         |      | mg/L  | 10              | 4/19/2004 1:22:00 PM |
| Manganese                             | 1.75    | 0.0500       |      | mg/L  | 10              | 4/19/2004 1:22:00 PM |
| Nickel                                | 0.00574 | 0.00500      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Potassium                             | 1.01    | 0.200        |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Sodium                                | 125     | 2.00         |      | mg/L  | 10              | 4/19/2004 1:22:00 PM |
| Vanadium                              | 0.00661 | 0.00500      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| Zinc                                  | ND      | 0.00500      |      | mg/L  | 1               | 4/16/2004 6:30:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                      |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Aniline                               | ND      | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time



**e-Lab, Inc.**

Date: April 26, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404115  
**Project:** NCL/TEL  
**Lab ID:** 0404115-01

**Client Sample ID:** MW-53  
**Collection Date:** 4/12/2004 8:45:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 4/16/2004 7:29:00 PM |
| Surr: 2,4,6-Tribromophenol | 86.1   | 39-153       |      | %REC  | 1               | 4/16/2004 7:29:00 PM |
| Surr: 2-Fluorobiphenyl     | 75.0   | 40-147       |      | %REC  | 1               | 4/16/2004 7:29:00 PM |
| Surr: 2-Fluorophenol       | 35.1   | 21-110       |      | %REC  | 1               | 4/16/2004 7:29:00 PM |
| Surr: 4-Terphenyl-d14      | 79.4   | 39-141       |      | %REC  | 1               | 4/16/2004 7:29:00 PM |
| Surr: Nitrobenzene-d5      | 72.9   | 37-140       |      | %REC  | 1               | 4/16/2004 7:29:00 PM |
| Surr: Phenol-d6            | 20.9   | 11-100       |      | %REC  | 1               | 4/16/2004 7:29:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                       |
|---------------------------|----|-----|--|------|---|-----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 4/22/2004 10:30:00 PM |
| Chlorobenzene             | ND | 5.0 |  | µg/L | 1 | 4/22/2004 10:30:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**
**Date:** April 26, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404115  
**Project:** NCL/TEL  
**Lab ID:** 0404115-01

**Client Sample ID:** MW-53  
**Collection Date:** 4/12/2004 8:45:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 4/22/2004 10:30:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 104    | 71-126        |      | %REC                | 1               | 4/22/2004 10:30:00 PM |
| Surr: 4-Bromofluorobenzene          | 77.4   | 74-125        |      | %REC                | 1               | 4/22/2004 10:30:00 PM |
| Surr: Dibromofluoromethane          | 99.9   | 73-126        |      | %REC                | 1               | 4/22/2004 10:30:00 PM |
| Surr: Toluene-d8                    | 95.0   | 75-125        |      | %REC                | 1               | 4/22/2004 10:30:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | <b>Analyst: MG</b>  |                 |                       |
| Chloride                            | 48.5   | 2.50          |      | mg/L                | 5               | 4/13/2004 8:47:00 PM  |
| Fluoride                            | 1.36   | 0.100         |      | mg/L                | 1               | 4/13/2004 8:18:00 PM  |
| Sulfate                             | 1,110  | 100           |      | mg/L                | 100             | 4/15/2004 10:57:00 AM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 4/13/2004 8:18:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 105    | 80-120        |      | %REC                | 1               | 4/13/2004 8:18:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 104    | 80-120        |      | %REC                | 5               | 4/13/2004 8:47:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC                | 100             | 4/15/2004 10:57:00 AM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | <b>Analyst: LMD</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 314    | 5.00          |      | mg/L                | 1               | 4/15/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/15/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 4/15/2004             |
| Alkalinity, Total (As CaCO3)        | 314    | 5.00          |      | mg/L                | 1               | 4/15/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | <b>Analyst: LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 4/17/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: April 26, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404115  
**Project:** NCL/TEL  
**Lab ID:** 0404115-02

**Client Sample ID:** NCL-49  
**Collection Date:** 4/12/2004 9:30:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                                             |
|---------------------------------------|---------|---------------|------|-------|-----------------|-----------------------------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                                           |
|                                       |         | <b>SW7470</b> |      |       |                 |                                                           |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | Prep Date: 4/16/2004 Analyst: JCJ<br>4/16/2004 4:34:35 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                                           |
|                                       |         | <b>SW6020</b> |      |       |                 |                                                           |
| Aluminum                              | 0.0117  | 0.0100        |      | mg/L  | 1               | Prep Date: 4/16/2004 Analyst: SA<br>4/16/2004 6:35:00 PM  |
| Arsenic                               | ND      | 0.00500       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Barium                                | 0.0110  | 0.00500       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Boron                                 | 0.240   | 0.0200        |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Calcium                               | 502     | 10.0          |      | mg/L  | 20              | 4/19/2004 2:33:00 PM                                      |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Cobalt                                | ND      | 0.00200       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Copper                                | 0.00210 | 0.00200       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Iron                                  | ND      | 0.200         |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Magnesium                             | 217     | 4.00          |      | mg/L  | 20              | 4/19/2004 2:33:00 PM                                      |
| Manganese                             | 0.00671 | 0.00500       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Nickel                                | ND      | 0.00500       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Potassium                             | 0.623   | 0.200         |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Selenium                              | 0.00693 | 0.00500       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Sodium                                | 117     | 4.00          |      | mg/L  | 20              | 4/19/2004 2:33:00 PM                                      |
| Vanadium                              | 0.00945 | 0.00500       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| Zinc                                  | ND      | 0.00500       |      | mg/L  | 1               | 4/16/2004 6:35:00 PM                                      |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                                           |
|                                       |         | <b>SW8270</b> |      |       |                 |                                                           |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1               | Prep Date: 4/13/2004 Analyst: HV<br>4/16/2004 8:01:00 PM  |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |
| Aniline                               | ND      | 10            |      | µg/L  | 1               | 4/16/2004 8:01:00 PM                                      |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: April 26, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL  
 Lab ID: 0404115-02

Client Sample ID: NCL-49  
 Collection Date: 4/12/2004 9:30:00 AM  
 Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 4/16/2004 8:01:00 PM |
| Surr: 2,4,6-Tribromophenol | 86.6   | 39-153       |      | %REC  | 1               | 4/16/2004 8:01:00 PM |
| Surr: 2-Fluorobiphenyl     | 76.4   | 40-147       |      | %REC  | 1               | 4/16/2004 8:01:00 PM |
| Surr: 2-Fluorophenol       | 36.7   | 21-110       |      | %REC  | 1               | 4/16/2004 8:01:00 PM |
| Surr: 4-Terphenyl-d14      | 80.3   | 39-141       |      | %REC  | 1               | 4/16/2004 8:01:00 PM |
| Surr: Nitrobenzene-d5      | 74.2   | 37-140       |      | %REC  | 1               | 4/16/2004 8:01:00 PM |
| Surr: Phenol-d6            | 22.1   | 11-100       |      | %REC  | 1               | 4/16/2004 8:01:00 PM |

## VOLATILES BY GC/MS

SW8260

Analyst: PC

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 4/23/2004 4:25:00 AM |
| Chlorobenzene             | ND | 5.0 |  | µg/L | 1 | 4/23/2004 4:25:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: April 26, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404115  
**Project:** NCL/TEL  
**Lab ID:** 0404115-02

**Client Sample ID:** NCL-49  
**Collection Date:** 4/12/2004 9:30:00 AM  
**Matrix:** WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|-----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 4/23/2004 4:25:00 AM |
| Surr: 1,2-Dichloroethane-d4 | 107    | 71-126       |      | %REC  | 1               | 4/23/2004 4:25:00 AM |
| Surr: 4-Bromofluorobenzene  | 78.2   | 74-125       |      | %REC  | 1               | 4/23/2004 4:25:00 AM |
| Surr: Dibromofluoromethane  | 104    | 73-126       |      | %REC  | 1               | 4/23/2004 4:25:00 AM |
| Surr: Toluene-d8            | 96.9   | 75-125       |      | %REC  | 1               | 4/23/2004 4:25:00 AM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |       |        |  |      |     |                       |
|----------------------------------|-------|--------|--|------|-----|-----------------------|
| Chloride                         | 195   | 2.50   |  | mg/L | 5   | 4/13/2004 10:12:00 PM |
| Fluoride                         | 0.900 | 0.100  |  | mg/L | 1   | 4/13/2004 9:15:00 PM  |
| Sulfate                          | 1,760 | 100    |  | mg/L | 100 | 4/15/2004 12:51:00 PM |
| Nitrate/Nitrite (as N)           | ND    | 0.100  |  | mg/L | 1   | 4/13/2004 9:15:00 PM  |
| Surr: Dichloroacetic acid (surr) | 101   | 80-120 |  | %REC | 1   | 4/13/2004 9:15:00 PM  |
| Surr: Dichloroacetic acid (surr) | 102   | 80-120 |  | %REC | 5   | 4/13/2004 10:12:00 PM |
| Surr: Dichloroacetic acid (surr) | 100   | 80-120 |  | %REC | 100 | 4/15/2004 12:51:00 PM |

**ALKALINITY****E310.1**Analyst: **LMD**

|                                    |     |      |  |      |   |           |
|------------------------------------|-----|------|--|------|---|-----------|
| Alkalinity, Bicarbonate (As CaCO3) | 211 | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Total (As CaCO3)       | 211 | 5.00 |  | mg/L | 1 | 4/15/2004 |

**CYANIDE, TOTAL****E335.3**Analyst: **LMD**

|         |    |        |  |      |   |           |
|---------|----|--------|--|------|---|-----------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 4/17/2004 |
|---------|----|--------|--|------|---|-----------|

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: April 26, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404115  
**Project:** NCL/TEL  
**Lab ID:** 0404115-03

**Client Sample ID:** NCL-32  
**Collection Date:** 4/12/2004 10:10:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor             | Date Analyzed        |
|---------------------------------------|---------|---------------|------|-------|-----------------------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                             |                      |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: <b>4/16/2004</b> | Analyst: <b>JCJ</b>  |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                             |                      |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: <b>4/16/2004</b> | Analyst: <b>SA</b>   |
| Aluminum                              | 0.457   | 0.0100        |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Arsenic                               | ND      | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Barium                                | 0.0233  | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Boron                                 | 0.234   | 0.0200        |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Calcium                               | 466     | 5.00          |      | mg/L  | 10                          | 4/19/2004 2:51:00 PM |
| Chromium                              | 0.00240 | 0.00200       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Cobalt                                | 0.00246 | 0.00200       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Copper                                | 0.00222 | 0.00200       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Iron                                  | 0.367   | 0.200         |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Magnesium                             | 147     | 2.00          |      | mg/L  | 10                          | 4/19/2004 2:51:00 PM |
| Manganese                             | 0.792   | 0.0500        |      | mg/L  | 10                          | 4/19/2004 2:51:00 PM |
| Nickel                                | 0.00678 | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Potassium                             | 3.00    | 0.200         |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Sodium                                | 73.0    | 2.00          |      | mg/L  | 10                          | 4/19/2004 2:51:00 PM |
| Vanadium                              | 0.0145  | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| Zinc                                  | 0.0197  | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:41:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                             |                      |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: <b>4/13/2004</b> | Analyst: <b>HV</b>   |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |
| Aniline                               | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 8:32:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

AR Page 7 of 18

## e-Lab, Inc.

Date: April 26, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL  
 Lab ID: 0404115-03

Client Sample ID: NCL-32  
 Collection Date: 4/12/2004 10:10:00 AM  
 Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units         | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|---------------|-----------------|----------------------|
| Anthracene                 | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| Phenol                     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 8:32:00 PM |
| Surr: 2,4,6-Tribromophenol | 86.7   | 39-153       |      | %REC          | 1               | 4/16/2004 8:32:00 PM |
| Surr: 2-Fluorobiphenyl     | 76.5   | 40-147       |      | %REC          | 1               | 4/16/2004 8:32:00 PM |
| Surr: 2-Fluorophenol       | 36.8   | 21-110       |      | %REC          | 1               | 4/16/2004 8:32:00 PM |
| Surr: 4-Terphenyl-d14      | 79.8   | 39-141       |      | %REC          | 1               | 4/16/2004 8:32:00 PM |
| Surr: Nitrobenzene-d5      | 74.8   | 37-140       |      | %REC          | 1               | 4/16/2004 8:32:00 PM |
| Surr: Phenol-d6            | 22.3   | 11-100       |      | %REC          | 1               | 4/16/2004 8:32:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        |              |      | <b>SW8260</b> |                 | <b>Analyst: PC</b>   |
| 1,1,1-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| 1,1,2-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| 1,1-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| 1,1-Dichloroethene         | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| 1,2-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| 2-Butanone                 | ND     | 10           |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| 2-Chloroethyl vinyl ether  | ND     | 10           |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| 2-Hexanone                 | ND     | 10           |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| 4-Methyl-2-pentanone       | ND     | 10           |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| Acetone                    | ND     | 10           |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| Benzene                    | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| Bromodichloromethane       | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| Bromoform                  | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| Bromomethane               | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| Carbon disulfide           | ND     | 10           |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| Carbon tetrachloride       | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |
| Chlorobenzene              | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 4:52:00 AM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: April 26, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL  
 Lab ID: 0404115-03

Client Sample ID: NCL-32  
 Collection Date: 4/12/2004 10:10:00 AM  
 Matrix: WATER

| Analyses                                        | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chloroethane                                    | ND     | 5.0           |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Chloroform                                      | ND     | 5.0           |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Chloromethane                                   | ND     | 5.0           |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| cis-1,3-Dichloropropene                         | ND     | 5.0           |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Dibromochloromethane                            | ND     | 5.0           |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Ethylbenzene                                    | ND     | 5.0           |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| m,p-Xylene                                      | ND     | 10            |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Methylene chloride                              | ND     | 10            |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Styrene                                         | ND     | 5.0           |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Tetrachloroethene                               | ND     | 5.0           |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Toluene                                         | ND     | 5.0           |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| trans-1,3-Dichloropropene                       | ND     | 5.0           |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Trichloroethene                                 | ND     | 5.0           |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Vinyl acetate                                   | ND     | 10            |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Vinyl chloride                                  | ND     | 2.0           |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Xylenes, Total                                  | ND     | 15            |      | µg/L                | 1               | 4/23/2004 4:52:00 AM  |
| Surr: 1,2-Dichloroethane-d4                     | 99.3   | 71-126        |      | %REC                | 1               | 4/23/2004 4:52:00 AM  |
| Surr: 4-Bromofluorobenzene                      | 77.2   | 74-125        |      | %REC                | 1               | 4/23/2004 4:52:00 AM  |
| Surr: Dibromofluoromethane                      | 101    | 73-126        |      | %REC                | 1               | 4/23/2004 4:52:00 AM  |
| Surr: Toluene-d8                                | 95.7   | 75-125        |      | %REC                | 1               | 4/23/2004 4:52:00 AM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b>             |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                       |
| Chloride                                        | 214    | 2.50          |      | mg/L                | 5               | 4/14/2004 12:06:00 AM |
| Fluoride                                        | ND     | 0.100         |      | mg/L                | 1               | 4/13/2004 11:38:00 PM |
| Sulfate                                         | 1,240  | 100           |      | mg/L                | 100             | 4/15/2004 2:17:00 PM  |
| Nitrate/Nitrite (as N)                          | ND     | 0.100         |      | mg/L                | 1               | 4/13/2004 11:38:00 PM |
| Surr: Dichloroacetic acid (surr)                | 107    | 80-120        |      | %REC                | 1               | 4/13/2004 11:38:00 PM |
| Surr: Dichloroacetic acid (surr)                | 99.0   | 80-120        |      | %REC                | 5               | 4/14/2004 12:06:00 AM |
| Surr: Dichloroacetic acid (surr)                | 102    | 80-120        |      | %REC                | 100             | 4/15/2004 2:17:00 PM  |
| <b>ALKALINITY</b>                               |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO <sub>3</sub> ) | 324    | 5.00          |      | mg/L                | 1               | 4/15/2004             |
| Alkalinity, Carbonate (As CaCO <sub>3</sub> )   | ND     | 5.00          |      | mg/L                | 1               | 4/15/2004             |
| Alkalinity, Hydroxide (As CaCO <sub>3</sub> )   | ND     | 5.00          |      | mg/L                | 1               | 4/15/2004             |
| Alkalinity, Total (As CaCO <sub>3</sub> )       | 324    | 5.00          |      | mg/L                | 1               | 4/15/2004             |
| <b>CYANIDE, TOTAL</b>                           |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Cyanide                                         | ND     | 0.0200        |      | mg/L                | 1               | 4/17/2004             |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
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 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time



**e-Lab, Inc.**

Date: April 26, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404115  
**Project:** NCL/TEL  
**Lab ID:** 0404115-04

**Client Sample ID:** NCL-44  
**Collection Date:** 4/12/2004 10:30:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor             | Date Analyzed        |
|---------------------------------------|---------|---------------|------|-------|-----------------------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                             |                      |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: <b>4/16/2004</b> | Analyst: <b>JCJ</b>  |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                           | 4/16/2004 4:37:35 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                             |                      |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: <b>4/16/2004</b> | Analyst: <b>SA</b>   |
| Aluminum                              | 0.590   | 0.100         |      | mg/L  | 10                          | 4/19/2004 2:57:00 PM |
| Arsenic                               | 0.0238  | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Barium                                | 0.0376  | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Boron                                 | 0.272   | 0.0200        |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Calcium                               | 313     | 5.00          |      | mg/L  | 10                          | 4/19/2004 2:57:00 PM |
| Chromium                              | 0.00936 | 0.00200       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Cobalt                                | 0.00441 | 0.00200       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Copper                                | 0.0376  | 0.00200       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Iron                                  | 1.36    | 0.200         |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Magnesium                             | 114     | 2.00          |      | mg/L  | 10                          | 4/19/2004 2:57:00 PM |
| Manganese                             | 0.742   | 0.0500        |      | mg/L  | 10                          | 4/19/2004 2:57:00 PM |
| Nickel                                | 0.00562 | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Potassium                             | 2.07    | 0.200         |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Sodium                                | 66.2    | 2.00          |      | mg/L  | 10                          | 4/19/2004 2:57:00 PM |
| Vanadium                              | ND      | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| Zinc                                  | 0.0267  | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:47:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                             |                      |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: <b>4/13/2004</b> | Analyst: <b>HV</b>   |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |
| Aniline                               | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:04:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: April 26, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL  
 Lab ID: 0404115-04

Client Sample ID: NCL-44  
 Collection Date: 4/12/2004 10:30:00 AM  
 Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units         | Dilution Factor    | Date Analyzed        |
|----------------------------|--------|--------------|------|---------------|--------------------|----------------------|
| Anthracene                 | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| Phenol                     | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L          | 1                  | 4/16/2004 9:04:00 PM |
| Surr: 2,4,6-Tribromophenol | 93.4   | 39-153       |      | %REC          | 1                  | 4/16/2004 9:04:00 PM |
| Surr: 2-Fluorobiphenyl     | 80.8   | 40-147       |      | %REC          | 1                  | 4/16/2004 9:04:00 PM |
| Surr: 2-Fluorophenol       | 38.9   | 21-110       |      | %REC          | 1                  | 4/16/2004 9:04:00 PM |
| Surr: 4-Terphenyl-d14      | 83.5   | 39-141       |      | %REC          | 1                  | 4/16/2004 9:04:00 PM |
| Surr: Nitrobenzene-d5      | 80.1   | 37-140       |      | %REC          | 1                  | 4/16/2004 9:04:00 PM |
| Surr: Phenol-d6            | 23.6   | 11-100       |      | %REC          | 1                  | 4/16/2004 9:04:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        |              |      | <b>SW8260</b> | <b>Analyst: PC</b> |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0          |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| 1,1,2-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| 1,1-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| 1,1-Dichloroethene         | ND     | 5.0          |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| 1,2-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| 2-Butanone                 | ND     | 10           |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| 2-Chloroethyl vinyl ether  | ND     | 10           |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| 2-Hexanone                 | ND     | 10           |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| 4-Methyl-2-pentanone       | ND     | 10           |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| Acetone                    | ND     | 10           |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| Benzene                    | ND     | 5.0          |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| Bromodichloromethane       | ND     | 5.0          |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| Bromoform                  | ND     | 5.0          |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| Bromomethane               | ND     | 5.0          |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| Carbon disulfide           | ND     | 10           |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| Carbon tetrachloride       | ND     | 5.0          |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |
| Chlorobenzene              | ND     | 5.0          |      | µg/L          | 1                  | 4/23/2004 5:19:00 AM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: April 26, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL  
 Lab ID: 0404115-04

Client Sample ID: NCL-44  
 Collection Date: 4/12/2004 10:30:00 AM  
 Matrix: WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|-----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 4/23/2004 5:19:00 AM |
| Surr: 1,2-Dichloroethane-d4 | 103    | 71-126       |      | %REC  | 1               | 4/23/2004 5:19:00 AM |
| Surr: 4-Bromofluorobenzene  | 84.9   | 74-125       |      | %REC  | 1               | 4/23/2004 5:19:00 AM |
| Surr: Dibromofluoromethane  | 105    | 73-126       |      | %REC  | 1               | 4/23/2004 5:19:00 AM |
| Surr: Toluene-d8            | 94.2   | 75-125       |      | %REC  | 1               | 4/23/2004 5:19:00 AM |

## ANIONS BY ION CHROMATOGRAPHY

E300

Analyst: MG

|                                  |     |        |  |      |    |                       |
|----------------------------------|-----|--------|--|------|----|-----------------------|
| Chloride                         | 250 | 2.50   |  | mg/L | 5  | 4/14/2004 1:03:00 AM  |
| Fluoride                         | ND  | 0.100  |  | mg/L | 1  | 4/14/2004 12:35:00 AM |
| Sulfate                          | 478 | 20.0   |  | mg/L | 20 | 4/15/2004 2:45:00 PM  |
| Nitrate/Nitrite (as N)           | ND  | 0.100  |  | mg/L | 1  | 4/14/2004 12:35:00 AM |
| Surr: Dichloroacetic acid (surr) | 106 | 80-120 |  | %REC | 1  | 4/14/2004 12:35:00 AM |
| Surr: Dichloroacetic acid (surr) | 101 | 80-120 |  | %REC | 5  | 4/14/2004 1:03:00 AM  |
| Surr: Dichloroacetic acid (surr) | 104 | 80-120 |  | %REC | 20 | 4/15/2004 2:45:00 PM  |

## ALKALINITY

E310.1

Analyst: LMD

|                                    |     |      |  |      |   |           |
|------------------------------------|-----|------|--|------|---|-----------|
| Alkalinity, Bicarbonate (As CaCO3) | 515 | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Total (As CaCO3)       | 515 | 5.00 |  | mg/L | 1 | 4/15/2004 |

## CYANIDE, TOTAL

E335.3

Analyst: LMD

|         |    |        |  |      |   |           |
|---------|----|--------|--|------|---|-----------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 4/17/2004 |
|---------|----|--------|--|------|---|-----------|

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: April 26, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL  
 Lab ID: 0404115-05

Client Sample ID: MW-55  
 Collection Date: 4/12/2004 1:30:00 PM  
 Matrix: WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor             | Date Analyzed        |
|---------------------------------------|---------|---------------|------|-------|-----------------------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                             |                      |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: <b>4/16/2004</b> | Analyst: <b>JCJ</b>  |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                           | 4/16/2004 4:39:06 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                             |                      |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: <b>4/16/2004</b> | Analyst: <b>SA</b>   |
| Aluminum                              | 0.0150  | 0.0100        |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Arsenic                               | 0.00542 | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Barium                                | 0.0102  | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Boron                                 | 0.382   | 0.0200        |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Calcium                               | 429     | 5.00          |      | mg/L  | 10                          | 4/19/2004 3:03:00 PM |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Cobalt                                | ND      | 0.00200       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Copper                                | ND      | 0.00200       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Iron                                  | ND      | 0.200         |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Magnesium                             | 234     | 2.00          |      | mg/L  | 10                          | 4/19/2004 3:03:00 PM |
| Manganese                             | 0.425   | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Nickel                                | 0.00737 | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Potassium                             | 0.672   | 0.200         |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Sodium                                | 181     | 2.00          |      | mg/L  | 10                          | 4/19/2004 3:03:00 PM |
| Vanadium                              | 0.0126  | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| Zinc                                  | ND      | 0.00500       |      | mg/L  | 1                           | 4/16/2004 6:53:00 PM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                             |                      |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: <b>4/13/2004</b> | Analyst: <b>HV</b>   |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |
| Aniline                               | ND      | 10            |      | µg/L  | 1                           | 4/16/2004 9:36:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: April 26, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL  
 Lab ID: 0404115-05

Client Sample ID: MW-55  
 Collection Date: 4/12/2004 1:30:00 PM  
 Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units         | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|---------------|-----------------|----------------------|
| Anthracene                 | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| Phenol                     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 9:36:00 PM |
| Surr: 2,4,6-Tribromophenol | 87.5   | 39-153       |      | %REC          | 1               | 4/16/2004 9:36:00 PM |
| Surr: 2-Fluorobiphenyl     | 77.2   | 40-147       |      | %REC          | 1               | 4/16/2004 9:36:00 PM |
| Surr: 2-Fluorophenol       | 37.5   | 21-110       |      | %REC          | 1               | 4/16/2004 9:36:00 PM |
| Surr: 4-Terphenyl-d14      | 80.4   | 39-141       |      | %REC          | 1               | 4/16/2004 9:36:00 PM |
| Surr: Nitrobenzene-d5      | 77.7   | 37-140       |      | %REC          | 1               | 4/16/2004 9:36:00 PM |
| Surr: Phenol-d6            | 23.4   | 11-100       |      | %REC          | 1               | 4/16/2004 9:36:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        |              |      | <b>SW8260</b> |                 | <b>Analyst: PC</b>   |
| 1,1,1-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| 1,1,2-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| 1,1-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| 1,1-Dichloroethene         | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| 1,2-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| 2-Butanone                 | ND     | 10           |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| 2-Chloroethyl vinyl ether  | ND     | 10           |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| 2-Hexanone                 | ND     | 10           |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| 4-Methyl-2-pentanone       | ND     | 10           |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| Acetone                    | ND     | 10           |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| Benzene                    | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| Bromodichloromethane       | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| Bromoform                  | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| Bromomethane               | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| Carbon disulfide           | ND     | 10           |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| Carbon tetrachloride       | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |
| Chlorobenzene              | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 5:46:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: April 26, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL  
 Lab ID: 0404115-05

Client Sample ID: MW-55  
 Collection Date: 4/12/2004 1:30:00 PM  
 Matrix: WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|-----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 4/23/2004 5:46:00 AM |
| Surr: 1,2-Dichloroethane-d4 | 100    | 71-126       |      | %REC  | 1               | 4/23/2004 5:46:00 AM |
| Surr: 4-Bromofluorobenzene  | 76.1   | 74-125       |      | %REC  | 1               | 4/23/2004 5:46:00 AM |
| Surr: Dibromofluoromethane  | 102    | 73-126       |      | %REC  | 1               | 4/23/2004 5:46:00 AM |
| Surr: Toluene-d8            | 93.9   | 75-125       |      | %REC  | 1               | 4/23/2004 5:46:00 AM |

## ANIONS BY ION CHROMATOGRAPHY

E300

Analyst: MG

|                                  |       |        |  |      |     |                      |
|----------------------------------|-------|--------|--|------|-----|----------------------|
| Chloride                         | 246   | 5.00   |  | mg/L | 10  | 4/15/2004 3:14:00 PM |
| Fluoride                         | ND    | 0.100  |  | mg/L | 1   | 4/14/2004 1:32:00 AM |
| Sulfate                          | 1,440 | 100    |  | mg/L | 100 | 4/15/2004 3:42:00 PM |
| Nitrate/Nitrite (as N)           | ND    | 0.100  |  | mg/L | 1   | 4/14/2004 1:32:00 AM |
| Surr: Dichloroacetic acid (surr) | 103   | 80-120 |  | %REC | 1   | 4/14/2004 1:32:00 AM |
| Surr: Dichloroacetic acid (surr) | 101   | 80-120 |  | %REC | 10  | 4/15/2004 3:14:00 PM |
| Surr: Dichloroacetic acid (surr) | 105   | 80-120 |  | %REC | 100 | 4/15/2004 3:42:00 PM |

## ALKALINITY

E310.1

Analyst: LMD

|                                    |     |      |  |      |   |           |
|------------------------------------|-----|------|--|------|---|-----------|
| Alkalinity, Bicarbonate (As CaCO3) | 392 | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Total (As CaCO3)       | 392 | 5.00 |  | mg/L | 1 | 4/15/2004 |

## CYANIDE, TOTAL

E335.3

Analyst: LMD

|         |    |        |  |      |   |           |
|---------|----|--------|--|------|---|-----------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 4/17/2004 |
|---------|----|--------|--|------|---|-----------|

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

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**e-Lab, Inc.**

Date: April 26, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0404115  
**Project:** NCL/TEL  
**Lab ID:** 0404115-06

**Client Sample ID:** MW-54A  
**Collection Date:** 4/12/2004 2:00:00 PM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed                                             |
|---------------------------------------|---------|---------------|------|-------|-----------------|-----------------------------------------------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                 |                                                           |
|                                       |         | <b>SW7470</b> |      |       |                 |                                                           |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1               | Prep Date: 4/16/2004 Analyst: JCJ<br>4/16/2004 4:40:38 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                 |                                                           |
|                                       |         | <b>SW6020</b> |      |       |                 |                                                           |
| Aluminum                              | 0.0183  | 0.0100        |      | mg/L  | 1               | Prep Date: 4/16/2004 Analyst: SA<br>4/16/2004 7:23:00 PM  |
| Arsenic                               | ND      | 0.00500       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Barium                                | 0.0321  | 0.00500       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Boron                                 | 0.434   | 0.0200        |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Calcium                               | 614     | 5.00          |      | mg/L  | 10              | 4/19/2004 3:09:00 PM                                      |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Cobalt                                | 0.00547 | 0.00200       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Copper                                | 0.00237 | 0.00200       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Iron                                  | 0.257   | 0.200         |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Magnesium                             | 222     | 2.00          |      | mg/L  | 10              | 4/19/2004 3:09:00 PM                                      |
| Manganese                             | 1.26    | 0.0500        |      | mg/L  | 10              | 4/19/2004 3:09:00 PM                                      |
| Nickel                                | 0.00989 | 0.00500       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Potassium                             | 0.313   | 0.200         |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Sodium                                | 154     | 2.00          |      | mg/L  | 10              | 4/19/2004 3:09:00 PM                                      |
| Vanadium                              | 0.00556 | 0.00500       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| Zinc                                  | ND      | 0.00500       |      | mg/L  | 1               | 4/16/2004 7:23:00 PM                                      |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                 |                                                           |
|                                       |         | <b>SW8270</b> |      |       |                 |                                                           |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1               | Prep Date: 4/13/2004 Analyst: HV<br>4/16/2004 10:08:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |
| Aniline                               | ND      | 10            |      | µg/L  | 1               | 4/16/2004 10:08:00 PM                                     |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: April 26, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL  
 Lab ID: 0404115-06

Client Sample ID: MW-54A  
 Collection Date: 4/12/2004 2:00:00 PM  
 Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units         | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|---------------|-----------------|-----------------------|
| Anthracene                 | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| Phenol                     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L          | 1               | 4/16/2004 10:08:00 PM |
| Surr: 2,4,6-Tribromophenol | 88.0   | 39-153       |      | %REC          | 1               | 4/16/2004 10:08:00 PM |
| Surr: 2-Fluorobiphenyl     | 77.5   | 40-147       |      | %REC          | 1               | 4/16/2004 10:08:00 PM |
| Surr: 2-Fluorophenol       | 34.6   | 21-110       |      | %REC          | 1               | 4/16/2004 10:08:00 PM |
| Surr: 4-Terphenyl-d14      | 77.6   | 39-141       |      | %REC          | 1               | 4/16/2004 10:08:00 PM |
| Surr: Nitrobenzene-d5      | 75.1   | 37-140       |      | %REC          | 1               | 4/16/2004 10:08:00 PM |
| Surr: Phenol-d6            | 22.0   | 11-100       |      | %REC          | 1               | 4/16/2004 10:08:00 PM |
| <b>VOLATILES BY GC/MS</b>  |        |              |      | <b>SW8260</b> |                 | <b>Analyst: PC</b>    |
| 1,1,1-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| 1,1,2-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| 1,1-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| 1,1-Dichloroethene         | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| 1,2-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| 2-Butanone                 | ND     | 10           |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| 2-Chloroethyl vinyl ether  | ND     | 10           |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| 2-Hexanone                 | ND     | 10           |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| 4-Methyl-2-pentanone       | ND     | 10           |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| Acetone                    | ND     | 10           |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| Benzene                    | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| Bromodichloromethane       | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| Bromoform                  | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| Bromomethane               | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| Carbon disulfide           | ND     | 10           |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| Carbon tetrachloride       | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |
| Chlorobenzene              | ND     | 5.0          |      | µg/L          | 1               | 4/23/2004 6:14:00 AM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time



## e-Lab, Inc.

Date: April 26, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL  
 Lab ID: 0404115-06

Client Sample ID: MW-54A  
 Collection Date: 4/12/2004 2:00:00 PM  
 Matrix: WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|-----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Ethylbenzene                | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| m,p-Xylene                  | ND     | 10           |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Xylenes, Total              | ND     | 15           |      | µg/L  | 1               | 4/23/2004 6:14:00 AM |
| Surr: 1,2-Dichloroethane-d4 | 106    | 71-126       |      | %REC  | 1               | 4/23/2004 6:14:00 AM |
| Surr: 4-Bromofluorobenzene  | 87.0   | 74-125       |      | %REC  | 1               | 4/23/2004 6:14:00 AM |
| Surr: Dibromofluoromethane  | 102    | 73-126       |      | %REC  | 1               | 4/23/2004 6:14:00 AM |
| Surr: Toluene-d8            | 98.4   | 75-125       |      | %REC  | 1               | 4/23/2004 6:14:00 AM |

## ANIONS BY ION CHROMATOGRAPHY

E300

Analyst: MG

|                                  |       |        |  |      |     |                      |
|----------------------------------|-------|--------|--|------|-----|----------------------|
| Chloride                         | 267   | 5.00   |  | mg/L | 10  | 4/15/2004 4:11:00 PM |
| Fluoride                         | 1.45  | 0.100  |  | mg/L | 1   | 4/14/2004 2:29:00 AM |
| Sulfate                          | 1,870 | 100    |  | mg/L | 100 | 4/15/2004 4:39:00 PM |
| Nitrate/Nitrite (as N)           | 1.34  | 0.100  |  | mg/L | 1   | 4/14/2004 2:29:00 AM |
| Surr: Dichloroacetic acid (surr) | 82.4  | 80-120 |  | %REC | 1   | 4/14/2004 2:29:00 AM |
| Surr: Dichloroacetic acid (surr) | 105   | 80-120 |  | %REC | 10  | 4/15/2004 4:11:00 PM |
| Surr: Dichloroacetic acid (surr) | 99.6  | 80-120 |  | %REC | 100 | 4/15/2004 4:39:00 PM |

## ALKALINITY

E310.1

Analyst: LMD

|                                    |     |      |  |      |   |           |
|------------------------------------|-----|------|--|------|---|-----------|
| Alkalinity, Bicarbonate (As CaCO3) | 422 | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 4/15/2004 |
| Alkalinity, Total (As CaCO3)       | 422 | 5.00 |  | mg/L | 1 | 4/15/2004 |

## CYANIDE, TOTAL

E335.3

Analyst: LMD

|         |    |        |  |      |   |           |
|---------|----|--------|--|------|---|-----------|
| Cyanide | ND | 0.0200 |  | mg/L | 1 | 4/17/2004 |
|---------|----|--------|--|------|---|-----------|

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

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e-Lab, Inc.

Date: Apr 26 2004

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8667 InstrumentID: Mercury

MBLK Sample ID: GBLKW1-041604 Test Code: SW7470 Units: mg/L Analysis Date: 04/16/04 16:14  
 Client ID: Run ID: MERCURY\_040416B SeqNo: 457443 Prep Date: 4/16/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW1-041604 Test Code: SW7470 Units: mg/L Analysis Date: 04/16/04 16:19  
 Client ID: Run ID: MERCURY\_040416B SeqNo: 457444 Prep Date: 4/16/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00521 | 0.00020 | 0.005   | 0             | 104  | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW1-041604 Test Code: SW7470 Units: mg/L Analysis Date: 04/16/04 16:21  
 Client ID: Run ID: MERCURY\_040416B SeqNo: 457445 Prep Date: 4/16/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00527 | 0.00020 | 0.005   | 0             | 105  | 83-115        | 0.00521       | 1.15 | 20        |      |

MS Sample ID: 0404115-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 04/16/04 16:28  
 Client ID: MW-53 Run ID: MERCURY\_040416B SeqNo: 457448 Prep Date: 4/16/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00503 | 0.00020 | 0.005   | -0.000007     | 101  | 83-115        | 0             |      |           |      |

MSD Sample ID: 0404115-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 04/16/04 16:29  
 Client ID: MW-53 Run ID: MERCURY\_040416B SeqNo: 457449 Prep Date: 4/16/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Mercury | 0.00501 | 0.00020 | 0.005   | -0.000007     | 100  | 83-115        | 0.00503       | 0.398 | 20        |      |

DUP Sample ID: 0404115-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 04/16/04 16:26  
 Client ID: MW-53 Run ID: MERCURY\_040416B SeqNo: 457447 Prep Date: 4/16/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | -0.000007     | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0404115-01C | 0404115-02C | 0404115-03C |
| 0404115-04C | 0404115-05C | 0404115-06C |

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in assoc. Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

U - Analyzed for but not detected

O - Referenced analyte value is &gt; 4 times amount spiked

P - Dual Column results percent difference &gt; 40%

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0404115  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8671 InstrumentID: ICP7500

MBLK Sample ID: MBLKW1-041604 Test Code: SW6020 Units: mg/L Analysis Date: 04/19/04 14:27

Client ID: Run ID: ICP7500\_040419A SeqNo: 457825 Prep Date: 4/16/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | ND      | 0.010  |         |               |      |               |               |      |           |      |
| Arsenic   | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Barium    | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Beryllium | ND      | 0.0020 |         |               |      |               |               |      |           |      |
| Boron     | ND      | 0.020  |         |               |      |               |               |      |           |      |
| Cadmium   | ND      | 0.0020 |         |               |      |               |               |      |           |      |
| Calcium   | ND      | 0.50   |         |               |      |               |               |      |           |      |
| Chromium  | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Cobalt    | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Copper    | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Iron      | 0.02974 | 0.20   |         |               |      |               |               |      |           | J    |
| Lead      | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium | ND      | 0.20   |         |               |      |               |               |      |           |      |
| Manganese | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel    | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium | 0.02582 | 0.20   |         |               |      |               |               |      |           | J    |
| Selenium  | 0.00252 | 0.0050 |         |               |      |               |               |      |           | J    |
| Silver    | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium    | ND      | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium  | ND      | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc      | ND      | 0.0050 |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8671 InstrumentID: ICP7500

LCS Sample ID: MLCSW1-041604 Test Code: SW6020 Units: mg/L Analysis Date: 04/16/04 18:12

Client ID: Run ID: ICP7500\_040416A SeqNo: 457529 Prep Date: 4/16/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 0.05898 | 0.010  | 0.05    | 0             | 118  | 79-126        | 0             |      |           |      |
| Arsenic   | 0.04565 | 0.0050 | 0.05    | 0             | 91.3 | 80-121        | 0             |      |           |      |
| Barium    | 0.05041 | 0.0050 | 0.05    | 0             | 101  | 79.8-119      | 0             |      |           |      |
| Beryllium | 0.04794 | 0.0020 | 0.05    | 0             | 95.9 | 78.9-120      | 0             |      |           |      |
| Boron     | 0.4782  | 0.020  | 0.5     | 0             | 95.6 | 80-120        | 0             |      |           |      |
| Cadmium   | 0.05178 | 0.0020 | 0.05    | 0             | 104  | 79.1-119      | 0             |      |           |      |
| Calcium   | 5.376   | 0.50   | 5       | 0             | 108  | 80-121        | 0             |      |           |      |
| Chromium  | 0.0462  | 0.0050 | 0.05    | 0             | 92.4 | 79.3-121      | 0             |      |           |      |
| Cobalt    | 0.04848 | 0.0050 | 0.05    | 0             | 97   | 82-121        | 0             |      |           |      |
| Copper    | 0.04896 | 0.0050 | 0.05    | 0             | 97.9 | 83-121        | 0             |      |           |      |
| Iron      | 5.204   | 0.20   | 5       | 0             | 104  | 80-120        | 0             |      |           |      |
| Lead      | 0.04516 | 0.0050 | 0.05    | 0             | 90.3 | 80-118        | 0             |      |           |      |
| Magnesium | 5.494   | 0.20   | 5       | 0             | 110  | 80-120        | 0             |      |           |      |
| Manganese | 0.05005 | 0.0050 | 0.05    | 0             | 100  | 82-119        | 0             |      |           |      |
| Nickel    | 0.05042 | 0.0050 | 0.05    | 0             | 101  | 85-120        | 0             |      |           |      |
| Potassium | 5.289   | 0.20   | 5       | 0             | 106  | 80-120        | 0             |      |           |      |
| Selenium  | 0.04833 | 0.0050 | 0.05    | 0             | 96.7 | 79.2-118      | 0             |      |           |      |
| Silver    | 0.04772 | 0.0050 | 0.05    | 0             | 95.4 | 83-117        | 0             |      |           |      |
| Sodium    | 5.439   | 0.20   | 5       | 0             | 109  | 82.4-120      | 0             |      |           |      |
| Vanadium  | 0.04819 | 0.0050 | 0.05    | 0             | 96.4 | 82.1-119      | 0             |      |           |      |
| Zinc      | 0.05093 | 0.0050 | 0.05    | 0             | 102  | 83-118        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8671 InstrumentID: ICP7500

MS Sample ID: 0404131-01CMS Test Code: SW6020 Units: mg/L Analysis Date: 04/16/04 19:41

Client ID: Run ID: ICP7500\_040416A SeqNo: 457543 Prep Date: 4/16/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 0.05113 | 0.010  | 0.05    | 0.005109      | 92   | 79-126        | 0             |      |           |      |
| Arsenic   | 0.04744 | 0.0050 | 0.05    | 0             | 94.9 | 80-121        | 0             |      |           |      |
| Barium    | 0.04828 | 0.0050 | 0.05    | 0             | 96.6 | 79.8-119      | 0             |      |           |      |
| Beryllium | 0.0475  | 0.0020 | 0.05    | 0             | 95   | 78.9-120      | 0             |      |           |      |
| Boron     | 0.481   | 0.020  | 0.5     | 0.032         | 89.8 | 80-120        | 0             |      |           |      |
| Cadmium   | 0.05033 | 0.0020 | 0.05    | 0             | 101  | 79.1-119      | 0             |      |           |      |
| Chromium  | 0.05385 | 0.0050 | 0.05    | 0.01025       | 87.2 | 79.3-121      | 0             |      |           |      |
| Cobalt    | 0.04516 | 0.0050 | 0.05    | 0             | 90.3 | 82-121        | 0             |      |           |      |
| Copper    | 0.04593 | 0.0050 | 0.05    | 0             | 91.9 | 83-121        | 0             |      |           |      |
| Iron      | 4.947   | 0.20   | 5       | 0             | 98.9 | 80-120        | 0             |      |           |      |
| Lead      | 0.04609 | 0.0050 | 0.05    | 0             | 92.2 | 80-118        | 0             |      |           |      |
| Magnesium | 4.955   | 0.20   | 5       | 0.8779        | 81.5 | 80-120        | 0             |      |           |      |
| Manganese | 0.04783 | 0.0050 | 0.05    | 0.005073      | 85.5 | 82-119        | 0             |      |           |      |
| Nickel    | 0.04695 | 0.0050 | 0.05    | 0             | 93.9 | 85-120        | 0             |      |           |      |
| Potassium | 4.895   | 0.20   | 5       | 0             | 97.9 | 80-120        | 0             |      |           |      |
| Selenium  | 0.04603 | 0.0050 | 0.05    | 0             | 92.1 | 79.2-118      | 0             |      |           |      |
| Silver    | 0.04822 | 0.0050 | 0.05    | 0             | 96.4 | 83-117        | 0             |      |           |      |
| Sodium    | 4.889   | 0.20   | 5       | 0.5767        | 86.2 | 82.4-120      | 0             |      |           |      |
| Vanadium  | 0.04783 | 0.0050 | 0.05    | 0.002896      | 89.9 | 82.1-119      | 0             |      |           |      |
| Zinc      | 0.04672 | 0.0050 | 0.05    | 0             | 93.4 | 83-118        | 0             |      |           |      |

MS Sample ID: 0404131-01CMS Test Code: SW6020 Units: mg/L Analysis Date: 04/19/04 13:58

Client ID: Run ID: ICP7500\_040419A SeqNo: 457820 Prep Date: 4/16/2004 DF: 1

| Analyte | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Calcium | 5.096  | 0.50 | 5       | 0.002515      | 102  | 80-121        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8671 InstrumentID: ICP7500

MSD Sample ID: 0404131-01CMSD Test Code: SW6020 Units: mg/L Analysis Date: 04/16/04 19:47

Client ID: Run ID: ICP7500\_040416A SeqNo: 457544 Prep Date: 4/16/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Aluminum  | 0.05254 | 0.010  | 0.05    | 0.005109      | 94.9 | 79-126        | 0.05113       | 2.72  | 15        |      |
| Arsenic   | 0.04541 | 0.0050 | 0.05    | 0             | 90.8 | 80-121        | 0.04744       | 4.37  | 15        |      |
| Barium    | 0.05072 | 0.0050 | 0.05    | 0             | 101  | 79.8-119      | 0.04828       | 4.93  | 15        |      |
| Beryllium | 0.04759 | 0.0020 | 0.05    | 0             | 95.2 | 78.9-120      | 0.0475        | 0.189 | 15        |      |
| Boron     | 0.494   | 0.020  | 0.5     | 0.032         | 92.4 | 80-120        | 0.481         | 2.67  | 15        |      |
| Cadmium   | 0.05266 | 0.0020 | 0.05    | 0             | 105  | 79.1-119      | 0.05033       | 4.52  | 15        |      |
| Cobalt    | 0.04502 | 0.0050 | 0.05    | 0             | 90   | 82-121        | 0.04516       | 0.31  | 15        |      |
| Copper    | 0.04587 | 0.0050 | 0.05    | 0             | 91.7 | 83-121        | 0.04593       | 0.131 | 15        |      |
| Iron      | 4.923   | 0.20   | 5       | 0             | 98.5 | 80-120        | 4.947         | 0.486 | 15        |      |
| Lead      | 0.04702 | 0.0050 | 0.05    | 0             | 94   | 80-118        | 0.04609       | 2     | 15        |      |
| Magnesium | 5.01    | 0.20   | 5       | 0.8779        | 82.6 | 80-120        | 4.955         | 1.1   | 15        |      |
| Manganese | 0.04826 | 0.0050 | 0.05    | 0.005073      | 86.4 | 82-119        | 0.04783       | 0.895 | 15        |      |
| Nickel    | 0.04737 | 0.0050 | 0.05    | 0             | 94.7 | 85-120        | 0.04695       | 0.891 | 15        |      |
| Potassium | 4.994   | 0.20   | 5       | 0             | 99.9 | 80-120        | 4.895         | 2     | 15        |      |
| Selenium  | 0.04431 | 0.0050 | 0.05    | 0             | 88.6 | 79.2-118      | 0.04603       | 3.81  | 15        |      |
| Silver    | 0.04739 | 0.0050 | 0.05    | 0             | 94.8 | 83-117        | 0.04822       | 1.74  | 15        |      |
| Sodium    | 4.981   | 0.20   | 5       | 0.5767        | 88.1 | 82.4-120      | 4.889         | 1.86  | 15        |      |
| Vanadium  | 0.04639 | 0.0050 | 0.05    | 0.002896      | 87   | 82.1-119      | 0.04783       | 3.06  | 15        |      |
| Zinc      | 0.04737 | 0.0050 | 0.05    | 0             | 94.7 | 83-118        | 0.04672       | 1.38  | 15        |      |

MSD Sample ID: 0404131-01CMSD Test Code: SW6020 Units: mg/L Analysis Date: 04/19/04 14:03

Client ID: Run ID: ICP7500\_040419A SeqNo: 457821 Prep Date: 4/16/2004 DF: 1

| Analyte  | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Calcium  | 5.173   | 0.50   | 5       | 0.002515      | 103  | 80-121        | 5.096         | 1.5  | 15        |      |
| Chromium | 0.04443 | 0.0050 | 0.05    | -0.006251     | 101  | 79.3-121      | 0.04301       | 3.25 | 15        |      |

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E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0404115  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8671 InstrumentID: ICP7500

DUP Sample ID: 0404131-01CDUP Test Code: SW6020 Units: mg/L Analysis Date: 04/19/04 13:52

Client ID: Run ID: ICP7500\_040419A SeqNo: 457819 Prep Date: 4/16/2004 DF: 1

| Analyte   | Result   | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 0.007016 | 0.010  | 0       | 0             | 0    | 0-0           | 0.007712      | 0    | 25        | J    |
| Arsenic   | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.00433      | 0    | 25        |      |
| Barium    | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0003404     | 0    | 25        |      |
| Beryllium | ND       | 0.0020 | 0       | 0             | 0    | 0-0           | 0.00002879    | 0    | 25        |      |
| Boron     | 0.01406  | 0.020  | 0       | 0             | 0    | 0-0           | 0.01603       | 0    | 25        | J    |
| Cadmium   | ND       | 0.0020 | 0       | 0             | 0    | 0-0           | 0.00004656    | 0    | 25        |      |
| Calcium   | ND       | 0.50   | 0       | 0             | 0    | 0-0           | 0.002515      | 0    | 25        |      |
| Chromium  | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.006251     | 0    | 25        |      |
| Cobalt    | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | 0.00005933    | 0    | 25        |      |
| Copper    | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | 0.000004229   | 0    | 25        |      |
| Iron      | ND       | 0.20   | 0       | 0             | 0    | 0-0           | 0.02691       | 0    | 25        |      |
| Lead      | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0001613     | 0    | 25        |      |
| Magnesium | 0.05026  | 0.20   | 0       | 0             | 0    | 0-0           | 0.0263        | 0    | 25        | J    |
| Manganese | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0002376     | 0    | 25        |      |
| Nickel    | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | 0.0002092     | 0    | 25        |      |
| Potassium | 0.0243   | 0.20   | 0       | 0             | 0    | 0-0           | 0.02659       | 0    | 25        | J    |
| Selenium  | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | 0.001248      | 0    | 25        |      |
| Silver    | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | 0.000008316   | 0    | 25        |      |
| Sodium    | 0.07218  | 0.20   | 0       | 0             | 0    | 0-0           | 0.05548       | 0    | 25        | J    |
| Vanadium  | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.001716     | 0    | 25        |      |
| Zinc      | ND       | 0.0050 | 0       | 0             | 0    | 0-0           | -0.004053     | 0    | 25        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0404115-01C | 0404115-02C | 0404115-03C |
| 0404115-04C | 0404115-05C | 0404115-06C |

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8627 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-040413 Test Code: SW8270 Units: µg/L Analysis Date: 04/15/04 11:42

Client ID: Run ID: SV-3\_040413A SeqNo: 456581 Prep Date: 4/13/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 81.98  | 0   | 100     | 0             | 82   | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 75.13  | 0   | 100     | 0             | 75.1 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 41.55  | 0   | 100     | 0             | 41.5 | 21-110        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 79.38  | 0   | 100     | 0             | 79.4 | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 73.89  | 0   | 100     | 0             | 73.9 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 24.59  | 0   | 100     | 0             | 24.6 | 11-100        |               | 0    |           |      |

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B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8627 InstrumentID: SV-3

LCS Sample ID: SLCSW1-040413 Test Code: SW8270 Units: µg/L Analysis Date: 04/15/04 12:14

Client ID: Run ID: SV-3\_040413A SeqNo: 456582 Prep Date: 4/13/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 37.56  | 10  | 50      | 0             | 75.1 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 87.82  | 10  | 100     | 0             | 87.8 | 68-128        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 83.68  | 10  | 100     | 0             | 83.7 | 66-125        | 0             |      |           |      |
| 2-Methylnaphthalene        | 39.01  | 10  | 50      | 0             | 78   | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 69.31  | 10  | 100     | 0             | 69.3 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 44.24  | 10  | 50      | 0             | 88.5 | 64-128        | 0             |      |           |      |
| 2-Nitrophenol              | 80.28  | 10  | 100     | 0             | 80.3 | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 37.36  | 10  | 50      | 0             | 74.7 | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 92.8   | 10  | 150     | 0             | 61.9 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 41.48  | 10  | 50      | 0             | 83   | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 39.73  | 10  | 100     | 0             | 39.7 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 42.09  | 10  | 50      | 0             | 84.2 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 41.03  | 10  | 50      | 0             | 82.1 | 67-116        | 0             |      |           |      |
| Aniline                    | 32.72  | 10  | 50      | 0             | 65.4 | 40-130        | 0             |      |           |      |
| Anthracene                 | 44.18  | 10  | 50      | 0             | 88.4 | 70-129        | 0             |      |           |      |
| Benz(a)anthracene          | 42.91  | 10  | 50      | 0             | 85.8 | 55-131        | 0             |      |           |      |
| Benzidine                  | 12.89  | 10  | 50      | 0             | 25.8 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 36.25  | 10  | 50      | 0             | 72.5 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 43.91  | 10  | 50      | 0             | 87.8 | 42-123        | 0             |      |           |      |
| Isophorone                 | 42.16  | 10  | 50      | 0             | 84.3 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 42.23  | 10  | 50      | 0             | 84.5 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 24.83  | 10  | 50      | 0             | 49.7 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 46.92  | 10  | 50      | 0             | 93.8 | 72-144        | 0             |      |           |      |
| Naphthalene                | 39.12  | 10  | 50      | 0             | 78.2 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 41.44  | 10  | 50      | 0             | 82.9 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 87.26  | 10  | 100     | 0             | 87.3 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 42.65  | 10  | 50      | 0             | 85.3 | 69-119        | 0             |      |           |      |
| Phenol                     | 32.84  | 10  | 100     | 0             | 32.8 | 16-115        | 0             |      |           |      |
| Pyrene                     | 40.35  | 10  | 50      | 0             | 80.7 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 83.1   | 0   | 100     | 0             | 83.1 | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 76.42  | 0   | 100     | 0             | 76.4 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 46.83  | 0   | 100     | 0             | 46.8 | 21-110        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 78.26  | 0   | 100     | 0             | 78.3 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 75.34  | 0   | 100     | 0             | 75.3 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 30     | 0   | 100     | 0             | 30   | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

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B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8627 InstrumentID: SV-3

LCSD Sample ID: SLCSDW1-040413 Test Code: SW8270 Units: µg/L Analysis Date: 04/15/04 12:46

Client ID: Run ID: SV-3\_040413A SeqNo: 456583 Prep Date: 4/13/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 42.3   | 10  | 50      | 0             | 84.6 | 50-115        | 37.56         | 11.9 | 30        |      |
| 2,4,5-Trichlorophenol      | 89.93  | 10  | 100     | 0             | 89.9 | 68-128        | 87.82         | 2.38 | 30        |      |
| 2,4,6-Trichlorophenol      | 86.79  | 10  | 100     | 0             | 86.8 | 66-125        | 83.68         | 3.65 | 30        |      |
| 2-Methylnaphthalene        | 43.34  | 10  | 50      | 0             | 86.7 | 47-122        | 39.01         | 10.5 | 30        |      |
| 2-Methylphenol             | 73.05  | 10  | 100     | 0             | 73   | 51-115        | 69.31         | 5.26 | 30        |      |
| 2-Nitroaniline             | 45.66  | 10  | 50      | 0             | 91.3 | 64-128        | 44.24         | 3.16 | 30        |      |
| 2-Nitrophenol              | 85.36  | 10  | 100     | 0             | 85.4 | 60-119        | 80.28         | 6.13 | 30        |      |
| 3-Nitroaniline             | 36.9   | 10  | 50      | 0             | 73.8 | 61-118        | 37.36         | 1.23 | 30        |      |
| 4-Methylphenol             | 100.7  | 10  | 150     | 0             | 67.2 | 44-115        | 92.8          | 8.21 | 30        |      |
| 4-Nitroaniline             | 42.3   | 10  | 50      | 0             | 84.6 | 61-123        | 41.48         | 1.95 | 30        |      |
| 4-Nitrophenol              | 41.32  | 10  | 100     | 0             | 41.3 | 17-100        | 39.73         | 3.92 | 30        |      |
| Acenaphthene               | 44.14  | 10  | 50      | 0             | 88.3 | 68-115        | 42.09         | 4.76 | 30        |      |
| Acenaphthylene             | 43.44  | 10  | 50      | 0             | 86.9 | 67-116        | 41.03         | 5.71 | 30        |      |
| Aniline                    | 25.29  | 10  | 50      | 0             | 50.6 | 40-130        | 32.72         | 25.6 | 30        |      |
| Anthracene                 | 47.24  | 10  | 50      | 0             | 94.5 | 70-129        | 44.18         | 6.7  | 30        |      |
| Benz(a)anthracene          | 44.51  | 10  | 50      | 0             | 89   | 55-131        | 42.91         | 3.66 | 30        |      |
| Benzidine                  | 8.361  | 10  | 50      | 0             | 16.7 | 10-115        | 12.89         | 0    | 30        | J    |
| Hexachloroethane           | 43.6   | 10  | 50      | 0             | 87.2 | 46-115        | 36.25         | 18.4 | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 46.1   | 10  | 50      | 0             | 92.2 | 42-123        | 43.91         | 4.87 | 30        |      |
| Isophorone                 | 43.62  | 10  | 50      | 0             | 87.2 | 63-117        | 42.16         | 3.41 | 30        |      |
| N-Nitrosodi-n-propylamine  | 44.94  | 10  | 50      | 0             | 89.9 | 67-115        | 42.23         | 6.22 | 30        |      |
| N-Nitrosodimethylamine     | 26.03  | 10  | 50      | 0             | 52.1 | 28-115        | 24.83         | 4.74 | 30        |      |
| N-Nitrosodiphenylamine     | 49.47  | 10  | 50      | 0             | 98.9 | 72-144        | 46.92         | 5.28 | 30        |      |
| Naphthalene                | 42.1   | 10  | 50      | 0             | 84.2 | 52-115        | 39.12         | 7.34 | 30        |      |
| Nitrobenzene               | 42.96  | 10  | 50      | 0             | 85.9 | 65-115        | 41.44         | 3.58 | 30        |      |
| Pentachlorophenol          | 91.38  | 10  | 100     | 0             | 91.4 | 65-123        | 87.26         | 4.61 | 30        |      |
| Phenanthrene               | 45.93  | 10  | 50      | 0             | 91.9 | 69-119        | 42.65         | 7.42 | 30        |      |
| Phenol                     | 33.47  | 10  | 100     | 0             | 33.5 | 16-115        | 32.84         | 1.88 | 30        |      |
| Pyrene                     | 41.87  | 10  | 50      | 0             | 83.7 | 51-130        | 40.35         | 3.71 | 30        |      |
| Surr: 2,4,6-Tribromophenol | 89.02  | 0   | 100     | 0             | 89   | 39-153        | 83.1          | 6.89 | 30        |      |
| Surr: 2-Fluorobiphenyl     | 79.28  | 0   | 100     | 0             | 79.3 | 40-147        | 76.42         | 3.67 | 30        |      |
| Surr: 2-Fluorophenol       | 48.04  | 0   | 100     | 0             | 48   | 21-110        | 46.83         | 2.54 | 30        |      |
| Surr: 4-Terphenyl-d14      | 81.93  | 0   | 100     | 0             | 81.9 | 39-141        | 78.26         | 4.58 | 30        |      |
| Surr: Nitrobenzene-d5      | 77.95  | 0   | 100     | 0             | 78   | 37-140        | 75.34         | 3.41 | 30        |      |
| Surr: Phenol-d6            | 30.62  | 0   | 100     | 0             | 30.6 | 11-100        | 30            | 2.06 | 30        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0404115-01E | 0404115-02E | 0404115-03E |
| 0404115-04E | 0404115-05E | 0404115-06E |

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CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20057 InstrumentID: VOA\_I

MBLK Sample ID: VBLKW-0422 Test Code: SW8260 Units: µg/L Analysis Date: 04/22/04 16:00

Client ID: Run ID: VOA\_I\_040422A SeqNo: 460191 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 47.15  | 5.0 | 50      | 0             | 94.3 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 39.18  | 5.0 | 50      | 0             | 78.4 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.5   | 5.0 | 50      | 0             | 97   | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 47.44  | 5.0 | 50      | 0             | 94.9 | 75-125        | 0             |      |           |      |

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E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20057 InstrumentID: VOA\_I

LCS Sample ID: VLCSW-0422 Test Code: SW8260 Units: µg/L Analysis Date: 04/22/04 15:32

Client ID: Run ID: VOA\_I\_040422A SeqNo: 460188 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 48.05  | 5.0 | 50      | 0             | 96.1 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 50.05  | 5.0 | 50      | 0             | 100  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 51.57  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 49.81  | 5.0 | 50      | 0             | 99.6 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 48.91  | 5.0 | 50      | 0             | 97.8 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 49.73  | 5.0 | 50      | 0             | 99.5 | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 96.38  | 10  | 100     | 0             | 96.4 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 92.71  | 10  | 100     | 0             | 92.7 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 73.95  | 10  | 100     | 0             | 74   | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 95.82  | 10  | 100     | 0             | 95.8 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 92     | 10  | 100     | 0             | 92   | 64.4-140      | 0             |      |           |      |
| Benzene                     | 54.61  | 5.0 | 50      | 0             | 109  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 48.27  | 5.0 | 50      | 0             | 96.5 | 80-120        | 0             |      |           |      |
| Bromoform                   | 51.15  | 5.0 | 50      | 0             | 102  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 49.8   | 5.0 | 50      | 0             | 99.6 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 95.83  | 10  | 100     | 0             | 95.8 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 49.66  | 5.0 | 50      | 0             | 99.3 | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 50.37  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Chloroethane                | 47.94  | 5.0 | 50      | 0             | 95.9 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 48.74  | 5.0 | 50      | 0             | 97.5 | 80-120        | 0             |      |           |      |
| Chloromethane               | 44.87  | 5.0 | 50      | 0             | 89.7 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 48.11  | 5.0 | 50      | 0             | 96.2 | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 50.2   | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 49.51  | 5.0 | 50      | 0             | 99   | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 102.1  | 10  | 100     | 0             | 102  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 60.91  | 10  | 50      | 0             | 122  | 76.2-120      | 0             |      |           | S    |
| Styrene                     | 50.04  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 54.15  | 5.0 | 50      | 0             | 108  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 50.44  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 45.73  | 5.0 | 50      | 0             | 91.5 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 51.96  | 5.0 | 50      | 0             | 104  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 111.1  | 10  | 100     | 0             | 111  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 48.61  | 2.0 | 50      | 0             | 97.2 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 151.6  | 15  | 150     | 0             | 101  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.23  | 5.0 | 50      | 0             | 90.5 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 47.22  | 5.0 | 50      | 0             | 94.4 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 47.09  | 5.0 | 50      | 0             | 94.2 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.39  | 5.0 | 50      | 0             | 98.8 | 75-125        | 0             |      |           |      |

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CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20057 InstrumentID: VOA\_I

MS Sample ID: 0404235-01AMS Test Code: SW8260 Units: µg/L Analysis Date: 04/22/04 17:24

Client ID: Run ID: VOA\_I\_040422A SeqNo: 460193 Prep Date: DF: 10

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 497.2  | 50  | 500     | 0             | 99.4 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 577.6  | 50  | 500     | 0             | 116  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 585.6  | 50  | 500     | 0             | 117  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 517.1  | 50  | 500     | 0             | 103  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 481.8  | 50  | 500     | 0             | 96.4 | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 571    | 50  | 500     | 0             | 114  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 1247   | 100 | 1000    | 0             | 125  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 1067   | 100 | 1000    | 0             | 107  | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 958.2  | 100 | 1000    | 0             | 95.8 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 1111   | 100 | 1000    | 0             | 111  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 1357   | 100 | 1000    | 0             | 136  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 560.4  | 50  | 500     | 0             | 112  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 620.2  | 50  | 500     | 78.59         | 108  | 80-120        | 0             |      |           |      |
| Bromoform                   | 626.5  | 50  | 500     | 0             | 125  | 77.9-121      | 0             |      |           | S    |
| Bromomethane                | 507.8  | 50  | 500     | 0             | 102  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 993.9  | 100 | 1000    | 0             | 99.4 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 510.4  | 50  | 500     | 0             | 102  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 562    | 50  | 500     | 0             | 112  | 80-120        | 0             |      |           |      |
| Chloroethane                | 488.3  | 50  | 500     | 0             | 97.7 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 2502   | 50  | 500     | 2009          | 98.6 | 80-120        | 0             |      |           | EO   |
| Chloromethane               | 472.8  | 50  | 500     | 0             | 94.6 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 524.2  | 50  | 500     | 0             | 105  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 596.9  | 50  | 500     | 0             | 119  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 511.9  | 50  | 500     | 0             | 102  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 1078   | 100 | 1000    | 0             | 108  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 560.7  | 100 | 500     | 0             | 112  | 76.2-120      | 0             |      |           |      |
| Styrene                     | 541.3  | 50  | 500     | 0             | 108  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 563    | 50  | 500     | 0             | 113  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 531.7  | 50  | 500     | 0             | 106  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 517.9  | 50  | 500     | 0             | 104  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 519.9  | 50  | 500     | 0             | 104  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 1236   | 100 | 1000    | 0             | 124  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 470.7  | 20  | 500     | 0             | 94.1 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 1618   | 150 | 1500    | 0             | 108  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 490    | 50  | 500     | 0             | 98   | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 485    | 50  | 500     | 0             | 97   | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 484.3  | 50  | 500     | 0             | 96.9 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 496.2  | 50  | 500     | 0             | 99.2 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20057 InstrumentID: VOA\_I

MSD Sample ID: 0404235-01AMSD Test Code: SW8260 Units: µg/L Analysis Date: 04/22/04 17:52

Client ID: Run ID: VOA\_I\_040422A SeqNo: 460194 Prep Date: DF: 10

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,1,1-Trichloroethane       | 469.4  | 50  | 500     | 0             | 93.9 | 75.2-120      | 497.2         | 5.75  | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 552.2  | 50  | 500     | 0             | 110  | 72.4-121      | 577.6         | 4.51  | 20        |      |
| 1,1,2-Trichloroethane       | 543.3  | 50  | 500     | 0             | 109  | 80-120        | 585.6         | 7.5   | 20        |      |
| 1,1-Dichloroethane          | 504.4  | 50  | 500     | 0             | 101  | 76.9-120      | 517.1         | 2.49  | 20        |      |
| 1,1-Dichloroethene          | 473.9  | 50  | 500     | 0             | 94.8 | 72.6-123      | 481.8         | 1.67  | 20        |      |
| 1,2-Dichloroethane          | 526.5  | 50  | 500     | 0             | 105  | 80-120        | 571           | 8.11  | 20        |      |
| 2-Butanone                  | 1155   | 100 | 1000    | 0             | 115  | 69-131        | 1247          | 7.65  | 20        |      |
| 2-Chloroethyl vinyl ether   | 997.6  | 100 | 1000    | 0             | 99.8 | 60-135        | 1067          | 6.69  | 20        |      |
| 2-Hexanone                  | 967.3  | 100 | 1000    | 0             | 96.7 | 55.6-126      | 958.2         | 0.948 | 20        |      |
| 4-Methyl-2-pentanone        | 1048   | 100 | 1000    | 0             | 105  | 67.4-121      | 1111          | 5.9   | 20        |      |
| Acetone                     | 1218   | 100 | 1000    | 0             | 122  | 64.4-140      | 1357          | 10.8  | 20        |      |
| Benzene                     | 537.6  | 50  | 500     | 0             | 108  | 80-120        | 560.4         | 4.15  | 20        |      |
| Bromodichloromethane        | 590.8  | 50  | 500     | 78.59         | 102  | 80-120        | 620.2         | 4.84  | 20        |      |
| Bromoform                   | 577.1  | 50  | 500     | 0             | 115  | 77.9-121      | 626.5         | 8.2   | 20        |      |
| Bromomethane                | 499.2  | 50  | 500     | 0             | 99.8 | 63.3-137      | 507.8         | 1.7   | 20        |      |
| Carbon disulfide            | 951.7  | 100 | 1000    | 0             | 95.2 | 74.1-123      | 993.9         | 4.34  | 20        |      |
| Carbon tetrachloride        | 491.9  | 50  | 500     | 0             | 98.4 | 74.7-120      | 510.4         | 3.69  | 20        |      |
| Chlorobenzene               | 535    | 50  | 500     | 0             | 107  | 80-120        | 562           | 4.91  | 20        |      |
| Chloroethane                | 476.6  | 50  | 500     | 0             | 95.3 | 74.7-126      | 488.3         | 2.41  | 20        |      |
| Chloroform                  | 2350   | 50  | 500     | 2009          | 68.1 | 80-120        | 2502          | 6.29  | 20        | SEO  |
| Chloromethane               | 447.1  | 50  | 500     | 0             | 89.4 | 64.5-132      | 472.8         | 5.58  | 20        |      |
| cis-1,3-Dichloropropene     | 499.7  | 50  | 500     | 0             | 99.9 | 80-120        | 524.2         | 4.79  | 20        |      |
| Dibromochloromethane        | 568.6  | 50  | 500     | 0             | 114  | 80-120        | 596.9         | 4.86  | 20        |      |
| Ethylbenzene                | 490.1  | 50  | 500     | 0             | 98   | 80-120        | 511.9         | 4.36  | 20        |      |
| m,p-Xylene                  | 1026   | 100 | 1000    | 0             | 103  | 80-120        | 1078          | 4.93  | 20        |      |
| Methylene chloride          | 517.7  | 100 | 500     | 0             | 104  | 76.2-120      | 560.7         | 7.98  | 20        |      |
| Styrene                     | 518.6  | 50  | 500     | 0             | 104  | 80-120        | 541.3         | 4.3   | 20        |      |
| Tetrachloroethene           | 554.3  | 50  | 500     | 0             | 111  | 68.5-130      | 563           | 1.56  | 20        |      |
| Toluene                     | 494.1  | 50  | 500     | 0             | 98.8 | 80-120        | 531.7         | 7.34  | 20        |      |
| trans-1,3-Dichloropropene   | 487.2  | 50  | 500     | 0             | 97.4 | 80-120        | 517.9         | 6.11  | 20        |      |
| Trichloroethene             | 512.5  | 50  | 500     | 0             | 103  | 78.9-120      | 519.9         | 1.43  | 20        |      |
| Vinyl acetate               | 1187   | 100 | 1000    | 0             | 119  | 62.4-133      | 1236          | 4.1   | 20        |      |
| Vinyl chloride              | 471.4  | 20  | 500     | 0             | 94.3 | 72.7-128      | 470.7         | 0.162 | 20        |      |
| Xylenes, Total              | 1535   | 150 | 1500    | 0             | 102  | 80-120        | 1618          | 5.26  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 461.9  | 50  | 500     | 0             | 92.4 | 71-126        | 490           | 5.92  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 468.4  | 50  | 500     | 0             | 93.7 | 74-125        | 485           | 3.49  | 20        |      |
| Surr: Dibromofluoromethane  | 479.9  | 50  | 500     | 0             | 96   | 73-126        | 484.3         | 0.909 | 20        |      |
| Surr: Toluene-d8            | 476    | 50  | 500     | 0             | 95.2 | 75-125        | 496.2         | 4.16  | 20        |      |

The following samples were analyzed in this batch:

0404115-01A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20062 InstrumentID: VOA\_I

MBLK Sample ID: VBLKW-0422 Test Code: SW8260 Units: µg/L Analysis Date: 04/23/04 0:45

Client ID: Run ID: VOA\_I\_040422B SeqNo: 460275 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 47.05  | 5.0 | 50      | 0             | 94.1 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 38.84  | 5.0 | 50      | 0             | 77.7 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.94  | 5.0 | 50      | 0             | 93.9 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 46.76  | 5.0 | 50      | 0             | 93.5 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20062 InstrumentID: VOA\_I

LCS Sample ID: VLCSW-0422 Test Code: SW8260 Units: µg/L Analysis Date: 04/22/04 23:50

Client ID: Run ID: VOA\_I\_040422B SeqNo: 460274 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 49.3   | 5.0 | 50      | 0             | 98.6 | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 46.85  | 5.0 | 50      | 0             | 93.7 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 51.82  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 49.83  | 5.0 | 50      | 0             | 99.7 | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 50.23  | 5.0 | 50      | 0             | 100  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 51.02  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 101.6  | 10  | 100     | 0             | 102  | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 94.31  | 10  | 100     | 0             | 94.3 | 60-135        | 0             |      |           |      |
| 2-Hexanone                  | 79.58  | 10  | 100     | 0             | 79.6 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 92.07  | 10  | 100     | 0             | 92.1 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 110.3  | 10  | 100     | 0             | 110  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 55.05  | 5.0 | 50      | 0             | 110  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 50.82  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Bromoform                   | 51.74  | 5.0 | 50      | 0             | 103  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 53.34  | 5.0 | 50      | 0             | 107  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 99.46  | 10  | 100     | 0             | 99.5 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 51.3   | 5.0 | 50      | 0             | 103  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 51.12  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Chloroethane                | 49.89  | 5.0 | 50      | 0             | 99.8 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 49.28  | 5.0 | 50      | 0             | 98.6 | 80-120        | 0             |      |           |      |
| Chloromethane               | 48.25  | 5.0 | 50      | 0             | 96.5 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 47.99  | 5.0 | 50      | 0             | 96   | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 52.12  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 49.65  | 5.0 | 50      | 0             | 99.3 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 98.82  | 10  | 100     | 0             | 98.8 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 54.44  | 10  | 50      | 0             | 109  | 76.2-120      | 0             |      |           |      |
| Styrene                     | 49.01  | 5.0 | 50      | 0             | 98   | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 52.47  | 5.0 | 50      | 0             | 105  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 49.69  | 5.0 | 50      | 0             | 99.4 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 46.67  | 5.0 | 50      | 0             | 93.3 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 55.14  | 5.0 | 50      | 0             | 110  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 76.71  | 10  | 100     | 0             | 76.7 | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 50.87  | 2.0 | 50      | 0             | 102  | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 147.7  | 15  | 150     | 0             | 98.4 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.83  | 5.0 | 50      | 0             | 93.7 | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.47  | 5.0 | 50      | 0             | 96.9 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.74  | 5.0 | 50      | 0             | 97.5 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 49.05  | 5.0 | 50      | 0             | 98.1 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R20062** InstrumentID: **VOA\_I**

MS Sample ID: **0404114-01AMS** Test Code: **SW8260** Units: **µg/L** Analysis Date: **04/23/04 2:08**

Client ID: Run ID: **VOA\_I\_040422B** SeqNo: **460276** Prep Date: DF: **25**

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 1278   | 120 | 1250    | 0             | 102  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 1225   | 120 | 1250    | 0             | 98   | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 1334   | 120 | 1250    | 0             | 107  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 1388   | 120 | 1250    | 0             | 111  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 2353   | 120 | 1250    | 977.5         | 110  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 1347   | 120 | 1250    | 0             | 108  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 2371   | 250 | 2500    | 0             | 94.9 | 69-131        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 250 | 2500    | 0             | 0    | 60-135        | 0             |      |           | S    |
| 2-Hexanone                  | 1921   | 250 | 2500    | 0             | 76.8 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 2201   | 250 | 2500    | 0             | 88.1 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 2195   | 250 | 2500    | 0             | 87.8 | 64.4-140      | 0             |      |           |      |
| Benzene                     | 1354   | 120 | 1250    | 0             | 108  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 1300   | 120 | 1250    | 0             | 104  | 80-120        | 0             |      |           |      |
| Bromoform                   | 1341   | 120 | 1250    | 0             | 107  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 1319   | 120 | 1250    | 0             | 106  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 2483   | 250 | 2500    | 0             | 99.3 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 1254   | 120 | 1250    | 0             | 100  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 1288   | 120 | 1250    | 0             | 103  | 80-120        | 0             |      |           |      |
| Chloroethane                | 1243   | 120 | 1250    | 0             | 99.4 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 1298   | 120 | 1250    | 0             | 104  | 80-120        | 0             |      |           |      |
| Chloromethane               | 1192   | 120 | 1250    | 0             | 95.4 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 1100   | 120 | 1250    | 0             | 88   | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 1344   | 120 | 1250    | 0             | 108  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 1238   | 120 | 1250    | 0             | 99   | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 2657   | 250 | 2500    | 0             | 106  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 1430   | 250 | 1250    | 0             | 114  | 76.2-120      | 0             |      |           |      |
| Styrene                     | 1286   | 120 | 1250    | 0             | 103  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 1369   | 120 | 1250    | 0             | 110  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 1291   | 120 | 1250    | 0             | 103  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 1174   | 120 | 1250    | 0             | 93.9 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 1286   | 120 | 1250    | 0             | 103  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 2790   | 250 | 2500    | 0             | 112  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 1238   | 50  | 1250    | 0             | 99   | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 3931   | 380 | 3750    | 0             | 105  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 1260   | 120 | 1250    | 0             | 101  | 71-126        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 1223   | 120 | 1250    | 0             | 97.8 | 74-125        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 1248   | 120 | 1250    | 0             | 99.8 | 73-126        | 0             |      |           |      |
| Surr: Toluene-d8            | 1245   | 120 | 1250    | 0             | 99.6 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R20062 InstrumentID: VOA\_I

MSD Sample ID: 0404114-01AMSD Test Code: SW8260 Units: µg/L Analysis Date: 04/23/04 2:35

Client ID: Run ID: VOA\_I\_040422B SeqNo: 460277 Prep Date: DF: 25

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,1,1-Trichloroethane       | 1186   | 120 | 1250    | 0             | 94.9 | 75.2-120      | 1278          | 7.48  | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 1220   | 120 | 1250    | 0             | 97.6 | 72.4-121      | 1225          | 0.461 | 20        |      |
| 1,1,2-Trichloroethane       | 1290   | 120 | 1250    | 0             | 103  | 80-120        | 1334          | 3.35  | 20        |      |
| 1,1-Dichloroethane          | 1324   | 120 | 1250    | 0             | 106  | 76.9-120      | 1388          | 4.73  | 20        |      |
| 1,1-Dichloroethene          | 2396   | 120 | 1250    | 977.5         | 113  | 72.6-123      | 2353          | 1.81  | 20        |      |
| 1,2-Dichloroethane          | 1285   | 120 | 1250    | 0             | 103  | 80-120        | 1347          | 4.68  | 20        |      |
| 2-Butanone                  | 2201   | 250 | 2500    | 0             | 88   | 69-131        | 2371          | 7.45  | 20        |      |
| 2-Chloroethyl vinyl ether   | ND     | 250 | 2500    | 0             | 0    | 60-135        | 0             | 0     | 20        | S    |
| 2-Hexanone                  | 1768   | 250 | 2500    | 0             | 70.7 | 55.6-126      | 1921          | 8.27  | 20        |      |
| 4-Methyl-2-pentanone        | 2186   | 250 | 2500    | 0             | 87.4 | 67.4-121      | 2201          | 0.702 | 20        |      |
| Acetone                     | 2002   | 250 | 2500    | 0             | 80.1 | 64.4-140      | 2195          | 9.21  | 20        |      |
| Benzene                     | 1315   | 120 | 1250    | 0             | 105  | 80-120        | 1354          | 2.96  | 20        |      |
| Bromodichloromethane        | 1237   | 120 | 1250    | 0             | 99   | 80-120        | 1300          | 4.96  | 20        |      |
| Bromoform                   | 1287   | 120 | 1250    | 0             | 103  | 77.9-121      | 1341          | 4.14  | 20        |      |
| Bromomethane                | 1349   | 120 | 1250    | 0             | 108  | 63.3-137      | 1319          | 2.22  | 20        |      |
| Carbon disulfide            | 2421   | 250 | 2500    | 0             | 96.8 | 74.1-123      | 2483          | 2.53  | 20        |      |
| Carbon tetrachloride        | 1201   | 120 | 1250    | 0             | 96.1 | 74.7-120      | 1254          | 4.3   | 20        |      |
| Chlorobenzene               | 1267   | 120 | 1250    | 0             | 101  | 80-120        | 1288          | 1.6   | 20        |      |
| Chloroethane                | 1218   | 120 | 1250    | 0             | 97.5 | 74.7-126      | 1243          | 1.98  | 20        |      |
| Chloroform                  | 1234   | 120 | 1250    | 0             | 98.7 | 80-120        | 1298          | 5.12  | 20        |      |
| Chloromethane               | 1128   | 120 | 1250    | 0             | 90.2 | 64.5-132      | 1192          | 5.58  | 20        |      |
| cis-1,3-Dichloropropene     | 1076   | 120 | 1250    | 0             | 86.1 | 80-120        | 1100          | 2.23  | 20        |      |
| Dibromochloromethane        | 1274   | 120 | 1250    | 0             | 102  | 80-120        | 1344          | 5.36  | 20        |      |
| Ethylbenzene                | 1216   | 120 | 1250    | 0             | 97.3 | 80-120        | 1238          | 1.8   | 20        |      |
| m,p-Xylene                  | 2475   | 250 | 2500    | 0             | 99   | 80-120        | 2657          | 7.08  | 20        |      |
| Methylene chloride          | 1316   | 250 | 1250    | 0             | 105  | 76.2-120      | 1430          | 8.29  | 20        |      |
| Styrene                     | 1244   | 120 | 1250    | 0             | 99.5 | 80-120        | 1286          | 3.34  | 20        |      |
| Tetrachloroethene           | 1352   | 120 | 1250    | 0             | 108  | 68.5-130      | 1369          | 1.28  | 20        |      |
| Toluene                     | 1234   | 120 | 1250    | 0             | 98.7 | 80-120        | 1291          | 4.52  | 20        |      |
| trans-1,3-Dichloropropene   | 1120   | 120 | 1250    | 0             | 89.6 | 80-120        | 1174          | 4.68  | 20        |      |
| Trichloroethene             | 1276   | 120 | 1250    | 0             | 102  | 78.9-120      | 1286          | 0.817 | 20        |      |
| Vinyl acetate               | 2773   | 250 | 2500    | 0             | 111  | 62.4-133      | 2790          | 0.607 | 20        |      |
| Vinyl chloride              | 1200   | 50  | 1250    | 0             | 96   | 72.7-128      | 1238          | 3.07  | 20        |      |
| Xylenes, Total              | 3693   | 380 | 3750    | 0             | 98.5 | 80-120        | 3931          | 6.24  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 1172   | 120 | 1250    | 0             | 93.8 | 71-126        | 1260          | 7.19  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 1177   | 120 | 1250    | 0             | 94.2 | 74-125        | 1223          | 3.77  | 20        |      |
| Surr: Dibromofluoromethane  | 1164   | 120 | 1250    | 0             | 93.1 | 73-126        | 1248          | 6.98  | 20        |      |
| Surr: Toluene-d8            | 1241   | 120 | 1250    | 0             | 99.3 | 75-125        | 1245          | 0.254 | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0404115-02A | 0404115-03A | 0404115-04A |
| 0404115-05A | 0404115-06A |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19878 InstrumentID: IC201

MBLK Sample ID: WBLKW1-041304 Test Code: E300 Units: mg/L Analysis Date: 04/13/04 18:53

Client ID: Run ID: IC201\_040413A SeqNo: 455434 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.71   | 0.10 | 5       | 0             | 94.2 | 80-120        | 0             |      |           |      |

LCS Sample ID: WLCSW1-041304 Test Code: E300 Units: mg/L Analysis Date: 04/13/04 19:21

Client ID: Run ID: IC201\_040413A SeqNo: 455435 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.02   | 0.50 | 10      | 0             | 90.2 | 80-120        | 0             |      |           |      |
| Fluoride                         | 1.94   | 0.10 | 2       | 0             | 97   | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.62   | 1.0  | 10      | 0             | 96.2 | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.99   | 0.10 | 5       | 0             | 99.8 | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-04130 Test Code: E300 Units: mg/L Analysis Date: 04/13/04 19:50

Client ID: Run ID: IC201\_040413A SeqNo: 455436 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 8.98   | 0.50 | 10      | 0             | 89.8 | 80-120        | 9.02          | 0.444 | 20        |      |
| Fluoride                         | 1.84   | 0.10 | 2       | 0             | 92   | 80-120        | 1.94          | 5.29  | 20        |      |
| Sulfate                          | 9.57   | 1.0  | 10      | 0             | 95.7 | 80-120        | 9.62          | 0.521 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 4.97   | 0.10 | 5       | 0             | 99.4 | 80-120        | 4.99          | 0.402 | 20        |      |

MS Sample ID: 0404115-06BMS Test Code: E300 Units: mg/L Analysis Date: 04/14/04 3:26

Client ID: MW-54A Run ID: IC201\_040413A SeqNo: 455451 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 331.5  | 0.50 | 10      | 326.1         | 54.2 | 75-125        | 0             |      |           | SEO  |
| Fluoride                         | 3.43   | 0.10 | 2       | 1.45          | 99   | 75-125        | 0             |      |           |      |
| Sulfate                          | 2622   | 1.0  | 10      | 2663          | -407 | 75-125        | 0             |      |           | SEO  |
| Nitrate/Nitrite (as N)           | 5.16   | 0.10 | 4       | 1.34          | 95.5 | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.03   | 0.10 | 5       | 0             | 80.6 | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0404115  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19878 InstrumentID: IC201

MSD Sample ID: 0404115-06BMSD Test Code: E300 Units: mg/L Analysis Date: 04/14/04 3:54

Client ID: MW-54A Run ID: IC201\_040413A SeqNo: 455452 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 330    | 0.50 | 10      | 326.1         | 38.8 | 75-125        | 331.5         | 0.466 | 20        | SEO  |
| Fluoride                         | 3.5    | 0.10 | 2       | 1.45          | 102  | 75-125        | 3.43          | 2.02  | 20        |      |
| Sulfate                          | 2608   | 1.0  | 10      | 2663          | -545 | 75-125        | 2622          | 0.528 | 20        | SEO  |
| Nitrate/Nitrite (as N)           | 5.14   | 0.10 | 4       | 1.34          | 95   | 75-125        | 5.16          | 0.388 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.87   | 0.10 | 5       | 0             | 117  | 80-120        | 4.03          | 37.2  | 20        | R    |

DUP Sample ID: 0404115-02BDUP Test Code: E300 Units: mg/L Analysis Date: 04/13/04 21:44

Client ID: NCL-49 Run ID: IC201\_040413A SeqNo: 455440 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 214.9  | 0.50 | 0       | 0             | 0    | 0-0           | 215           | 0.0558 | 20        | E    |
| Fluoride                         | 0.93   | 0.10 | 0       | 0             | 0    | 0-0           | 0.9           | 3.28   | 20        |      |
| Sulfate                          | 2237   | 1.0  | 0       | 0             | 0    | 0-0           | 2235          | 0.0859 | 20        | E    |
| Nitrate/Nitrite (as N)           | 9.36   | 0.10 | 0       | 0             | 0    | 0-0           | 9.37          | 0.107  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.13   | 0.10 | 5       | 0             | 103  | 80-120        | 5.04          | 1.77   | 20        |      |

DUP Sample ID: 0404115-06BDUP Test Code: E300 Units: mg/L Analysis Date: 04/14/04 2:57

Client ID: MW-54A Run ID: IC201\_040413A SeqNo: 455450 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 324.9  | 0.50 | 0       | 0             | 0    | 0-0           | 326.1         | 0.366 | 20        | E    |
| Fluoride                         | 1.5    | 0.10 | 0       | 0             | 0    | 0-0           | 1.45          | 3.39  | 20        |      |
| Sulfate                          | 2650   | 1.0  | 0       | 0             | 0    | 0-0           | 2663          | 0.479 | 20        | E    |
| Nitrate/Nitrite (as N)           | 1.35   | 0.10 | 0       | 0             | 0    | 0-0           | 1.34          | 0.743 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.85   | 0.10 | 5       | 0             | 117  | 80-120        | 4.12          | 34.7  | 20        | R    |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0404115-01B | 0404115-02B | 0404115-03B |
| 0404115-04B | 0404115-05B | 0404115-06B |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0404115  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19930 InstrumentID: Wet Chemistry

MBLK Sample ID: WMBW1-041504 Test Code: E310.1 Units: mg/L Analysis Date: 04/15/04 0:00

Client ID: Run ID: WET CHEMISTRY\_0404 SeqNo: 456584 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-041504 Test Code: E310.1 Units: mg/L Analysis Date: 04/15/04 0:00

Client ID: Run ID: WET CHEMISTRY\_0404 SeqNo: 456585 Prep Date: DF: 1

| Analyte                      | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Total (As CaCO3) | 980.6  | 5.0 | 1000    | 0             | 98.1 | 80-120        | 0             |      |           |      |

DUP Sample ID: 0404115-03BDUP Test Code: E310.1 Units: mg/L Analysis Date: 04/15/04 0:00

Client ID: NCL-32 Run ID: WET CHEMISTRY\_0404 SeqNo: 456596 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 323.6  | 5.0 | 0       | 0             | 0    | 0-0           | 323.6         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 323.6  | 5.0 | 0       | 0             | 0    | 0-0           | 323.6         | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0404115-01B | 0404115-02B | 0404115-03B |
| 0404115-04B | 0404115-05B | 0404115-06B |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19935 InstrumentID: IC201

MBLK Sample ID: WBLKW1-041404 Test Code: E300 Units: mg/L Analysis Date: 04/14/04 17:22

Client ID: Run ID: IC201\_040414A SeqNo: 456851 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.98   | 0.10 | 5       | 0             | 99.6 | 80-120        | 0             |      |           |      |

LCS Sample ID: WLC SW1-041404 Test Code: E300 Units: mg/L Analysis Date: 04/14/04 17:51

Client ID: Run ID: IC201\_040414A SeqNo: 456852 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9      | 0.50 | 10      | 0             | 90   | 80-120        | 0             |      |           |      |
| Fluoride                         | 2.06   | 0.10 | 2       | 0             | 103  | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.5    | 1.0  | 10      | 0             | 95   | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.94   | 0.10 | 5       | 0             | 98.8 | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-04140 Test Code: E300 Units: mg/L Analysis Date: 04/14/04 18:19

Client ID: Run ID: IC201\_040414A SeqNo: 456853 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 8.99   | 0.50 | 10      | 0             | 89.9 | 80-120        | 9             | 0.111 | 20        |      |
| Fluoride                         | 1.87   | 0.10 | 2       | 0             | 93.5 | 80-120        | 2.06          | 9.67  | 20        |      |
| Sulfate                          | 9.54   | 1.0  | 10      | 0             | 95.4 | 80-120        | 9.5           | 0.42  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5      | 0.10 | 5       | 0             | 100  | 80-120        | 4.94          | 1.21  | 20        |      |

MS Sample ID: 0404115-01BMS Test Code: E300 Units: mg/L Analysis Date: 04/15/04 11:54

Client ID: MW-53 Run ID: IC201\_040414A SeqNo: 456874 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 1032   | 50  | 1000    | 163           | 86.9 | 75-125        | 0             |      |           |      |
| Fluoride                         | 229    | 10  | 200     | 0             | 114  | 75-125        | 0             |      |           |      |
| Sulfate                          | 2145   | 100 | 1000    | 1113          | 103  | 75-125        | 0             |      |           |      |
| Nitrate/Nitrite (as N)           | 408    | 10  | 400     | 0             | 102  | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 499    | 10  | 500     | 0             | 99.8 | 80-120        | 0             |      |           |      |

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0404115  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19935 InstrumentID: IC201

|                                  |                           |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| MSD                              | Sample ID: 0404115-01BMSD |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 04/15/04 12:23 |           |      |
| Client ID: MW-53                 | Run ID: IC201_040414A     |     |         | SeqNo: 456875   |      | Prep Date:    |               | DF: 100                       |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 1004                      | 50  | 1000    | 163             | 84.1 | 75-125        | 1032          | 2.75                          | 20        |      |
| Fluoride                         | 219                       | 10  | 200     | 0               | 110  | 75-125        | 229           | 4.46                          | 20        |      |
| Sulfate                          | 2101                      | 100 | 1000    | 1113            | 98.8 | 75-125        | 2145          | 2.07                          | 20        |      |
| Nitrate/Nitrite (as N)           | 397                       | 10  | 400     | 0               | 99.2 | 75-125        | 408           | 2.73                          | 20        |      |
| Surr: Dichloroacetic acid (surr) | 514                       | 10  | 500     | 0               | 103  | 80-120        | 499           | 2.96                          | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                              |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|------------------------------|-----------|------|
| DUP                              | Sample ID: 0404077-01BDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 04/15/04 1:55 |           |      |
| Client ID:                       | Run ID: IC201_040414A     |     |         | SeqNo: 456869   |      | Prep Date:    |               | DF: 100                      |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                         | RPD Limit | Qual |
| Chloride                         | 646                       | 50  | 0       | 0               | 0    | 0-0           | 646           | 0                            | 20        |      |
| Fluoride                         | 49                        | 10  | 0       | 0               | 0    | 0-0           | 50            | 2.02                         | 20        |      |
| Sulfate                          | 1995                      | 100 | 0       | 0               | 0    | 0-0           | 1998          | 0.15                         | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                            | 20        |      |
| Surr: Dichloroacetic acid (surr) | 517                       | 10  | 500     | 0               | 103  | 80-120        | 522           | 0.962                        | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0404115-01BDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 04/15/04 11:26 |           |      |
| Client ID: MW-53                 | Run ID: IC201_040414A     |     |         | SeqNo: 456873   |      | Prep Date:    |               | DF: 100                       |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 165                       | 50  | 0       | 0               | 0    | 0-0           | 163           | 1.22                          | 20        |      |
| Fluoride                         | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Sulfate                          | 1112                      | 100 | 0       | 0               | 0    | 0-0           | 1113          | 0.0899                        | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 519                       | 10  | 500     | 0               | 104  | 80-120        | 530           | 2.1                           | 20        |      |

|                                  |                           |     |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0404115-06BDUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 04/15/04 17:08 |           |      |
| Client ID: MW-54A                | Run ID: IC201_040414A     |     |         | SeqNo: 456898   |      | Prep Date:    |               | DF: 100                       |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 323                       | 50  | 0       | 0               | 0    | 0-0           | 324           | 0.309                         | 20        |      |
| Fluoride                         | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Sulfate                          | 1862                      | 100 | 0       | 0               | 0    | 0-0           | 1866          | 0.215                         | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 507                       | 10  | 500     | 0               | 101  | 80-120        | 498           | 1.79                          | 20        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0404115  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19935 InstrumentID: IC201

|                                  |                           |     |         |                 |      |               |               |                              |           |      |
|----------------------------------|---------------------------|-----|---------|-----------------|------|---------------|---------------|------------------------------|-----------|------|
| DUP                              | Sample ID: 0404099-03ADUP |     |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 04/15/04 7:38 |           |      |
| Client ID:                       | Run ID: IC201_040414A     |     |         | SeqNo: 456933   |      | Prep Date:    |               | DF: 100                      |           |      |
| Analyte                          | Result                    | PQL | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                         | RPD Limit | Qual |
| Chloride                         | 605                       | 50  | 0       | 0               | 0    | 0-0           | 606           | 0.165                        | 20        |      |
| Fluoride                         | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                            | 20        |      |
| Sulfate                          | 4123                      | 100 | 0       | 0               | 0    | 0-0           | 4144          | 0.508                        | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 10  | 0       | 0               | 0    | 0-0           | 0             | 0                            | 20        |      |
| Surr: Dichloroacetic acid (surr) | 519                       | 10  | 500     | 0               | 104  | 80-120        | 513           | 1.16                         | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0404115-01B | 0404115-02B | 0404115-03B |
| 0404115-04B | 0404115-05B | 0404115-06B |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
Work Order: 0404115  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R19956 InstrumentID: UV-2101PC

MBLK Sample ID: WMBW1-041704 Test Code: E335.3 Units: mg/L Analysis Date: 04/17/04 0:00

Client ID: Run ID: UV-2101PC\_040417A SeqNo: 457309 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLC SW1-041704 Test Code: E335.3 Units: mg/L Analysis Date: 04/17/04 0:00

Client ID: Run ID: UV-2101PC\_040417A SeqNo: 457310 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2039 | 0.020 | 0.2     | 0             | 102  | 80-120        | 0             |      |           |      |

MS Sample ID: 0404115-06DMS Test Code: E335.3 Units: mg/L Analysis Date: 04/17/04 0:00

Client ID: MW-54A Run ID: UV-2101PC\_040417A SeqNo: 457326 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2    | 0.020 | 0.2     | 0.001         | 99.5 | 75-125        | 0             |      |           |      |

MSD Sample ID: 0404115-06DMSD Test Code: E335.3 Units: mg/L Analysis Date: 04/17/04 0:00

Client ID: MW-54A Run ID: UV-2101PC\_040417A SeqNo: 457327 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Cyanide | 0.1987 | 0.020 | 0.2     | 0.001         | 98.8 | 75-125        | 0.2           | 0.652 | 25        |      |

DUP Sample ID: 0404115-06DDUP Test Code: E335.3 Units: mg/L Analysis Date: 04/17/04 0:00

Client ID: MW-54A Run ID: UV-2101PC\_040417A SeqNo: 457325 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 | 0       | 0             | 0    | 0-0           | 0.001         | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0404115-01D | 0404115-02D | 0404115-03D |
| 0404115-04D | 0404115-05D | 0404115-06D |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



e-Lab, Inc.  
10450 Stancliff Rd. #210  
Houston, Texas 77099  
(Tel) 281.530.5656  
(Fax) 281.530.5887

## Chain of Custody Form

e-Lab, Inc.  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

Page 1 of 1

| Customer Information |                    |         |      | Project Information       |       |          |   | Parameter/Method Request for Analysis |   |   |   |   |   |   |   |   |      |  |  |
|----------------------|--------------------|---------|------|---------------------------|-------|----------|---|---------------------------------------|---|---|---|---|---|---|---|---|------|--|--|
| Purchase Order       | Project Name       |         |      | NCL/TEL                   |       |          |   | Tot. Metals WQCC Metals+18 Cations    |   |   |   |   |   |   |   |   |      |  |  |
| Work Order           | Project Number     |         |      |                           |       |          |   | Semi-volatiles B270                   |   |   |   |   |   |   |   |   |      |  |  |
| Company Name         | Bill To Company    |         |      | Navajo Refining Company   |       |          |   | Volatiles B260                        |   |   |   |   |   |   |   |   |      |  |  |
| Send Report To       | Invoice Attn       |         |      | Jeff Byrd                 |       |          |   | Anions: Cl, NO3, NO2, F, SO4          |   |   |   |   |   |   |   |   |      |  |  |
| Address              | Address            |         |      | P.O. Box 159              |       |          |   | Alkalinity                            |   |   |   |   |   |   |   |   |      |  |  |
| City/State/Zip       | City/State/Zip     |         |      | Artesia, New Mexico 88211 |       |          |   | Cyanide                               |   |   |   |   |   |   |   |   |      |  |  |
| Phone                | Phone              |         |      | (505) 746-3311            |       |          |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| Fax                  | Fax                |         |      | (505) 746-5421            |       |          |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| e-Mail Address       | e-Mail Address     |         |      |                           |       |          |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| No.                  | Sample Description | Date    | Time | Matrix                    | Pres. | #Bottles | A | B                                     | C | D | E | F | G | H | I | J | Hold |  |  |
| 1                    | MW-53              | 4/12/04 | 0845 | L                         | Q     | 8        | X | X                                     | X | X | X | X | X | X | X | X |      |  |  |
| 2                    | NCL-49             |         | 0930 |                           |       |          | X | X                                     | X | X | X | X | X | X | X | X |      |  |  |
| 3                    | NCL-32             |         | 1010 |                           |       |          | X | X                                     | X | X | X | X | X | X | X | X |      |  |  |
| 4                    | NCL-44             |         | 1030 |                           |       |          | X | X                                     | X | X | X | X | X | X | X | X |      |  |  |
| 5                    | MW-55              |         | 1330 |                           |       |          | X | X                                     | X | X | X | X | X | X | X | X |      |  |  |
| 6                    | MW-54A             |         | 1400 |                           |       |          | X | X                                     | X | X | X | X | X | X | X | X |      |  |  |
| 7                    |                    |         |      |                           |       |          |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 8                    |                    |         |      |                           |       |          |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 9                    |                    |         |      |                           |       |          |   |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 10                   |                    |         |      |                           |       |          |   |                                       |   |   |   |   |   |   |   |   |      |  |  |

| Shipments Method          |         | Required Turnaround Time: (Check Box)              |                                    | Results Due Date                   |                                  |
|---------------------------|---------|----------------------------------------------------|------------------------------------|------------------------------------|----------------------------------|
| Received by:              | Time:   | <input type="checkbox"/> STD 10 WK Days            | <input type="checkbox"/> 5 WK Days | <input type="checkbox"/> 2 WK Days | <input type="checkbox"/> 24 Hour |
| Jeff Byrd                 | 4/12/04 |                                                    |                                    |                                    |                                  |
| Received by (Laboratory): | Time:   | Notes: 2-Centers                                   |                                    |                                    |                                  |
| Received by:              | Time:   | QC Package: (Check One Box Below)                  |                                    |                                    |                                  |
| Received by (Laboratory): | Time:   | <input checked="" type="checkbox"/> Level I STD QC |                                    |                                    |                                  |
| Received by (Laboratory): | Time:   | <input type="checkbox"/> Level II STD QC           |                                    |                                    |                                  |
| Received by (Laboratory): | Time:   | <input type="checkbox"/> Level III STD QC          |                                    |                                    |                                  |
| Received by (Laboratory): | Time:   | <input type="checkbox"/> Level IV STD QC           |                                    |                                    |                                  |
| Received by (Laboratory): | Time:   | <input type="checkbox"/> Other                     |                                    |                                    |                                  |

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4°C

Note: 1. Any changes must be made in writing once samples and COC form have been submitted to e-Lab, Inc.

2. Unless otherwise agreed in a formal contract, e-Lab, Inc. reserves the right to limit the use of this form and conditions stated on the form.

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e-Lab, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 4/13/2004 9:00:00 AM

Work Order Number 0404115

Received by: RSZ

Checklist completed by

Signature

Date

Reviewed by

Initials

Date

Matrix: N

Carrier name FedEx

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☐

No ☒

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

Temperature(s)/Thermometer(s):

3.2, 2.9 c

003

Water - VOA vials have zero headspace?

Yes ☒

No ☐

No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

N/A ☐

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Login Notes: Sample NCL-44 and MW-54A were received broken for 8270, only one cantainter was received.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_



**e-Lab, Inc.**

10450 Standliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

February 16, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: NCL/TEL

Work Order : **0402010**

Dear Jeff Byrd,

e-Lab, Inc. received 5 samples on 2/3/2004 9:20:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Inc. The total number of pages in this report is 46.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

*Lora Terrill*

Electronically approved by: Patrina A. Dathorne

Lora Terrill  
VP Lab Operations

**e-Lab, Inc.**

**Date:** February 16, 2004

**CLIENT:** Navajo Refining Company  
**Project:** NCL/TEL  
**Work Order:** 0402010

**Work Order Sample Summary**

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0402010-01           | MW-59                   | Water         |                   | 2/1/2004 11:00         | 2/3/2004 09:20       | <input type="checkbox"/> |
| 0402010-02           | TEL-4                   | Water         |                   | 2/2/2004 09:10         | 2/3/2004 09:20       | <input type="checkbox"/> |
| 0402010-03           | TEL-3                   | Water         |                   | 2/2/2004 11:00         | 2/3/2004 09:20       | <input type="checkbox"/> |
| 0402010-04           | TEL-2                   | Water         |                   | 2/2/2004 11:15         | 2/3/2004 09:20       | <input type="checkbox"/> |
| 0402010-05           | TEL-1                   | Water         |                   | 2/2/2004 11:30         | 2/3/2004 09:20       | <input type="checkbox"/> |

**e-Lab, Inc.**

Date: February 16, 2004

CLIENT: Navajo Refining Company  
Work Order: 0402010  
Project: NCL/TEL  
Lab ID: 0402010-01

Client Sample ID: MW-59  
Collection Date: 2/1/2004 11:00:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|---------------------------------------|---------|--------------|------|-------|-----------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                      |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 2/11/2004 2:53:48 PM |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                      |
| Aluminum                              | 0.232   | 0.0500       |      | mg/L  | 5               | 2/12/2004 3:56:00 PM |
| Arsenic                               | 0.0258  | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Barium                                | 0.0233  | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Boron                                 | 0.330   | 0.0200       |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Calcium                               | 469     | 25.0         |      | mg/L  | 50              | 2/12/2004 3:47:00 PM |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Cobalt                                | 0.00287 | 0.00200      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Copper                                | 0.00579 | 0.00200      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Iron                                  | 1.08    | 0.200        |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Magnesium                             | 298     | 10.0         |      | mg/L  | 50              | 2/12/2004 3:47:00 PM |
| Manganese                             | 0.407   | 0.0250       |      | mg/L  | 5               | 2/12/2004 3:56:00 PM |
| Nickel                                | 0.00652 | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Potassium                             | 0.686   | 0.200        |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Sodium                                | 197     | 2.00         |      | mg/L  | 10              | 2/12/2004 3:52:00 PM |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| Zinc                                  | 0.0223  | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:13:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                      |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Aniline                               | ND      | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: February 16, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0402010  
**Project:** NCL/TEL  
**Lab ID:** 0402010-01

**Client Sample ID:** MW-59  
**Collection Date:** 2/1/2004 11:00:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Phenol                     | 140    | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:11:00 PM |
| Surr: 2,4,6-Tribromophenol | 114    | 39-153       |      | %REC  | 1               | 2/12/2004 8:11:00 PM |
| Surr: 2-Fluorobiphenyl     | 89.0   | 40-147       |      | %REC  | 1               | 2/12/2004 8:11:00 PM |
| Surr: 2-Fluorophenol       | 44.7   | 21-100       |      | %REC  | 1               | 2/12/2004 8:11:00 PM |
| Surr: 4-Terphenyl-d14      | 91.5   | 39-141       |      | %REC  | 1               | 2/12/2004 8:11:00 PM |
| Surr: Nitrobenzene-d5      | 86.5   | 37-140       |      | %REC  | 1               | 2/12/2004 8:11:00 PM |
| Surr: Phenol-d6            | 29.5   | 11-100       |      | %REC  | 1               | 2/12/2004 8:11:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |       |     |  |      |    |                     |
|---------------------------|-------|-----|--|------|----|---------------------|
| 1,1,1-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| 1,1,2,2-Tetrachloroethane | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| 1,1,2-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| 1,1-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| 1,1-Dichloroethene        | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| 1,2-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| 2-Butanone                | ND    | 10  |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| 2-Chloroethyl vinyl ether | ND    | 10  |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| 2-Hexanone                | ND    | 10  |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| 4-Methyl-2-pentanone      | ND    | 10  |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| Acetone                   | ND    | 10  |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| Benzene                   | 3,800 | 250 |  | µg/L | 50 | 2/5/2004 5:08:00 AM |
| Bromodichloromethane      | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| Bromoform                 | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| Bromomethane              | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| Carbon disulfide          | ND    | 10  |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| Carbon tetrachloride      | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:15:00 PM |
| Chlorobenzene             | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:15:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: February 16, 2004

CLIENT: Navajo Refining Company  
Work Order: 0402010  
Project: NCL/TEL  
Lab ID: 0402010-01

Client Sample ID: MW-59  
Collection Date: 2/1/2004 11:00:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed       |
|-------------------------------------|--------|---------------|------|-------|---------------------|---------------------|
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Ethylbenzene                        | 380    | 250           |      | µg/L  | 50                  | 2/5/2004 5:08:00 AM |
| m,p-Xylene                          | 56     | 10            |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Toluene                             | 18     | 5.0           |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Xylenes, Total                      | 59     | 15            |      | µg/L  | 1                   | 2/3/2004 7:15:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 96.8   | 70-130        |      | %REC  | 1                   | 2/3/2004 7:15:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 102    | 70-130        |      | %REC  | 50                  | 2/5/2004 5:08:00 AM |
| Surr: 4-Bromofluorobenzene          | 92.8   | 70-130        |      | %REC  | 1                   | 2/3/2004 7:15:00 PM |
| Surr: 4-Bromofluorobenzene          | 90.3   | 70-130        |      | %REC  | 50                  | 2/5/2004 5:08:00 AM |
| Surr: Dibromofluoromethane          | 102    | 70-130        |      | %REC  | 50                  | 2/5/2004 5:08:00 AM |
| Surr: Dibromofluoromethane          | 95.2   | 70-130        |      | %REC  | 1                   | 2/3/2004 7:15:00 PM |
| Surr: Toluene-d8                    | 95.0   | 70-130        |      | %REC  | 1                   | 2/3/2004 7:15:00 PM |
| Surr: Toluene-d8                    | 92.9   | 70-130        |      | %REC  | 50                  | 2/5/2004 5:08:00 AM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>MG</b>  |                     |
| Chloride                            | 168    | 2.50          |      | mg/L  | 5                   | 2/3/2004 2:56:00 PM |
| Fluoride                            | 1.50   | 0.100         |      | mg/L  | 1                   | 2/3/2004 2:27:00 PM |
| Sulfate                             | 1,430  | 100           |      | mg/L  | 100                 | 2/6/2004 2:14:00 PM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1                   | 2/3/2004 2:27:00 PM |
| Surr: Dichloroacetic acid (surr)    | 98.2   | 80-120        |      | %REC  | 1                   | 2/3/2004 2:27:00 PM |
| Surr: Dichloroacetic acid (surr)    | 99.2   | 80-120        |      | %REC  | 5                   | 2/3/2004 2:56:00 PM |
| Surr: Dichloroacetic acid (surr)    | 103    | 80-120        |      | %REC  | 100                 | 2/6/2004 2:14:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>MG</b>  |                     |
| Alkalinity, Bicarbonate (As CaCO3)  | 500    | 5.00          |      | mg/L  | 1                   | 2/10/2004           |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 2/10/2004           |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 2/10/2004           |
| Alkalinity, Total (As CaCO3)        | 500    | 5.00          |      | mg/L  | 1                   | 2/10/2004           |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: <b>LMD</b> |                     |
| Cyanide                             | ND     | 0.020         |      | mg/L  | 1                   | 2/9/2004            |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab, Inc.**

Date: February 16, 2004

CLIENT: Navajo Refining Company  
Work Order: 0402010  
Project: NCL/TEL  
Lab ID: 0402010-02

Client Sample ID: TEL-4  
Collection Date: 2/2/2004 9:10:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor      | Date Analyzed        |
|---------------------------------------|---------|---------------|------|-------|----------------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                      |                      |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: 2/10/2004 | Analyst: JCJ         |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                    | 2/11/2004 3:00:01 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                      |                      |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: 2/5/2004  | Analyst: ALR         |
| Aluminum                              | 0.0344  | 0.0100        |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| Arsenic                               | 0.00783 | 0.00500       |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| Barium                                | 0.296   | 0.00500       |      | mg/L  | 1                    | 2/10/2004 1:43:00 PM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| Boron                                 | 0.693   | 0.0200        |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                    | 2/10/2004 1:43:00 PM |
| Calcium                               | 178     | 5.00          |      | mg/L  | 10                   | 2/12/2004 4:05:00 PM |
| Chromium                              | 0.00389 | 0.00200       |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| Cobalt                                | ND      | 0.00200       |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| Copper                                | 0.0177  | 0.00200       |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| Iron                                  | 0.451   | 0.200         |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                    | 2/10/2004 1:43:00 PM |
| Magnesium                             | 202     | 10.0          |      | mg/L  | 50                   | 2/12/2004 4:00:00 PM |
| Manganese                             | 0.227   | 0.0250        |      | mg/L  | 5                    | 2/12/2004 4:09:00 PM |
| Nickel                                | 0.00800 | 0.00500       |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| Potassium                             | 0.361   | 0.200         |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                    | 2/10/2004 1:43:00 PM |
| Sodium                                | 339     | 10.0          |      | mg/L  | 50                   | 2/12/2004 4:00:00 PM |
| Vanadium                              | ND      | 0.00500       |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| Zinc                                  | 0.0116  | 0.00500       |      | mg/L  | 1                    | 2/9/2004 4:26:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                      |                      |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: 2/5/2004  | Analyst: HLBW        |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |
| Aniline                               | ND      | 10            |      | µg/L  | 1                    | 2/12/2004 8:36:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: February 16, 2004

CLIENT: Navajo Refining Company  
Work Order: 0402010  
Project: NCL/TEL  
Lab ID: 0402010-02

Client Sample ID: TEL-4  
Collection Date: 2/2/2004 9:10:00 AM  
Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| Naphthalene                | 22     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 8:36:00 PM |
| Surr: 2,4,6-Tribromophenol | 113    | 39-153       |      | %REC  | 1               | 2/12/2004 8:36:00 PM |
| Surr: 2-Fluorobiphenyl     | 91.4   | 40-147       |      | %REC  | 1               | 2/12/2004 8:36:00 PM |
| Surr: 2-Fluorophenol       | 38.0   | 21-100       |      | %REC  | 1               | 2/12/2004 8:36:00 PM |
| Surr: 4-Terphenyl-d14      | 90.7   | 39-141       |      | %REC  | 1               | 2/12/2004 8:36:00 PM |
| Surr: Nitrobenzene-d5      | 87.2   | 37-140       |      | %REC  | 1               | 2/12/2004 8:36:00 PM |
| Surr: Phenol-d6            | 26.3   | 11-100       |      | %REC  | 1               | 2/12/2004 8:36:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |       |     |  |      |    |                     |
|---------------------------|-------|-----|--|------|----|---------------------|
| 1,1,1-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| 1,1,2,2-Tetrachloroethane | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| 1,1,2-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| 1,1-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| 1,1-Dichloroethene        | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| 1,2-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| 2-Butanone                | ND    | 10  |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| 2-Chloroethyl vinyl ether | ND    | 10  |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| 2-Hexanone                | ND    | 10  |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| 4-Methyl-2-pentanone      | ND    | 10  |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| Acetone                   | ND    | 10  |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| Benzene                   | 2,900 | 120 |  | µg/L | 25 | 2/5/2004 5:36:00 AM |
| Bromodichloromethane      | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| Bromoform                 | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| Bromomethane              | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| Carbon disulfide          | ND    | 10  |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| Carbon tetrachloride      | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 8:35:00 PM |
| Chlorobenzene             | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 8:35:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

AR Page 5 of 16

## e-Lab, Inc.

Date: February 16, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL  
 Lab ID: 0402010-02

Client Sample ID: TEL-4  
 Collection Date: 2/2/2004 9:10:00 AM  
 Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed       |
|-------------------------------------|--------|---------------|------|-------|--------------------|---------------------|
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Ethylbenzene                        | 200    | 50            |      | µg/L  | 10                 | 2/3/2004 9:02:00 PM |
| m,p-Xylene                          | 350    | 10            |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Toluene                             | 53     | 5.0           |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Xylenes, Total                      | 360    | 15            |      | µg/L  | 1                  | 2/3/2004 8:35:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 101    | 70-130        |      | %REC  | 1                  | 2/3/2004 8:35:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 97.6   | 70-130        |      | %REC  | 10                 | 2/3/2004 9:02:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 101    | 70-130        |      | %REC  | 25                 | 2/5/2004 5:36:00 AM |
| Surr: 4-Bromofluorobenzene          | 91.8   | 70-130        |      | %REC  | 1                  | 2/3/2004 8:35:00 PM |
| Surr: 4-Bromofluorobenzene          | 90.0   | 70-130        |      | %REC  | 10                 | 2/3/2004 9:02:00 PM |
| Surr: 4-Bromofluorobenzene          | 91.3   | 70-130        |      | %REC  | 25                 | 2/5/2004 5:36:00 AM |
| Surr: Dibromofluoromethane          | 97.2   | 70-130        |      | %REC  | 10                 | 2/3/2004 9:02:00 PM |
| Surr: Dibromofluoromethane          | 101    | 70-130        |      | %REC  | 25                 | 2/5/2004 5:36:00 AM |
| Surr: Dibromofluoromethane          | 97.7   | 70-130        |      | %REC  | 1                  | 2/3/2004 8:35:00 PM |
| Surr: Toluene-d8                    | 94.6   | 70-130        |      | %REC  | 1                  | 2/3/2004 8:35:00 PM |
| Surr: Toluene-d8                    | 93.5   | 70-130        |      | %REC  | 10                 | 2/3/2004 9:02:00 PM |
| Surr: Toluene-d8                    | 94.6   | 70-130        |      | %REC  | 25                 | 2/5/2004 5:36:00 AM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>MG</b> |                     |
| Chloride                            | 481    | 5.00          |      | mg/L  | 10                 | 2/3/2004 4:50:00 PM |
| Fluoride                            | 1.21   | 0.100         |      | mg/L  | 1                  | 2/3/2004 3:53:00 PM |
| Sulfate                             | 198    | 5.00          |      | mg/L  | 5                  | 2/3/2004 4:21:00 PM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1                  | 2/3/2004 3:53:00 PM |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC  | 5                  | 2/3/2004 4:21:00 PM |
| Surr: Dichloroacetic acid (surr)    | 109    | 80-120        |      | %REC  | 10                 | 2/3/2004 4:50:00 PM |
| Surr: Dichloroacetic acid (surr)    | 95.0   | 80-120        |      | %REC  | 1                  | 2/3/2004 3:53:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>MG</b> |                     |
| Alkalinity, Bicarbonate (As CaCO3)  | 890    | 5.00          |      | mg/L  | 1                  | 2/10/2004           |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                  | 2/10/2004           |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                  | 2/10/2004           |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: February 16, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0402010  
**Project:** NCL/TEL  
**Lab ID:** 0402010-02

**Client Sample ID:** TEL-4  
**Collection Date:** 2/2/2004 9:10:00 AM  
**Matrix:** WATER

| Analyses                                  | Result | Report<br>Limit | Qual          | Units | Dilution<br>Factor | Date Analyzed       |
|-------------------------------------------|--------|-----------------|---------------|-------|--------------------|---------------------|
| Alkalinity, Total (As CaCO <sub>3</sub> ) | 890    | 5.00            |               | mg/L  | 1                  | 2/10/2004           |
| <b>CYANIDE, TOTAL</b>                     |        |                 | <b>E335.3</b> |       |                    | Analyst: <b>LMD</b> |
| Cyanide                                   | ND     | 0.020           |               | mg/L  | 1                  | 2/9/2004            |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: February 16, 2004

CLIENT: Navajo Refining Company  
Work Order: 0402010  
Project: NCL/TEL  
Lab ID: 0402010-03

Client Sample ID: TEL-3  
Collection Date: 2/2/2004 11:00:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|---------------------------------------|---------|--------------|------|-------|-----------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                      |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 2/11/2004 3:01:32 PM |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                      |
| Aluminum                              | 0.0383  | 0.0100       |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Barium                                | 0.0118  | 0.00500      |      | mg/L  | 1               | 2/10/2004 1:47:00 PM |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Boron                                 | 0.799   | 0.0200       |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 2/10/2004 1:47:00 PM |
| Calcium                               | 485     | 25.0         |      | mg/L  | 50              | 2/12/2004 4:14:00 PM |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Copper                                | 0.00345 | 0.00200      |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Iron                                  | 0.602   | 0.200        |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 2/10/2004 1:47:00 PM |
| Magnesium                             | 109     | 2.00         |      | mg/L  | 10              | 2/12/2004 4:18:00 PM |
| Manganese                             | ND      | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Nickel                                | ND      | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Potassium                             | 2.66    | 0.200        |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 2/10/2004 1:47:00 PM |
| Sodium                                | 93.7    | 2.00         |      | mg/L  | 10              | 2/12/2004 4:18:00 PM |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| Zinc                                  | 0.0103  | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:31:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                      |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Aniline                               | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: February 16, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0402010  
**Project:** NCL/TEL  
**Lab ID:** 0402010-03

**Client Sample ID:** TEL-3  
**Collection Date:** 2/2/2004 11:00:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Phenanthrene               | 35     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:01:00 PM |
| Surr: 2,4,6-Tribromophenol | 125    | 39-153       |      | %REC  | 1               | 2/12/2004 9:01:00 PM |
| Surr: 2-Fluorobiphenyl     | 101    | 40-147       |      | %REC  | 1               | 2/12/2004 9:01:00 PM |
| Surr: 2-Fluorophenol       | 45.9   | 21-100       |      | %REC  | 1               | 2/12/2004 9:01:00 PM |
| Surr: 4-Terphenyl-d14      | 97.0   | 39-141       |      | %REC  | 1               | 2/12/2004 9:01:00 PM |
| Surr: Nitrobenzene-d5      | 100    | 37-140       |      | %REC  | 1               | 2/12/2004 9:01:00 PM |
| Surr: Phenol-d6            | 30.9   | 11-100       |      | %REC  | 1               | 2/12/2004 9:01:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |     |     |  |      |   |                     |
|---------------------------|-----|-----|--|------|---|---------------------|
| 1,1,1-Trichloroethane     | ND  | 5.0 |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| 1,1,2,2-Tetrachloroethane | ND  | 5.0 |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| 1,1,2-Trichloroethane     | ND  | 5.0 |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| 1,1-Dichloroethane        | ND  | 5.0 |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| 1,1-Dichloroethene        | ND  | 5.0 |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| 1,2-Dichloroethane        | ND  | 5.0 |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| 2-Butanone                | ND  | 10  |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| 2-Chloroethyl vinyl ether | ND  | 10  |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| 2-Hexanone                | ND  | 10  |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| 4-Methyl-2-pentanone      | ND  | 10  |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| Acetone                   | ND  | 10  |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| Benzene                   | 160 | 5.0 |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| Bromodichloromethane      | ND  | 5.0 |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| Bromoform                 | ND  | 5.0 |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| Bromomethane              | ND  | 5.0 |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| Carbon disulfide          | ND  | 10  |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| Carbon tetrachloride      | ND  | 5.0 |  | µg/L | 1 | 2/3/2004 9:29:00 PM |
| Chlorobenzene             | ND  | 5.0 |  | µg/L | 1 | 2/3/2004 9:29:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: February 16, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0402010  
**Project:** NCL/TEL  
**Lab ID:** 0402010-03

**Client Sample ID:** TEL-3  
**Collection Date:** 2/2/2004 11:00:00 AM  
**Matrix:** WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed       |
|-----------------------------|--------|--------------|------|-------|-----------------|---------------------|
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Ethylbenzene                | 9.5    | 5.0          |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| m,p-Xylene                  | 58     | 10           |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Toluene                     | 5.3    | 5.0          |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Xylenes, Total              | 63     | 15           |      | µg/L  | 1               | 2/3/2004 9:29:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 98.5   | 70-130       |      | %REC  | 1               | 2/3/2004 9:29:00 PM |
| Surr: 4-Bromofluorobenzene  | 88.2   | 70-130       |      | %REC  | 1               | 2/3/2004 9:29:00 PM |
| Surr: Dibromofluoromethane  | 97.8   | 70-130       |      | %REC  | 1               | 2/3/2004 9:29:00 PM |
| Surr: Toluene-d8            | 95.2   | 70-130       |      | %REC  | 1               | 2/3/2004 9:29:00 PM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |      |        |  |      |    |                     |
|----------------------------------|------|--------|--|------|----|---------------------|
| Chloride                         | 137  | 2.50   |  | mg/L | 5  | 2/3/2004 5:47:00 PM |
| Fluoride                         | 2.47 | 0.100  |  | mg/L | 1  | 2/3/2004 5:18:00 PM |
| Sulfate                          | 998  | 50.0   |  | mg/L | 50 | 2/6/2004 5:05:00 PM |
| Nitrate/Nitrite (as N)           | ND   | 0.100  |  | mg/L | 1  | 2/3/2004 5:18:00 PM |
| Surr: Dichloroacetic acid (surr) | 99.4 | 80-120 |  | %REC | 1  | 2/3/2004 5:18:00 PM |
| Surr: Dichloroacetic acid (surr) | 106  | 80-120 |  | %REC | 5  | 2/3/2004 5:47:00 PM |
| Surr: Dichloroacetic acid (surr) | 100  | 80-120 |  | %REC | 50 | 2/6/2004 5:05:00 PM |

**ALKALINITY****E310.1**Analyst: **MG**

|                                    |     |      |  |      |   |           |
|------------------------------------|-----|------|--|------|---|-----------|
| Alkalinity, Bicarbonate (As CaCO3) | 560 | 5.00 |  | mg/L | 1 | 2/10/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 2/10/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 |  | mg/L | 1 | 2/10/2004 |
| Alkalinity, Total (As CaCO3)       | 560 | 5.00 |  | mg/L | 1 | 2/10/2004 |

**CYANIDE, TOTAL****E335.3**Analyst: **LMD**

|         |    |       |  |      |   |          |
|---------|----|-------|--|------|---|----------|
| Cyanide | ND | 0.020 |  | mg/L | 1 | 2/9/2004 |
|---------|----|-------|--|------|---|----------|

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
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S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab, Inc.**

Date: February 16, 2004

CLIENT: Navajo Refining Company  
Work Order: 0402010  
Project: NCL/TEL  
Lab ID: 0402010-04

Client Sample ID: TEL-2  
Collection Date: 2/2/2004 11:15:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|---------------------------------------|---------|--------------|------|-------|-----------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                      |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 2/11/2004 3:03:03 PM |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                      |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Arsenic                               | 0.0114  | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Barium                                | 0.126   | 0.00500      |      | mg/L  | 1               | 2/10/2004 1:52:00 PM |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Boron                                 | 0.739   | 0.0200       |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 2/10/2004 1:52:00 PM |
| Calcium                               | 166     | 25.0         |      | mg/L  | 50              | 2/12/2004 4:22:00 PM |
| Chromium                              | ND      | 0.00200      |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Copper                                | 0.00333 | 0.00200      |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Iron                                  | 0.279   | 0.200        |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 2/10/2004 1:52:00 PM |
| Magnesium                             | 186     | 2.00         |      | mg/L  | 10              | 2/12/2004 4:27:00 PM |
| Manganese                             | 0.0244  | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Nickel                                | ND      | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Potassium                             | 0.906   | 0.200        |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 2/10/2004 1:52:00 PM |
| Sodium                                | 408     | 10.0         |      | mg/L  | 50              | 2/12/2004 4:22:00 PM |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| Zinc                                  | 0.00912 | 0.00500      |      | mg/L  | 1               | 2/9/2004 4:36:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                      |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Aniline                               | ND      | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab, Inc.**

Date: February 16, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0402010  
**Project:** NCL/TEL  
**Lab ID:** 0402010-04

**Client Sample ID:** TEL-2  
**Collection Date:** 2/2/2004 11:15:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Naphthalene                | 18     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:27:00 PM |
| Surr: 2,4,6-Tribromophenol | 113    | 39-153       |      | %REC  | 1               | 2/12/2004 9:27:00 PM |
| Surr: 2-Fluorobiphenyl     | 93.6   | 40-147       |      | %REC  | 1               | 2/12/2004 9:27:00 PM |
| Surr: 2-Fluorophenol       | 38.4   | 21-100       |      | %REC  | 1               | 2/12/2004 9:27:00 PM |
| Surr: 4-Terphenyl-d14      | 91.0   | 39-141       |      | %REC  | 1               | 2/12/2004 9:27:00 PM |
| Surr: Nitrobenzene-d5      | 85.0   | 37-140       |      | %REC  | 1               | 2/12/2004 9:27:00 PM |
| Surr: Phenol-d6            | 26.2   | 11-100       |      | %REC  | 1               | 2/12/2004 9:27:00 PM |

**VOLATILES BY GC/MS****SW8260**Analyst: **PC**

|                           |       |     |  |      |    |                     |
|---------------------------|-------|-----|--|------|----|---------------------|
| 1,1,1-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| 1,1,2,2-Tetrachloroethane | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| 1,1,2-Trichloroethane     | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| 1,1-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| 1,1-Dichloroethene        | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| 1,2-Dichloroethane        | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| 2-Butanone                | ND    | 10  |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| 2-Chloroethyl vinyl ether | ND    | 10  |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| 2-Hexanone                | ND    | 10  |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| 4-Methyl-2-pentanone      | ND    | 10  |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| Acetone                   | ND    | 10  |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| Benzene                   | 1,500 | 100 |  | µg/L | 20 | 2/5/2004 6:03:00 AM |
| Bromodichloromethane      | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| Bromoform                 | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| Bromomethane              | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| Carbon disulfide          | ND    | 10  |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| Carbon tetrachloride      | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:41:00 PM |
| Chlorobenzene             | ND    | 5.0 |  | µg/L | 1  | 2/3/2004 7:41:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: February 16, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL  
 Lab ID: 0402010-04

Client Sample ID: TEL-2  
 Collection Date: 2/2/2004 11:15:00 AM  
 Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed       |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|---------------------|
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Ethylbenzene                        | 45     | 5.0           |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| m,p-Xylene                          | 210    | 10            |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Toluene                             | 93     | 5.0           |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Xylenes, Total                      | 230    | 15            |      | µg/L                | 1               | 2/3/2004 7:41:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 96.2   | 70-130        |      | %REC                | 1               | 2/3/2004 7:41:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 102    | 70-130        |      | %REC                | 20              | 2/5/2004 6:03:00 AM |
| Surr: 4-Bromofluorobenzene          | 90.5   | 70-130        |      | %REC                | 1               | 2/3/2004 7:41:00 PM |
| Surr: 4-Bromofluorobenzene          | 91.4   | 70-130        |      | %REC                | 20              | 2/5/2004 6:03:00 AM |
| Surr: Dibromofluoromethane          | 99.4   | 70-130        |      | %REC                | 20              | 2/5/2004 6:03:00 AM |
| Surr: Dibromofluoromethane          | 96.0   | 70-130        |      | %REC                | 1               | 2/3/2004 7:41:00 PM |
| Surr: Toluene-d8                    | 93.6   | 70-130        |      | %REC                | 1               | 2/3/2004 7:41:00 PM |
| Surr: Toluene-d8                    | 94.2   | 70-130        |      | %REC                | 20              | 2/5/2004 6:03:00 AM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                     |
| Chloride                            | 202    | 2.50          |      | mg/L                | 5               | 2/3/2004 7:12:00 PM |
| Fluoride                            | 1.57   | 0.100         |      | mg/L                | 1               | 2/3/2004 6:44:00 PM |
| Sulfate                             | 700    | 50.0          |      | mg/L                | 50              | 2/6/2004 5:33:00 PM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 2/3/2004 6:44:00 PM |
| Surr: Dichloroacetic acid (surr)    | 97.6   | 80-120        |      | %REC                | 1               | 2/3/2004 6:44:00 PM |
| Surr: Dichloroacetic acid (surr)    | 103    | 80-120        |      | %REC                | 5               | 2/3/2004 7:12:00 PM |
| Surr: Dichloroacetic acid (surr)    | 100    | 80-120        |      | %REC                | 50              | 2/6/2004 5:33:00 PM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>MG</b>  |                 |                     |
| Alkalinity, Bicarbonate (As CaCO3)  | 850    | 5.00          |      | mg/L                | 1               | 2/10/2004           |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 2/10/2004           |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 2/10/2004           |
| Alkalinity, Total (As CaCO3)        | 850    | 5.00          |      | mg/L                | 1               | 2/10/2004           |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                     |
| Cyanide                             | ND     | 0.020         |      | mg/L                | 1               | 2/9/2004            |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: February 16, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0402010  
**Project:** NCL/TEL  
**Lab ID:** 0402010-05

**Client Sample ID:** TEL-1  
**Collection Date:** 2/2/2004 11:30:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor             | Date Analyzed        |
|---------------------------------------|---------|---------------|------|-------|-----------------------------|----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                             |                      |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: <b>2/10/2004</b> | Analyst: <b>JCJ</b>  |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                           | 2/11/2004 3:07:40 PM |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                             |                      |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: <b>2/5/2004</b>  | Analyst: <b>ALR</b>  |
| Aluminum                              | ND      | 0.0100        |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Arsenic                               | ND      | 0.00500       |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Barium                                | 0.0131  | 0.00500       |      | mg/L  | 1                           | 2/10/2004 1:56:00 PM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Boron                                 | 0.667   | 0.0200        |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                           | 2/10/2004 1:56:00 PM |
| Calcium                               | 266     | 10.0          |      | mg/L  | 20                          | 2/12/2004 4:40:00 PM |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Cobalt                                | ND      | 0.00200       |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Copper                                | 0.00276 | 0.00200       |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Iron                                  | 0.417   | 0.200         |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                           | 2/10/2004 1:56:00 PM |
| Magnesium                             | 116     | 2.00          |      | mg/L  | 10                          | 2/12/2004 4:44:00 PM |
| Manganese                             | 0.0613  | 0.00500       |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Nickel                                | ND      | 0.00500       |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Potassium                             | 0.754   | 0.200         |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                           | 2/10/2004 1:56:00 PM |
| Sodium                                | 531     | 4.00          |      | mg/L  | 20                          | 2/12/2004 4:40:00 PM |
| Vanadium                              | ND      | 0.00500       |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| Zinc                                  | 0.00788 | 0.00500       |      | mg/L  | 1                           | 2/9/2004 4:40:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                             |                      |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: <b>2/5/2004</b>  | Analyst: <b>HLBW</b> |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |
| Aniline                               | ND      | 10            |      | µg/L  | 1                           | 2/12/2004 9:52:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: February 16, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0402010  
**Project:** NCL/TEL  
**Lab ID:** 0402010-05

**Client Sample ID:** TEL-1  
**Collection Date:** 2/2/2004 11:30:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 2/12/2004 9:52:00 PM |
| Surr: 2,4,6-Tribromophenol | 112    | 39-153       |      | %REC  | 1               | 2/12/2004 9:52:00 PM |
| Surr: 2-Fluorobiphenyl     | 96.3   | 40-147       |      | %REC  | 1               | 2/12/2004 9:52:00 PM |
| Surr: 2-Fluorophenol       | 42.4   | 21-100       |      | %REC  | 1               | 2/12/2004 9:52:00 PM |
| Surr: 4-Terphenyl-d14      | 96.1   | 39-141       |      | %REC  | 1               | 2/12/2004 9:52:00 PM |
| Surr: Nitrobenzene-d5      | 95.9   | 37-140       |      | %REC  | 1               | 2/12/2004 9:52:00 PM |
| Surr: Phenol-d6            | 28.0   | 11-100       |      | %REC  | 1               | 2/12/2004 9:52:00 PM |

**VOLATILES BY GC/MS**

SW8260

Analyst: PC

|                           |    |     |  |      |   |                     |
|---------------------------|----|-----|--|------|---|---------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| Benzene                   | 34 | 5.0 |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 2/3/2004 8:08:00 PM |
| Chlorobenzene             | ND | 5.0 |  | µg/L | 1 | 2/3/2004 8:08:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: February 16, 2004

CLIENT: Navajo Refining Company  
Work Order: 0402010  
Project: NCL/TEL  
Lab ID: 0402010-05

Client Sample ID: TEL-1  
Collection Date: 2/2/2004 11:30:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit | Qual | Units         | Dilution Factor | Date Analyzed       |
|-------------------------------------|--------|--------------|------|---------------|-----------------|---------------------|
| Chloroethane                        | ND     | 5.0          |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Chloroform                          | ND     | 5.0          |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Chloromethane                       | ND     | 5.0          |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0          |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Dibromochloromethane                | ND     | 5.0          |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Ethylbenzene                        | 7.3    | 5.0          |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| m,p-Xylene                          | 17     | 10           |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Methylene chloride                  | ND     | 10           |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Styrene                             | ND     | 5.0          |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Tetrachloroethene                   | ND     | 5.0          |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Toluene                             | 5.9    | 5.0          |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0          |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Trichloroethene                     | ND     | 5.0          |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Vinyl acetate                       | ND     | 10           |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Vinyl chloride                      | ND     | 2.0          |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Xylenes, Total                      | 24     | 15           |      | µg/L          | 1               | 2/3/2004 8:08:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 98.4   | 70-130       |      | %REC          | 1               | 2/3/2004 8:08:00 PM |
| Surr: 4-Bromofluorobenzene          | 93.8   | 70-130       |      | %REC          | 1               | 2/3/2004 8:08:00 PM |
| Surr: Dibromofluoromethane          | 98.1   | 70-130       |      | %REC          | 1               | 2/3/2004 8:08:00 PM |
| Surr: Toluene-d8                    | 94.8   | 70-130       |      | %REC          | 1               | 2/3/2004 8:08:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        |              |      | <b>E300</b>   |                 | Analyst: <b>MG</b>  |
| Chloride                            | 178    | 2.50         |      | mg/L          | 5               | 2/3/2004 8:38:00 PM |
| Fluoride                            | 1.34   | 0.100        |      | mg/L          | 1               | 2/3/2004 8:09:00 PM |
| Sulfate                             | 1,320  | 50.0         |      | mg/L          | 50              | 2/6/2004 6:02:00 PM |
| Nitrate/Nitrite (as N)              | ND     | 0.100        |      | mg/L          | 1               | 2/3/2004 8:09:00 PM |
| Surr: Dichloroacetic acid (surr)    | 98.4   | 80-120       |      | %REC          | 1               | 2/3/2004 8:09:00 PM |
| Surr: Dichloroacetic acid (surr)    | 91.4   | 80-120       |      | %REC          | 5               | 2/3/2004 8:38:00 PM |
| Surr: Dichloroacetic acid (surr)    | 98.2   | 80-120       |      | %REC          | 50              | 2/6/2004 6:02:00 PM |
| <b>ALKALINITY</b>                   |        |              |      | <b>E310.1</b> |                 | Analyst: <b>MG</b>  |
| Alkalinity, Bicarbonate (As CaCO3)  | 470    | 5.00         |      | mg/L          | 1               | 2/10/2004           |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00         |      | mg/L          | 1               | 2/10/2004           |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00         |      | mg/L          | 1               | 2/10/2004           |
| Alkalinity, Total (As CaCO3)        | 470    | 5.00         |      | mg/L          | 1               | 2/10/2004           |
| <b>CYANIDE, TOTAL</b>               |        |              |      | <b>E335.3</b> |                 | Analyst: <b>LMD</b> |
| Cyanide                             | ND     | 0.020        |      | mg/L          | 1               | 2/9/2004            |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: Feb 16 2004

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

**QC BATCH REPORT**

Batch ID: 7952 InstrumentID: ICP4500

MBLK Sample ID: MBLKW3-020504 Test Code: SW6020 Units: mg/L Analysis Date: 02/09/04 15:40  
 Client ID: Run ID: ICP4500\_040209A SeqNo: 427226 Prep Date: 2/5/2004 DF: 1

| Analyte   | Result   | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Arsenic   | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Barium    | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Beryllium | ND       | 0.0020 |         |               |      |               |               |      |           |      |
| Boron     | ND       | 0.020  |         |               |      |               |               |      |           |      |
| Cadmium   | ND       | 0.0010 |         |               |      |               |               |      |           |      |
| Calcium   | ND       | 0.50   |         |               |      |               |               |      |           |      |
| Chromium  | ND       | 0.0020 |         |               |      |               |               |      |           |      |
| Cobalt    | ND       | 0.0020 |         |               |      |               |               |      |           |      |
| Copper    | ND       | 0.0020 |         |               |      |               |               |      |           |      |
| Iron      | ND       | 0.20   |         |               |      |               |               |      |           |      |
| Lead      | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium | ND       | 0.20   |         |               |      |               |               |      |           |      |
| Manganese | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel    | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium | ND       | 0.20   |         |               |      |               |               |      |           |      |
| Selenium  | 0.002704 | 0.0050 |         |               |      |               |               |      |           | J    |
| Silver    | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium    | 0.04194  | 0.20   |         |               |      |               |               |      |           | J    |
| Vanadium  | ND       | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc      | ND       | 0.0050 |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW3-020504 Test Code: SW6020 Units: mg/L Analysis Date: 02/10/04 12:14  
 Client ID: Run ID: ICP4500\_040210A SeqNo: 427544 Prep Date: 2/5/2004 DF: 1

| Analyte  | Result   | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------|----------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum | 0.009616 | 0.010 |         |               |      |               |               |      |           | J    |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is &gt; 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0402010  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7952 InstrumentID: ICP4500

LCS Sample ID: MLC3W3-020504 Test Code: SW6020 Units: mg/L Analysis Date: 02/09/04 15:55

Client ID: Run ID: ICP4500\_040209A SeqNo: 427228 Prep Date: 2/5/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Arsenic   | 0.04415 | 0.0050 | 0.05    | 0             | 88.3 | 80-120        | 0             |      |           |      |
| Barium    | 0.04374 | 0.0050 | 0.05    | 0             | 87.5 | 80-120        | 0             |      |           |      |
| Beryllium | 0.04359 | 0.0020 | 0.05    | 0             | 87.2 | 80-120        | 0             |      |           |      |
| Boron     | 0.4714  | 0.020  | 0.5     | 0             | 94.3 | 80-120        | 0             |      |           |      |
| Cadmium   | 0.04633 | 0.0010 | 0.05    | 0             | 92.7 | 80-120        | 0             |      |           |      |
| Calcium   | 4.792   | 0.50   | 5       | 0             | 95.8 | 80-120        | 0             |      |           |      |
| Chromium  | 0.04542 | 0.0020 | 0.05    | 0             | 90.8 | 80-120        | 0             |      |           |      |
| Cobalt    | 0.0456  | 0.0020 | 0.05    | 0             | 91.2 | 80-120        | 0             |      |           |      |
| Copper    | 0.04443 | 0.0020 | 0.05    | 0             | 88.9 | 80-120        | 0             |      |           |      |
| Iron      | 4.653   | 0.20   | 5       | 0             | 93.1 | 80-120        | 0             |      |           |      |
| Lead      | 0.04284 | 0.0050 | 0.05    | 0             | 85.7 | 80-120        | 0             |      |           |      |
| Magnesium | 4.892   | 0.20   | 5       | 0             | 97.8 | 80-120        | 0             |      |           |      |
| Manganese | 0.04436 | 0.0050 | 0.05    | 0             | 88.7 | 80-120        | 0             |      |           |      |
| Nickel    | 0.04585 | 0.0050 | 0.05    | 0             | 91.7 | 80-120        | 0             |      |           |      |
| Potassium | 4.86    | 0.20   | 5       | 0             | 97.2 | 80-120        | 0             |      |           |      |
| Selenium  | 0.0424  | 0.0050 | 0.05    | 0             | 84.8 | 80-120        | 0             |      |           |      |
| Silver    | 0.0447  | 0.0050 | 0.05    | 0             | 89.4 | 80-120        | 0             |      |           |      |
| Sodium    | 4.881   | 0.20   | 5       | 0             | 97.6 | 80-120        | 0             |      |           |      |
| Vanadium  | 0.04525 | 0.0050 | 0.05    | 0             | 90.5 | 80-120        | 0             |      |           |      |
| Zinc      | 0.04404 | 0.0050 | 0.05    | 0             | 88.1 | 80-120        | 0             |      |           |      |

LCS Sample ID: MLC3W3-020504 Test Code: SW6020 Units: mg/L Analysis Date: 02/10/04 12:18

Client ID: Run ID: ICP4500\_040210A SeqNo: 427545 Prep Date: 2/5/2004 DF: 1

| Analyte  | Result  | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------|---------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum | 0.04734 | 0.010 | 0.05    | 0             | 94.7 | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7952 InstrumentID: ICP4500

MS Sample ID: 0402027-01CMS Test Code: SW6020 Units: mg/L Analysis Date: 02/09/04 16:59

Client ID: Run ID: ICP4500\_040209A SeqNo: 427240 Prep Date: 2/5/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 2.41    | 0.010  | 0.05    | 2.088         | 644  | 75-125        | 0             |      |           | SEO  |
| Arsenic   | 0.0764  | 0.0050 | 0.05    | 0.03482       | 83.2 | 75-125        | 0             |      |           |      |
| Beryllium | 0.04248 | 0.0020 | 0.05    | 0             | 85   | 75-125        | 0             |      |           |      |
| Boron     | 0.2589  | 0.020  | 0.5     | 0.2521        | 1.36 | 75-125        | 0             |      |           | S    |
| Calcium   | 250.2   | 0.50   | 5       | 252.5         | -46  | 75-125        | 0             |      |           | SEO  |
| Chromium  | 0.05014 | 0.0020 | 0.05    | 0.005542      | 89.2 | 75-125        | 0             |      |           |      |
| Cobalt    | 0.04967 | 0.0020 | 0.05    | 0.006164      | 87   | 75-125        | 0             |      |           |      |
| Copper    | 0.0435  | 0.0020 | 0.05    | 0.003005      | 81   | 75-125        | 0             |      |           |      |
| Iron      | 45.57   | 0.20   | 5       | 41.46         | 82.2 | 75-125        | 0             |      |           | O    |
| Magnesium | 24.84   | 0.20   | 5       | 20.87         | 79.4 | 75-125        | 0             |      |           | O    |
| Manganese | 9.723   | 0.0050 | 0.05    | 9.975         | -504 | 75-125        | 0             |      |           | SEO  |
| Nickel    | 0.05343 | 0.0050 | 0.05    | 0.01194       | 83   | 75-125        | 0             |      |           |      |
| Potassium | 15.6    | 0.20   | 5       | 10.97         | 92.6 | 75-125        | 0             |      |           |      |
| Selenium  | 0.04121 | 0.0050 | 0.05    | 0.004112      | 74.2 | 75-125        | 0             |      |           | S    |
| Sodium    | ND      | 0.20   | 5       | 0             | 0    | 75-125        | 0             |      |           | S    |
| Vanadium  | 0.05793 | 0.0050 | 0.05    | 0.01159       | 92.7 | 75-125        | 0             |      |           |      |
| Zinc      | 0.1598  | 0.0050 | 0.05    | 0.119         | 81.6 | 75-125        | 0             |      |           |      |

MS Sample ID: 0402027-01CMS Test Code: SW6020 Units: mg/L Analysis Date: 02/10/04 13:20

Client ID: Run ID: ICP4500\_040210A SeqNo: 427559 Prep Date: 2/5/2004 DF: 1

| Analyte | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Barium  | 0.666   | 0.0050 | 0.05    | 0.6396        | 52.8 | 75-125        | 0             |      |           | SEO  |
| Cadmium | 0.03904 | 0.0010 | 0.05    | 0.0002425     | 77.6 | 75-125        | 0             |      |           |      |
| Lead    | 0.06671 | 0.0050 | 0.05    | 0.02027       | 92.9 | 75-125        | 0             |      |           |      |
| Silver  | 0.03925 | 0.0050 | 0.05    | 0.00006945    | 78.4 | 75-125        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7952 InstrumentID: ICP4500

MSD Sample ID: 0402027-01CMSD Test Code: SW6020 Units: mg/L Analysis Date: 02/09/04 17:03

Client ID: Run ID: ICP4500\_040209A SeqNo: 427241 Prep Date: 2/5/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 3.059   | 0.010  | 0.05    | 2.088         | 1940 | 75-125        | 2.41          | 23.7 | 25        | SEO  |
| Arsenic   | 0.08532 | 0.0050 | 0.05    | 0.03482       | 101  | 75-125        | 0.0764        | 11   | 25        |      |
| Beryllium | 0.04378 | 0.0020 | 0.05    | 0             | 87.6 | 75-125        | 0.04248       | 3.01 | 25        |      |
| Boron     | 0.2741  | 0.020  | 0.5     | 0.2521        | 4.4  | 75-125        | 0.2589        | 5.7  | 25        | S    |
| Calcium   | 265.5   | 0.50   | 5       | 252.5         | 260  | 75-125        | 250.2         | 5.93 | 25        | SEO  |
| Chromium  | 0.05296 | 0.0020 | 0.05    | 0.005542      | 94.8 | 75-125        | 0.05014       | 5.47 | 25        |      |
| Cobalt    | 0.05193 | 0.0020 | 0.05    | 0.006164      | 91.5 | 75-125        | 0.04967       | 4.45 | 25        |      |
| Copper    | 0.04572 | 0.0020 | 0.05    | 0.003005      | 85.4 | 75-125        | 0.0435        | 4.98 | 25        |      |
| Iron      | 48.83   | 0.20   | 5       | 41.46         | 147  | 75-125        | 45.57         | 6.91 | 25        | SO   |
| Magnesium | 26.6    | 0.20   | 5       | 20.87         | 115  | 75-125        | 24.84         | 6.84 | 25        | O    |
| Manganese | 10.34   | 0.0050 | 0.05    | 9.975         | 730  | 75-125        | 9.723         | 6.15 | 25        | SEO  |
| Nickel    | 0.05653 | 0.0050 | 0.05    | 0.01194       | 89.2 | 75-125        | 0.05343       | 5.64 | 25        |      |
| Potassium | 16.46   | 0.20   | 5       | 10.97         | 110  | 75-125        | 15.6          | 5.36 | 25        |      |
| Selenium  | 0.04511 | 0.0050 | 0.05    | 0.004112      | 82   | 75-125        | 0.04121       | 9.04 | 25        |      |
| Sodium    | ND      | 0.20   | 5       | 0             | 0    | 75-125        | 0             | 0    | 25        | S    |
| Vanadium  | 0.06102 | 0.0050 | 0.05    | 0.01159       | 98.9 | 75-125        | 0.05793       | 5.2  | 25        |      |
| Zinc      | 0.1686  | 0.0050 | 0.05    | 0.119         | 99.2 | 75-125        | 0.1598        | 5.36 | 25        |      |

MSD Sample ID: 0402027-01CMSD Test Code: SW6020 Units: mg/L Analysis Date: 02/10/04 13:25

Client ID: Run ID: ICP4500\_040210A SeqNo: 427560 Prep Date: 2/5/2004 DF: 1

| Analyte | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Barium  | 0.6852  | 0.0050 | 0.05    | 0.6396        | 91.2 | 75-125        | 0.666         | 2.84 | 25        | EO   |
| Cadmium | 0.03989 | 0.0010 | 0.05    | 0.0002425     | 79.3 | 75-125        | 0.03904       | 2.15 | 25        |      |
| Lead    | 0.07063 | 0.0050 | 0.05    | 0.02027       | 101  | 75-125        | 0.06671       | 5.71 | 25        |      |
| Silver  | 0.03936 | 0.0050 | 0.05    | 0.00006945    | 78.6 | 75-125        | 0.03925       | 0.28 | 25        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

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P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7952 InstrumentID: ICP4500

| DUP        | Sample ID: 0402027-01CDUP |        |         | Test Code: SW6020 |      | Units: mg/L         |               | Analysis Date: 02/09/04 16:54 |           |      |
|------------|---------------------------|--------|---------|-------------------|------|---------------------|---------------|-------------------------------|-----------|------|
| Client ID: | Run ID: ICP4500_040209A   |        |         | SeqNo: 427239     |      | Prep Date: 2/5/2004 |               | DF: 1                         |           |      |
| Analyte    | Result                    | PQL    | SPK Val | SPK Ref Value     | %REC | Control Limit       | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Arsenic    | 0.03674                   | 0.0050 | 0       | 0                 | 0    | 0-0                 | 0.03482       | 5.37                          | 25        |      |
| Beryllium  | ND                        | 0.0020 | 0       | 0                 | 0    | 0-0                 | 0.000242      | 0                             | 25        |      |
| Boron      | 0.2757                    | 0.020  | 0       | 0                 | 0    | 0-0                 | 0.2521        | 8.94                          | 25        |      |
| Chromium   | 0.007658                  | 0.0020 | 0       | 0                 | 0    | 0-0                 | 0.005542      | 32.1                          | 25        | R    |
| Cobalt     | 0.006586                  | 0.0020 | 0       | 0                 | 0    | 0-0                 | 0.006164      | 6.62                          | 25        |      |
| Copper     | 0.005022                  | 0.0020 | 0       | 0                 | 0    | 0-0                 | 0.003005      | 50.3                          | 25        | R    |
| Iron       | 42.28                     | 0.20   | 0       | 0                 | 0    | 0-0                 | 41.46         | 1.96                          | 25        |      |
| Magnesium  | 21.64                     | 0.20   | 0       | 0                 | 0    | 0-0                 | 20.87         | 3.62                          | 25        |      |
| Nickel     | 0.01304                   | 0.0050 | 0       | 0                 | 0    | 0-0                 | 0.01194       | 8.81                          | 25        |      |
| Potassium  | 11.39                     | 0.20   | 0       | 0                 | 0    | 0-0                 | 10.97         | 3.76                          | 25        |      |
| Selenium   | 0.002953                  | 0.0050 | 0       | 0                 | 0    | 0-0                 | 0.004112      | 0                             | 25        | J    |
| Vanadium   | 0.01251                   | 0.0050 | 0       | 0                 | 0    | 0-0                 | 0.01159       | 7.63                          | 25        |      |
| Zinc       | 0.1266                    | 0.0050 | 0       | 0                 | 0    | 0-0                 | 0.119         | 6.19                          | 25        |      |

|            |                           |      |         |                   |      |                     |               |                               |           |      |
|------------|---------------------------|------|---------|-------------------|------|---------------------|---------------|-------------------------------|-----------|------|
| DUP        | Sample ID: 0402027-01CDUP |      |         | Test Code: SW6020 |      | Units: mg/L         |               | Analysis Date: 02/10/04 12:49 |           |      |
| Client ID: | Run ID: ICP4500_040210A   |      |         | SeqNo: 427552     |      | Prep Date: 2/5/2004 |               | DF: 20                        |           |      |
| Analyte    | Result                    | PQL  | SPK Val | SPK Ref Value     | %REC | Control Limit       | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Aluminum   | 2.194                     | 0.20 | 0       | 0                 | 0    | 0-0                 | 1.855         | 16.7                          | 25        |      |
| Calcium    | 241.5                     | 10   | 0       | 0                 | 0    | 0-0                 | 241.8         | 0.124                         | 25        |      |
| Manganese  | 8.436                     | 0.10 | 0       | 0                 | 0    | 0-0                 | 8.328         | 1.29                          | 25        |      |
| Sodium     | 118.8                     | 4.0  | 0       | 0                 | 0    | 0-0                 | 116.9         | 1.61                          | 25        |      |

|            |                           |       |         |               |                   |                     |               |        |                               |      |  |
|------------|---------------------------|-------|---------|---------------|-------------------|---------------------|---------------|--------|-------------------------------|------|--|
| DUP        | Sample ID: 0402027-01CDUP |       |         |               | Test Code: SW6020 |                     | Units: mg/L   |        | Analysis Date: 02/10/04 12:57 |      |  |
| Client ID: | Run ID: ICP4500_040210A   |       |         | SeqNo: 427554 |                   | Prep Date: 2/5/2004 |               | DF: 10 |                               |      |  |
| Analyte    | Result                    | PQL   | SPK Val | SPK Ref Value | %REC              | Control Limit       | RPD Ref Value | %RPD   | RPD Limit                     | Qual |  |
| Barium     | 0.6451                    | 0.050 | 0       | 0             | 0                 | 0-0                 | 0.6099        | 5.61   | 25                            |      |  |

|            |                           |        |         |                   |      |                     |               |                               |           |      |
|------------|---------------------------|--------|---------|-------------------|------|---------------------|---------------|-------------------------------|-----------|------|
| DUP        | Sample ID: 0402027-01CDUP |        |         | Test Code: SW6020 |      | Units: mg/L         |               | Analysis Date: 02/10/04 13:07 |           |      |
| Client ID: | Run ID: ICP4500_040210A   |        |         | SeqNo: 427556     |      | Prep Date: 2/5/2004 |               | DF: 1                         |           |      |
| Analyte    | Result                    | PQL    | SPK Val | SPK Ref Value     | %REC | Control Limit       | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Cadmium    | 0.0002718                 | 0.0010 | 0       | 0                 | 0    | 0-0                 | 0.0002425     | 0                             | 25        | J    |
| Lead       | 0.02673                   | 0.0050 | 0       | 0                 | 0    | 0-0                 | 0.02027       | 27.5                          | 25        | R    |
| Silver     | ND                        | 0.0050 | 0       | 0                 | 0    | 0-0                 | 0.00006945    | 0                             | 25        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0402010-01C | 0402010-02C | 0402010-03C |
| 0402010-04C | 0402010-05C |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0402010  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 8003 InstrumentID: Mercury

MBLK Sample ID: GBLKW3-021004 Test Code: SW7470 Units: mg/L Analysis Date: 02/11/04 14:45

Client ID: Run ID: MERCURY\_040211E SeqNo: 428300 Prep Date: 2/10/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW3-021004 Test Code: SW7470 Units: mg/L Analysis Date: 02/11/04 14:50

Client ID: Run ID: MERCURY\_040211E SeqNo: 428301 Prep Date: 2/10/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00548 | 0.00020 | 0.005   | 0             | 110  | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW3-021004 Test Code: SW7470 Units: mg/L Analysis Date: 02/11/04 14:52

Client ID: Run ID: MERCURY\_040211E SeqNo: 428302 Prep Date: 2/10/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00548 | 0.00020 | 0.005   | 0             | 110  | 83-115        | 0.00548       | 0    | 20        |      |

MS Sample ID: 0402010-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 02/11/04 14:56

Client ID: MW-59 Run ID: MERCURY\_040211E SeqNo: 428305 Prep Date: 2/10/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00457 | 0.00020 | 0.005   | -0.000054     | 92.5 | 70-124        | 0             |      |           |      |

MSD Sample ID: 0402010-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 02/11/04 14:58

Client ID: MW-59 Run ID: MERCURY\_040211E SeqNo: 428306 Prep Date: 2/10/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Mercury | 0.00458 | 0.00020 | 0.005   | -0.000054     | 92.7 | 70-124        | 0.00457       | 0.219 | 20        |      |

DUP Sample ID: 0402010-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 02/11/04 14:55

Client ID: MW-59 Run ID: MERCURY\_040211E SeqNo: 428304 Prep Date: 2/10/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | -0.000054     | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0402010-01C | 0402010-02C | 0402010-03C |
| 0402010-04C | 0402010-05C |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7957 InstrumentID: SV-3

MBLK Sample ID: SBLKW1-040205 Test Code: SW8270 Units: µg/L Analysis Date: 02/06/04 17:40

Client ID: Run ID: SV-3\_040206A SeqNo: 426364 Prep Date: 2/5/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 88.75  | 0   | 100     | 0             | 88.8 | 39-153        |               | 0    |           |      |
| Surr: 2-Fluorobiphenyl     | 80.84  | 0   | 100     | 0             | 80.8 | 40-147        |               | 0    |           |      |
| Surr: 2-Fluorophenol       | 55.64  | 0   | 100     | 0             | 55.6 | 21-100        |               | 0    |           |      |
| Surr: 4-Terphenyl-d14      | 81.2   | 0   | 100     | 0             | 81.2 | 39-141        |               | 0    |           |      |
| Surr: Nitrobenzene-d5      | 82.1   | 0   | 100     | 0             | 82.1 | 37-140        |               | 0    |           |      |
| Surr: Phenol-d6            | 36.23  | 0   | 100     | 0             | 36.2 | 11-100        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0402010  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7957 InstrumentID: SV-3

LCS Sample ID: SLCSW1-040205 Test Code: SW8270 Units: µg/L Analysis Date: 02/06/04 18:06

Client ID: Run ID: SV-3\_040206A SeqNo: 426365 Prep Date: 2/5/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 49.02  | 10  | 50      | 0             | 98   | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 101.5  | 10  | 100     | 0             | 102  | 72-118        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 97.86  | 10  | 100     | 0             | 97.9 | 72-117        | 0             |      |           |      |
| 2-Methylnaphthalene        | 47.89  | 10  | 50      | 0             | 95.8 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 88.69  | 10  | 100     | 0             | 88.7 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 50.78  | 10  | 50      | 0             | 102  | 73-119        | 0             |      |           |      |
| 2-Nitrophenol              | 100.7  | 10  | 100     | 0             | 101  | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 43.39  | 10  | 50      | 0             | 86.8 | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 124    | 10  | 150     | 0             | 82.7 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 47.16  | 10  | 50      | 0             | 94.3 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 50.13  | 10  | 100     | 0             | 50.1 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 48.92  | 10  | 50      | 0             | 97.8 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 47.07  | 10  | 50      | 0             | 94.1 | 67-116        | 0             |      |           |      |
| Aniline                    | 38.33  | 10  | 50      | 0             | 76.7 | 40-130        | 0             |      |           |      |
| Anthracene                 | 51.97  | 10  | 50      | 0             | 104  | 72-124        | 0             |      |           |      |
| Benz(a)anthracene          | 50.98  | 10  | 50      | 0             | 102  | 55-131        | 0             |      |           |      |
| Benzidine                  | 26.45  | 10  | 50      | 0             | 52.9 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 48.12  | 10  | 50      | 0             | 96.2 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 47.72  | 10  | 50      | 0             | 95.4 | 42-123        | 0             |      |           |      |
| Isophorone                 | 49.97  | 10  | 50      | 0             | 99.9 | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 48.85  | 10  | 50      | 0             | 97.7 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 32.37  | 10  | 50      | 0             | 64.7 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 50.9   | 10  | 50      | 0             | 102  | 72-144        | 0             |      |           |      |
| Naphthalene                | 47.71  | 10  | 50      | 0             | 95.4 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 49.07  | 10  | 50      | 0             | 98.1 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 92.52  | 10  | 100     | 0             | 92.5 | 65-123        | 0             |      |           |      |
| Phenanthrene               | 49.23  | 10  | 50      | 0             | 98.5 | 69-119        | 0             |      |           |      |
| Phenol                     | 45.6   | 10  | 100     | 0             | 45.6 | 16-115        | 0             |      |           |      |
| Pyrene                     | 46.92  | 10  | 50      | 0             | 93.8 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 101.3  | 0   | 100     | 0             | 101  | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 88     | 0   | 100     | 0             | 88   | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 64.68  | 0   | 100     | 0             | 64.7 | 21-100        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 90.59  | 0   | 100     | 0             | 90.6 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 91.45  | 0   | 100     | 0             | 91.4 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 42.41  | 0   | 100     | 0             | 42.4 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7957 InstrumentID: SV-3

LCSD Sample ID: SLCSDW1-040205 Test Code: SW8270 Units: µg/L Analysis Date: 02/06/04 18:32

Client ID: Run ID: SV-3\_040206A SeqNo: 426366 Prep Date: 2/5/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,2,4-Trichlorobenzene     | 48.53  | 10  | 50      | 0             | 97.1 | 50-115        | 49.02         | 0.999  | 30        |      |
| 2,4,5-Trichlorophenol      | 101.5  | 10  | 100     | 0             | 102  | 72-118        | 101.5         | 0.0156 | 30        |      |
| 2,4,6-Trichlorophenol      | 97.09  | 10  | 100     | 0             | 97.1 | 72-117        | 97.86         | 0.785  | 30        |      |
| 2-Methylnaphthalene        | 45.84  | 10  | 50      | 0             | 91.7 | 47-122        | 47.89         | 4.39   | 30        |      |
| 2-Methylphenol             | 86.61  | 10  | 100     | 0             | 86.6 | 51-115        | 88.69         | 2.37   | 30        |      |
| 2-Nitroaniline             | 50.03  | 10  | 50      | 0             | 100  | 73-119        | 50.78         | 1.5    | 30        |      |
| 2-Nitrophenol              | 101.3  | 10  | 100     | 0             | 101  | 60-119        | 100.7         | 0.626  | 30        |      |
| 3-Nitroaniline             | 39.53  | 10  | 50      | 0             | 79.1 | 61-118        | 43.39         | 9.31   | 30        |      |
| 4-Methylphenol             | 121.1  | 10  | 150     | 0             | 80.8 | 44-115        | 124           | 2.32   | 30        |      |
| 4-Nitroaniline             | 45.41  | 10  | 50      | 0             | 90.8 | 61-123        | 47.16         | 3.79   | 30        |      |
| 4-Nitrophenol              | 52.62  | 10  | 100     | 0             | 52.6 | 17-100        | 50.13         | 4.85   | 30        |      |
| Acenaphthene               | 48.82  | 10  | 50      | 0             | 97.6 | 68-115        | 48.92         | 0.196  | 30        |      |
| Acenaphthylene             | 46.5   | 10  | 50      | 0             | 93   | 67-116        | 47.07         | 1.21   | 30        |      |
| Aniline                    | 36.62  | 10  | 50      | 0             | 73.2 | 40-130        | 38.33         | 4.56   | 30        |      |
| Anthracene                 | 51.89  | 10  | 50      | 0             | 104  | 72-124        | 51.97         | 0.16   | 30        |      |
| Benz(a)anthracene          | 48.8   | 10  | 50      | 0             | 97.6 | 55-131        | 50.98         | 4.37   | 30        |      |
| Benzidine                  | 25.31  | 10  | 50      | 0             | 50.6 | 10-115        | 26.45         | 4.42   | 30        |      |
| Hexachloroethane           | 47.34  | 10  | 50      | 0             | 94.7 | 46-115        | 48.12         | 1.64   | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 47.74  | 10  | 50      | 0             | 95.5 | 42-123        | 47.72         | 0.045  | 30        |      |
| Isophorone                 | 48.2   | 10  | 50      | 0             | 96.4 | 63-117        | 49.97         | 3.6    | 30        |      |
| N-Nitrosodi-n-propylamine  | 47.89  | 10  | 50      | 0             | 95.8 | 67-115        | 48.85         | 1.97   | 30        |      |
| N-Nitrosodimethylamine     | 33.36  | 10  | 50      | 0             | 66.7 | 28-115        | 32.37         | 3.02   | 30        |      |
| N-Nitrosodiphenylamine     | 51.1   | 10  | 50      | 0             | 102  | 72-144        | 50.9          | 0.398  | 30        |      |
| Naphthalene                | 47.22  | 10  | 50      | 0             | 94.4 | 52-115        | 47.71         | 1.05   | 30        |      |
| Nitrobenzene               | 48.61  | 10  | 50      | 0             | 97.2 | 65-115        | 49.07         | 0.932  | 30        |      |
| Pentachlorophenol          | 94.9   | 10  | 100     | 0             | 94.9 | 65-123        | 92.52         | 2.54   | 30        |      |
| Phenanthrene               | 49.18  | 10  | 50      | 0             | 98.4 | 69-119        | 49.23         | 0.115  | 30        |      |
| Phenol                     | 46.38  | 10  | 100     | 0             | 46.4 | 16-115        | 45.6          | 1.71   | 30        |      |
| Pyrene                     | 45.19  | 10  | 50      | 0             | 90.4 | 51-130        | 46.92         | 3.77   | 30        |      |
| Surr: 2,4,6-Tribromophenol | 98.67  | 0   | 100     | 0             | 98.7 | 39-153        | 101.3         | 2.67   | 30        |      |
| Surr: 2-Fluorobiphenyl     | 88.21  | 0   | 100     | 0             | 88.2 | 40-147        | 88            | 0.24   | 30        |      |
| Surr: 2-Fluorophenol       | 65.53  | 0   | 100     | 0             | 65.5 | 21-100        | 64.68         | 1.29   | 30        |      |
| Surr: 4-Terphenyl-d14      | 87.58  | 0   | 100     | 0             | 87.6 | 39-141        | 90.59         | 3.38   | 30        |      |
| Surr: Nitrobenzene-d5      | 90.22  | 0   | 100     | 0             | 90.2 | 37-140        | 91.45         | 1.35   | 30        |      |
| Surr: Phenol-d6            | 43.33  | 0   | 100     | 0             | 43.3 | 11-100        | 42.41         | 2.14   | 30        |      |

ND - Not Detected at the Reporting Limit

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E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7957 InstrumentID: SV-3

MS Sample ID: 0402021-08HMS Test Code: SW8270 Units: µg/L Analysis Date: 02/06/04 21:03

Client ID: Run ID: SV-3\_040206A SeqNo: 426368 Prep Date: 2/5/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 47.64  | 10  | 50      | 0             | 95.3 | 45-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 100.5  | 10  | 100     | 0             | 101  | 47-129        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 96.71  | 10  | 100     | 0             | 96.7 | 45-127        | 0             |      |           |      |
| 2-Methylnaphthalene        | 46.76  | 10  | 50      | 0             | 93.5 | 30-144        | 0             |      |           |      |
| 2-Methylphenol             | 76.23  | 10  | 100     | 0             | 76.2 | 42-115        | 0             |      |           |      |
| 2-Nitroaniline             | 49.79  | 10  | 50      | 0             | 99.6 | 48-129        | 0             |      |           |      |
| 2-Nitrophenol              | 97.3   | 10  | 100     | 0             | 97.3 | 32-144        | 0             |      |           |      |
| 3-Nitroaniline             | 31.48  | 10  | 50      | 0             | 63   | 23-122        | 0             |      |           |      |
| 4-Methylphenol             | 103.4  | 10  | 150     | 0             | 68.9 | 35-115        | 0             |      |           |      |
| 4-Nitroaniline             | 41.93  | 10  | 50      | 0             | 83.9 | 12-138        | 0             |      |           |      |
| 4-Nitrophenol              | 40.11  | 10  | 100     | 0             | 40.1 | 10-80         | 0             |      |           |      |
| Acenaphthene               | 48.88  | 10  | 50      | 0             | 97.8 | 55-117        | 0             |      |           |      |
| Acenaphthylene             | 46.61  | 10  | 50      | 0             | 93.2 | 39-128        | 0             |      |           |      |
| Aniline                    | 14.51  | 10  | 50      | 0             | 29   | 40-130        | 0             |      |           | S    |
| Anthracene                 | 52.06  | 10  | 50      | 0             | 104  | 58-129        | 0             |      |           |      |
| Benz(a)anthracene          | 49.11  | 10  | 50      | 0             | 98.2 | 42-135        | 0             |      |           |      |
| Benzidine                  | 3.455  | 10  | 50      | 0             | 6.91 | 10-127        | 0             |      |           | JS   |
| Hexachloroethane           | 45.82  | 10  | 50      | 0             | 91.6 | 45-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 45.35  | 10  | 50      | 0             | 90.7 | 32-132        | 0             |      |           |      |
| Isophorone                 | 48.96  | 10  | 50      | 0             | 97.9 | 51-122        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 48.45  | 10  | 50      | 0             | 96.9 | 55-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 21.41  | 10  | 50      | 0             | 42.8 | 30-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 50.61  | 10  | 50      | 0             | 101  | 47-146        | 0             |      |           |      |
| Naphthalene                | 46.3   | 10  | 50      | 0             | 92.6 | 46-116        | 0             |      |           |      |
| Nitrobenzene               | 47.68  | 10  | 50      | 0             | 95.4 | 48-126        | 0             |      |           |      |
| Pentachlorophenol          | 93.04  | 10  | 100     | 0             | 93   | 53-134        | 0             |      |           |      |
| Phenanthrene               | 48.86  | 10  | 50      | 0             | 97.7 | 57-123        | 0             |      |           |      |
| Phenol                     | 31.64  | 10  | 100     | 0             | 31.6 | 10-115        | 0             |      |           |      |
| Pyrene                     | 46.68  | 10  | 50      | 0             | 93.4 | 40-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 100.2  | 0   | 100     | 0             | 100  | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 86.43  | 0   | 100     | 0             | 86.4 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 47.88  | 0   | 100     | 0             | 47.9 | 21-100        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 86.76  | 0   | 100     | 0             | 86.8 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 87.54  | 0   | 100     | 0             | 87.5 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 30.5   | 0   | 100     | 0             | 30.5 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7957 InstrumentID: SV-3

MSD Sample ID: 0402021-08HMSD Test Code: SW8270 Units: µg/L Analysis Date: 02/06/04 21:28

Client ID: Run ID: SV-3\_040206A SeqNo: 426369 Prep Date: 2/5/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD    | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|---------|-----------|------|
| 1,2,4-Trichlorobenzene     | 49.27  | 10  | 50      | 0             | 98.5 | 45-115        | 47.64         | 3.37    | 30        |      |
| 2,4,5-Trichlorophenol      | 101.9  | 10  | 100     | 0             | 102  | 47-129        | 100.5         | 1.36    | 30        |      |
| 2,4,6-Trichlorophenol      | 97.82  | 10  | 100     | 0             | 97.8 | 45-127        | 96.71         | 1.13    | 30        |      |
| 2-Methylnaphthalene        | 48.2   | 10  | 50      | 0             | 96.4 | 30-144        | 46.76         | 3.04    | 30        |      |
| 2-Methylphenol             | 76.08  | 10  | 100     | 0             | 76.1 | 42-115        | 76.23         | 0.203   | 30        |      |
| 2-Nitroaniline             | 51.09  | 10  | 50      | 0             | 102  | 48-129        | 49.79         | 2.58    | 30        |      |
| 2-Nitrophenol              | 101.6  | 10  | 100     | 0             | 102  | 32-144        | 97.3          | 4.32    | 30        |      |
| 3-Nitroaniline             | 30.6   | 10  | 50      | 0             | 61.2 | 23-122        | 31.48         | 2.85    | 30        |      |
| 4-Methylphenol             | 102.1  | 10  | 150     | 0             | 68.1 | 35-115        | 103.4         | 1.23    | 30        |      |
| 4-Nitroaniline             | 40.58  | 10  | 50      | 0             | 81.2 | 12-138        | 41.93         | 3.27    | 30        |      |
| 4-Nitrophenol              | 39.46  | 10  | 100     | 0             | 39.5 | 10-80         | 40.11         | 1.65    | 30        |      |
| Acenaphthene               | 49.31  | 10  | 50      | 0             | 98.6 | 55-117        | 48.88         | 0.877   | 30        |      |
| Acenaphthylene             | 46.99  | 10  | 50      | 0             | 94   | 39-128        | 46.61         | 0.827   | 30        |      |
| Aniline                    | 12.17  | 10  | 50      | 0             | 24.3 | 40-130        | 14.51         | 17.6    | 30        | S    |
| Anthracene                 | 53.67  | 10  | 50      | 0             | 107  | 58-129        | 52.06         | 3.05    | 30        |      |
| Benz(a)anthracene          | 49.23  | 10  | 50      | 0             | 98.5 | 42-135        | 49.11         | 0.259   | 30        |      |
| Benzidine                  | 3.366  | 10  | 50      | 0             | 6.73 | 10-127        | 3.455         | 0       | 30        | JS   |
| Hexachloroethane           | 46.8   | 10  | 50      | 0             | 93.6 | 45-115        | 45.82         | 2.12    | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 46.19  | 10  | 50      | 0             | 92.4 | 32-132        | 45.35         | 1.84    | 30        |      |
| Isophorone                 | 49.8   | 10  | 50      | 0             | 99.6 | 51-122        | 48.96         | 1.72    | 30        |      |
| N-Nitrosodi-n-propylamine  | 48.46  | 10  | 50      | 0             | 96.9 | 55-115        | 48.45         | 0.0105  | 30        |      |
| N-Nitrosodimethylamine     | 22.2   | 10  | 50      | 0             | 44.4 | 30-115        | 21.41         | 3.66    | 30        |      |
| N-Nitrosodiphenylamine     | 52.19  | 10  | 50      | 0             | 104  | 47-146        | 50.61         | 3.07    | 30        |      |
| Naphthalene                | 48.13  | 10  | 50      | 0             | 96.3 | 46-116        | 46.3          | 3.89    | 30        |      |
| Nitrobenzene               | 49.54  | 10  | 50      | 0             | 99.1 | 48-126        | 47.68         | 3.83    | 30        |      |
| Pentachlorophenol          | 95.3   | 10  | 100     | 0             | 95.3 | 53-134        | 93.04         | 2.4     | 30        |      |
| Phenanthrene               | 49.63  | 10  | 50      | 0             | 99.3 | 57-123        | 48.86         | 1.56    | 30        |      |
| Phenol                     | 32.06  | 10  | 100     | 0             | 32.1 | 10-115        | 31.64         | 1.31    | 30        |      |
| Pyrene                     | 46.68  | 10  | 50      | 0             | 93.4 | 40-130        | 46.68         | 0.00338 | 30        |      |
| Surr: 2,4,6-Tribromophenol | 101.7  | 0   | 100     | 0             | 102  | 39-153        | 100.2         | 1.5     | 30        |      |
| Surr: 2-Fluorobiphenyl     | 88.26  | 0   | 100     | 0             | 88.3 | 40-147        | 86.43         | 2.09    | 30        |      |
| Surr: 2-Fluorophenol       | 48.32  | 0   | 100     | 0             | 48.3 | 21-100        | 47.88         | 0.909   | 30        |      |
| Surr: 4-Terphenyl-d14      | 87.96  | 0   | 100     | 0             | 88   | 39-141        | 86.76         | 1.37    | 30        |      |
| Surr: Nitrobenzene-d5      | 91.01  | 0   | 100     | 0             | 91   | 37-140        | 87.54         | 3.88    | 30        |      |
| Surr: Phenol-d6            | 30.62  | 0   | 100     | 0             | 30.6 | 11-100        | 30.5          | 0.39    | 30        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0402010-01E | 0402010-02E | 0402010-03E |
| 0402010-04E | 0402010-05E |             |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18562 InstrumentID: VOA\_I

MBLK Sample ID: VBLKW-0203 Test Code: SW8260 Units: µg/L Analysis Date: 02/03/04 12:30

Client ID: Run ID: VOA\_I\_040203A SeqNo: 424466 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 43.04  | 5.0 | 50      | 0             | 86.1 | 70-130        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 50.1   | 5.0 | 50      | 0             | 100  | 70-130        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 43.62  | 5.0 | 50      | 0             | 87.2 | 70-130        | 0             |      |           |      |
| Surr: Toluene-d8            | 45.56  | 5.0 | 50      | 0             | 91.1 | 70-130        | 0             |      |           |      |

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E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18562 InstrumentID: VOA\_I

LCS Sample ID: VLCSW-0203 Test Code: SW8260 Units: µg/L Analysis Date: 02/03/04 11:10

Client ID: Run ID: VOA\_I\_040203A SeqNo: 424465 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 56.51  | 5.0 | 50      | 0             | 113  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 47.75  | 5.0 | 50      | 0             | 95.5 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 49.89  | 5.0 | 50      | 0             | 99.8 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 55.04  | 5.0 | 50      | 0             | 110  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 61.71  | 5.0 | 50      | 0             | 123  | 72.6-123      | 0             |      |           | S    |
| 1,2-Dichloroethane          | 56.45  | 5.0 | 50      | 0             | 113  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 98.42  | 10  | 100     | 0             | 98.4 | 70-130        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 84.46  | 10  | 100     | 0             | 84.5 | 45.5-135      | 0             |      |           |      |
| 2-Hexanone                  | 72.11  | 10  | 100     | 0             | 72.1 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 90.06  | 10  | 100     | 0             | 90.1 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 132.6  | 10  | 100     | 0             | 133  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 51.32  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 54.45  | 5.0 | 50      | 0             | 109  | 80-120        | 0             |      |           |      |
| Bromoform                   | 52.28  | 5.0 | 50      | 0             | 105  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 40.57  | 5.0 | 50      | 0             | 81.1 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 95.2   | 10  | 100     | 0             | 95.2 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 57.78  | 5.0 | 50      | 0             | 116  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 51.51  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Chloroethane                | 49.29  | 5.0 | 50      | 0             | 98.6 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 54.89  | 5.0 | 50      | 0             | 110  | 80-120        | 0             |      |           |      |
| Chloromethane               | 50.93  | 5.0 | 50      | 0             | 102  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 52.06  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 54.23  | 5.0 | 50      | 0             | 108  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 50.23  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 101.7  | 10  | 100     | 0             | 102  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 55.88  | 10  | 50      | 0             | 112  | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.67  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 54.93  | 5.0 | 50      | 0             | 110  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 50.48  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 49.62  | 5.0 | 50      | 0             | 99.2 | 80-120        | 0             |      |           |      |
| Trichloroethene             | 52.93  | 5.0 | 50      | 0             | 106  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 97.56  | 10  | 100     | 0             | 97.6 | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 45.37  | 2.0 | 50      | 0             | 90.7 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 154    | 15  | 150     | 0             | 103  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 42.98  | 5.0 | 50      | 0             | 86   | 70-130        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 50     | 5.0 | 50      | 0             | 100  | 70-130        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 43.75  | 5.0 | 50      | 0             | 87.5 | 70-130        | 0             |      |           |      |
| Surr: Toluene-d8            | 44.17  | 5.0 | 50      | 0             | 88.3 | 70-130        | 0             |      |           |      |

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18562 InstrumentID: VOA\_I

MS Sample ID: 0402009-03AMS Test Code: SW8260 Units: µg/L Analysis Date: 02/03/04 13:51

Client ID: Run ID: VOA\_I\_040203A SeqNo: 424469 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 53.89  | 5.0 | 50      | 0             | 108  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 50.86  | 5.0 | 50      | 0             | 102  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 52.34  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 54.81  | 5.0 | 50      | 0             | 110  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 57.73  | 5.0 | 50      | 0             | 115  | 72.6-123      | 0             |      |           |      |
| 1,2-Dichloroethane          | 58.77  | 5.0 | 50      | 0             | 118  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 94.64  | 10  | 100     | 0             | 94.6 | 70-130        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 45.5-135      | 0             |      |           | S    |
| 2-Hexanone                  | 67.83  | 10  | 100     | 0             | 67.8 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 88.17  | 10  | 100     | 0             | 88.2 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 107.2  | 10  | 100     | 0             | 107  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 52.28  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 57.22  | 5.0 | 50      | 0             | 114  | 80-120        | 0             |      |           |      |
| Bromoform                   | 55.22  | 5.0 | 50      | 0             | 110  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 41.28  | 5.0 | 50      | 0             | 82.6 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 89.77  | 10  | 100     | 0             | 89.8 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 54.96  | 5.0 | 50      | 0             | 110  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 52.64  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Chloroethane                | 45.34  | 5.0 | 50      | 0             | 90.7 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 55.42  | 5.0 | 50      | 0             | 111  | 80-120        | 0             |      |           |      |
| Chloromethane               | 57.01  | 5.0 | 50      | 0             | 114  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 54.17  | 5.0 | 50      | 0             | 108  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 57.78  | 5.0 | 50      | 0             | 116  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 49.68  | 5.0 | 50      | 0             | 99.4 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 101.9  | 10  | 100     | 0             | 102  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 57.33  | 10  | 50      | 0             | 115  | 76.2-120      | 0             |      |           |      |
| Styrene                     | 51.07  | 5.0 | 50      | 0             | 102  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 51.29  | 5.0 | 50      | 0             | 103  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 49.57  | 5.0 | 50      | 0             | 99.1 | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 53.71  | 5.0 | 50      | 0             | 107  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 53.48  | 5.0 | 50      | 0             | 107  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 105.4  | 10  | 100     | 0             | 105  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 40.63  | 2.0 | 50      | 0             | 81.3 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 154.7  | 15  | 150     | 0             | 103  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 43.43  | 5.0 | 50      | 0             | 86.9 | 70-130        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 49.79  | 5.0 | 50      | 0             | 99.6 | 70-130        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 43.7   | 5.0 | 50      | 0             | 87.4 | 70-130        | 0             |      |           |      |
| Surr: Toluene-d8            | 43.54  | 5.0 | 50      | 0             | 87.1 | 70-130        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

**CLIENT:** Navajo Refining Company  
**Work Order:** 0402010  
**Project:** NCL/TEL

## QC BATCH REPORT

Batch ID: **R18562** InstrumentID: **VOA\_I**

MSD Sample ID: **0402009-03AMSD** Test Code: **SW8260** Units: **µg/L** Analysis Date: **02/03/04 14:18**

Client ID: Run ID: **VOA\_I\_040203A** SeqNo: **424470** Prep Date: DF: **1**

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,1,1-Trichloroethane       | 52.53  | 5.0 | 50      | 0             | 105  | 75.2-120      | 53.89         | 2.56  | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 44.42  | 5.0 | 50      | 0             | 88.8 | 72.4-121      | 50.86         | 13.5  | 20        |      |
| 1,1,2-Trichloroethane       | 47.57  | 5.0 | 50      | 0             | 95.1 | 80-120        | 52.34         | 9.57  | 20        |      |
| 1,1-Dichloroethane          | 50.54  | 5.0 | 50      | 0             | 101  | 76.9-120      | 54.81         | 8.1   | 20        |      |
| 1,1-Dichloroethene          | 57.83  | 5.0 | 50      | 0             | 116  | 72.6-123      | 57.73         | 0.183 | 20        |      |
| 1,2-Dichloroethane          | 54.09  | 5.0 | 50      | 0             | 108  | 80-120        | 58.77         | 8.29  | 20        |      |
| 2-Butanone                  | 83.52  | 10  | 100     | 0             | 83.5 | 70-130        | 94.64         | 12.5  | 20        |      |
| 2-Chloroethyl vinyl ether   | 7.394  | 10  | 100     | 0             | 7.39 | 45.5-135      | 0             | 0     | 20        | JS   |
| 2-Hexanone                  | 68.69  | 10  | 100     | 0             | 68.7 | 55.6-126      | 67.83         | 1.26  | 20        |      |
| 4-Methyl-2-pentanone        | 78.56  | 10  | 100     | 0             | 78.6 | 67.4-121      | 88.17         | 11.5  | 20        |      |
| Acetone                     | 94.9   | 10  | 100     | 0             | 94.9 | 64.4-140      | 107.2         | 12.2  | 20        |      |
| Benzene                     | 48.71  | 5.0 | 50      | 0             | 97.4 | 80-120        | 52.28         | 7.06  | 20        |      |
| Bromodichloromethane        | 51.92  | 5.0 | 50      | 0             | 104  | 80-120        | 57.22         | 9.71  | 20        |      |
| Bromoform                   | 50.31  | 5.0 | 50      | 0             | 101  | 77.9-121      | 55.22         | 9.3   | 20        |      |
| Bromomethane                | 42.08  | 5.0 | 50      | 0             | 84.2 | 63.3-137      | 41.28         | 1.92  | 20        |      |
| Carbon disulfide            | 86.8   | 10  | 100     | 0             | 86.8 | 74.1-123      | 89.77         | 3.36  | 20        |      |
| Carbon tetrachloride        | 54.9   | 5.0 | 50      | 0             | 110  | 74.7-120      | 54.96         | 0.115 | 20        |      |
| Chlorobenzene               | 49.21  | 5.0 | 50      | 0             | 98.4 | 80-120        | 52.64         | 6.73  | 20        |      |
| Chloroethane                | 43.8   | 5.0 | 50      | 0             | 87.6 | 74.7-126      | 45.34         | 3.47  | 20        |      |
| Chloroform                  | 51.39  | 5.0 | 50      | 0             | 103  | 80-120        | 55.42         | 7.55  | 20        |      |
| Chloromethane               | 51.29  | 5.0 | 50      | 0             | 103  | 64.5-132      | 57.01         | 10.6  | 20        |      |
| cis-1,3-Dichloropropene     | 50.86  | 5.0 | 50      | 0             | 102  | 80-120        | 54.17         | 6.32  | 20        |      |
| Dibromochloromethane        | 51.98  | 5.0 | 50      | 0             | 104  | 80-120        | 57.78         | 10.6  | 20        |      |
| Ethylbenzene                | 47.24  | 5.0 | 50      | 0             | 94.5 | 80-120        | 49.68         | 5.03  | 20        |      |
| m,p-Xylene                  | 96.29  | 10  | 100     | 0             | 96.3 | 80-120        | 101.9         | 5.69  | 20        |      |
| Methylene chloride          | 51.58  | 10  | 50      | 0             | 103  | 76.2-120      | 57.33         | 10.6  | 20        |      |
| Styrene                     | 47.37  | 5.0 | 50      | 0             | 94.7 | 80-120        | 51.07         | 7.52  | 20        |      |
| Tetrachloroethene           | 50.6   | 5.0 | 50      | 0             | 101  | 68.5-130      | 51.29         | 1.36  | 20        |      |
| Toluene                     | 47.22  | 5.0 | 50      | 0             | 94.4 | 80-120        | 49.57         | 4.86  | 20        |      |
| trans-1,3-Dichloropropene   | 48.08  | 5.0 | 50      | 0             | 96.2 | 80-120        | 53.71         | 11.1  | 20        |      |
| Trichloroethene             | 51.31  | 5.0 | 50      | 0             | 103  | 78.9-120      | 53.48         | 4.13  | 20        |      |
| Vinyl acetate               | 94.54  | 10  | 100     | 0             | 94.5 | 62.4-133      | 105.4         | 10.8  | 20        |      |
| Vinyl chloride              | 41.06  | 2.0 | 50      | 0             | 82.1 | 72.7-128      | 40.63         | 1.05  | 20        |      |
| Xylenes, Total              | 145.6  | 15  | 150     | 0             | 97.1 | 80-120        | 154.7         | 6.01  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 42.74  | 5.0 | 50      | 0             | 85.5 | 70-130        | 43.43         | 1.6   | 20        |      |
| Surr: 4-Bromofluorobenzene  | 50.07  | 5.0 | 50      | 0             | 100  | 70-130        | 49.79         | 0.575 | 20        |      |
| Surr: Dibromofluoromethane  | 42.81  | 5.0 | 50      | 0             | 85.6 | 70-130        | 43.7          | 2.05  | 20        |      |
| Surr: Toluene-d8            | 44.23  | 5.0 | 50      | 0             | 88.5 | 70-130        | 43.54         | 1.56  | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0402010-01A | 0402010-02A | 0402010-03A |
| 0402010-04A | 0402010-05A |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18596 InstrumentID: VOA\_I

MBLK Sample ID: VBLKW-0204 Test Code: SW8260 Units: µg/L Analysis Date: 02/04/04 23:18

Client ID: Run ID: VOA\_I\_040204B SeqNo: 425164 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 48.82  | 5.0 | 50      | 0             | 97.6 | 70-130        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 45.64  | 5.0 | 50      | 0             | 91.3 | 70-130        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.67  | 5.0 | 50      | 0             | 97.3 | 70-130        | 0             |      |           |      |
| Surr: Toluene-d8            | 46.12  | 5.0 | 50      | 0             | 92.2 | 70-130        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18596 InstrumentID: VOA\_I

LCS Sample ID: VLCSW-0204 Test Code: SW8260 Units: µg/L Analysis Date: 02/04/04 21:57

Client ID: Run ID: VOA\_I\_040204B SeqNo: 425162 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 56.33  | 5.0 | 50      | 0             | 113  | 75.2-120      | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 47.23  | 5.0 | 50      | 0             | 94.5 | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 49.8   | 5.0 | 50      | 0             | 99.6 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 56.04  | 5.0 | 50      | 0             | 112  | 76.9-120      | 0             |      |           |      |
| 1,1-Dichloroethene          | 61.64  | 5.0 | 50      | 0             | 123  | 72.6-123      | 0             |      |           | S    |
| 1,2-Dichloroethane          | 56.01  | 5.0 | 50      | 0             | 112  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 97.15  | 10  | 100     | 0             | 97.2 | 70-130        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 84.79  | 10  | 100     | 0             | 84.8 | 45.5-135      | 0             |      |           |      |
| 2-Hexanone                  | 75.45  | 10  | 100     | 0             | 75.4 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 82.72  | 10  | 100     | 0             | 82.7 | 67.4-121      | 0             |      |           |      |
| Acetone                     | 129.5  | 10  | 100     | 0             | 129  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 52.46  | 5.0 | 50      | 0             | 105  | 80-120        | 0             |      |           |      |
| Bromodichloromethane        | 54.82  | 5.0 | 50      | 0             | 110  | 80-120        | 0             |      |           |      |
| Bromoform                   | 51.59  | 5.0 | 50      | 0             | 103  | 77.9-121      | 0             |      |           |      |
| Bromomethane                | 47.31  | 5.0 | 50      | 0             | 94.6 | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 94.83  | 10  | 100     | 0             | 94.8 | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 56.35  | 5.0 | 50      | 0             | 113  | 74.7-120      | 0             |      |           |      |
| Chlorobenzene               | 51.31  | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Chloroethane                | 47.65  | 5.0 | 50      | 0             | 95.3 | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 55.66  | 5.0 | 50      | 0             | 111  | 80-120        | 0             |      |           |      |
| Chloromethane               | 49.44  | 5.0 | 50      | 0             | 98.9 | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 51.7   | 5.0 | 50      | 0             | 103  | 80-120        | 0             |      |           |      |
| Dibromochloromethane        | 54.26  | 5.0 | 50      | 0             | 109  | 80-120        | 0             |      |           |      |
| Ethylbenzene                | 49.35  | 5.0 | 50      | 0             | 98.7 | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 99.32  | 10  | 100     | 0             | 99.3 | 80-120        | 0             |      |           |      |
| Methylene chloride          | 57.62  | 10  | 50      | 0             | 115  | 76.2-120      | 0             |      |           |      |
| Styrene                     | 50.53  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 52.41  | 5.0 | 50      | 0             | 105  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 48.98  | 5.0 | 50      | 0             | 98   | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 50.54  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Trichloroethene             | 54.26  | 5.0 | 50      | 0             | 109  | 78.9-120      | 0             |      |           |      |
| Vinyl acetate               | 88.08  | 10  | 100     | 0             | 88.1 | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 44.37  | 2.0 | 50      | 0             | 88.7 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 151.2  | 15  | 150     | 0             | 101  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 49.44  | 5.0 | 50      | 0             | 98.9 | 70-130        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 47.31  | 5.0 | 50      | 0             | 94.6 | 70-130        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 50     | 5.0 | 50      | 0             | 100  | 70-130        | 0             |      |           |      |
| Surr: Toluene-d8            | 48.18  | 5.0 | 50      | 0             | 96.4 | 70-130        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18596 InstrumentID: VOA\_I

LCSD Sample ID: VLCSWD-0204 Test Code: SW8260 Units: µg/L Analysis Date: 02/04/04 22:24

Client ID: Run ID: VOA\_I\_040204B SeqNo: 425163 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 56.88  | 5.0 | 50      | 0             | 114  | 75.2-120      | 56.33         | 0.971  | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 45.97  | 5.0 | 50      | 0             | 91.9 | 72.4-121      | 47.23         | 2.69   | 20        |      |
| 1,1,2-Trichloroethane       | 49.31  | 5.0 | 50      | 0             | 98.6 | 80-120        | 49.8          | 0.984  | 20        |      |
| 1,1-Dichloroethane          | 56.52  | 5.0 | 50      | 0             | 113  | 76.9-120      | 56.04         | 0.841  | 20        |      |
| 1,1-Dichloroethene          | 61.94  | 5.0 | 50      | 0             | 124  | 72.6-123      | 61.64         | 0.491  | 20        | S    |
| 1,2-Dichloroethane          | 54.87  | 5.0 | 50      | 0             | 110  | 80-120        | 56.01         | 2.06   | 20        |      |
| 2-Butanone                  | 106.5  | 10  | 100     | 0             | 106  | 70-130        | 97.15         | 9.17   | 20        |      |
| 2-Chloroethyl vinyl ether   | 82.27  | 10  | 100     | 0             | 82.3 | 45.5-135      | 84.79         | 3.02   | 20        |      |
| 2-Hexanone                  | 74.57  | 10  | 100     | 0             | 74.6 | 55.6-126      | 75.45         | 1.17   | 20        |      |
| 4-Methyl-2-pentanone        | 82     | 10  | 100     | 0             | 82   | 67.4-121      | 82.72         | 0.88   | 20        |      |
| Acetone                     | 129.1  | 10  | 100     | 0             | 129  | 64.4-140      | 129.5         | 0.289  | 20        |      |
| Benzene                     | 53.04  | 5.0 | 50      | 0             | 106  | 80-120        | 52.46         | 1.11   | 20        |      |
| Bromodichloromethane        | 55.1   | 5.0 | 50      | 0             | 110  | 80-120        | 54.82         | 0.505  | 20        |      |
| Bromoform                   | 50.37  | 5.0 | 50      | 0             | 101  | 77.9-121      | 51.59         | 2.4    | 20        |      |
| Bromomethane                | 49.54  | 5.0 | 50      | 0             | 99.1 | 63.3-137      | 47.31         | 4.61   | 20        |      |
| Carbon disulfide            | 95.27  | 10  | 100     | 0             | 95.3 | 74.1-123      | 94.83         | 0.469  | 20        |      |
| Carbon tetrachloride        | 57.66  | 5.0 | 50      | 0             | 115  | 74.7-120      | 56.35         | 2.29   | 20        |      |
| Chlorobenzene               | 51.65  | 5.0 | 50      | 0             | 103  | 80-120        | 51.31         | 0.671  | 20        |      |
| Chloroethane                | 48.71  | 5.0 | 50      | 0             | 97.4 | 74.7-126      | 47.65         | 2.19   | 20        |      |
| Chloroform                  | 55.87  | 5.0 | 50      | 0             | 112  | 80-120        | 55.66         | 0.366  | 20        |      |
| Chloromethane               | 49.43  | 5.0 | 50      | 0             | 98.9 | 64.5-132      | 49.44         | 0.0305 | 20        |      |
| cis-1,3-Dichloropropene     | 52.28  | 5.0 | 50      | 0             | 105  | 80-120        | 51.7          | 1.12   | 20        |      |
| Dibromochloromethane        | 53.01  | 5.0 | 50      | 0             | 106  | 80-120        | 54.26         | 2.33   | 20        |      |
| Ethylbenzene                | 50.23  | 5.0 | 50      | 0             | 100  | 80-120        | 49.35         | 1.77   | 20        |      |
| m,p-Xylene                  | 99.7   | 10  | 100     | 0             | 99.7 | 80-120        | 99.32         | 0.379  | 20        |      |
| Methylene chloride          | 57.21  | 10  | 50      | 0             | 114  | 76.2-120      | 57.62         | 0.722  | 20        |      |
| Styrene                     | 49.32  | 5.0 | 50      | 0             | 98.6 | 80-120        | 50.53         | 2.41   | 20        |      |
| Tetrachloroethene           | 52.37  | 5.0 | 50      | 0             | 105  | 68.5-130      | 52.41         | 0.0836 | 20        |      |
| Toluene                     | 50.06  | 5.0 | 50      | 0             | 100  | 80-120        | 48.98         | 2.16   | 20        |      |
| trans-1,3-Dichloropropene   | 49.92  | 5.0 | 50      | 0             | 99.8 | 80-120        | 50.54         | 1.24   | 20        |      |
| Trichloroethene             | 54.83  | 5.0 | 50      | 0             | 110  | 78.9-120      | 54.26         | 1.04   | 20        |      |
| Vinyl acetate               | 88.12  | 10  | 100     | 0             | 88.1 | 62.4-133      | 88.08         | 0.0381 | 20        |      |
| Vinyl chloride              | 45.03  | 2.0 | 50      | 0             | 90.1 | 72.7-128      | 44.37         | 1.48   | 20        |      |
| Xylenes, Total              | 150.7  | 15  | 150     | 0             | 100  | 80-120        | 151.2         | 0.382  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 49.62  | 5.0 | 50      | 0             | 99.2 | 70-130        | 49.44         | 0.371  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 45.36  | 5.0 | 50      | 0             | 90.7 | 70-130        | 47.31         | 4.22   | 20        |      |
| Surr: Dibromofluoromethane  | 49.21  | 5.0 | 50      | 0             | 98.4 | 70-130        | 50            | 1.6    | 20        |      |
| Surr: Toluene-d8            | 46.73  | 5.0 | 50      | 0             | 93.5 | 70-130        | 48.18         | 3.05   | 20        |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18596 InstrumentID: VOA\_I

MS Sample ID: 0402005-09AMS Test Code: SW8260 Units: µg/L Analysis Date: 02/05/04 0:39

Client ID: Run ID: VOA\_I\_040204B SeqNo: 425165 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 63.79  | 5.0 | 50      | 0             | 128  | 75.2-120      | 0             |      |           | S    |
| 1,1,2,2-Tetrachloroethane   | 56.13  | 5.0 | 50      | 0             | 112  | 72.4-121      | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 59.76  | 5.0 | 50      | 0             | 120  | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethane          | 64.6   | 5.0 | 50      | 0             | 129  | 76.9-120      | 0             |      |           | S    |
| 1,1-Dichloroethene          | 67.69  | 5.0 | 50      | 0             | 135  | 72.6-123      | 0             |      |           | S    |
| 1,2-Dichloroethane          | 65.7   | 5.0 | 50      | 0             | 131  | 80-120        | 0             |      |           | S    |
| 2-Butanone                  | 105.5  | 10  | 100     | 0             | 105  | 70-130        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 45.5-135      | 0             |      |           | S    |
| 2-Hexanone                  | 92.32  | 10  | 100     | 0             | 92.3 | 55.6-126      | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 109.7  | 10  | 100     | 0             | 110  | 67.4-121      | 0             |      |           |      |
| Acetone                     | 123.8  | 10  | 100     | 0             | 124  | 64.4-140      | 0             |      |           |      |
| Benzene                     | 60.48  | 5.0 | 50      | 0             | 121  | 80-120        | 0             |      |           | S    |
| Bromodichloromethane        | 64.7   | 5.0 | 50      | 0             | 129  | 80-120        | 0             |      |           | S    |
| Bromoform                   | 61.64  | 5.0 | 50      | 0             | 123  | 77.9-121      | 0             |      |           | S    |
| Bromomethane                | 56.52  | 5.0 | 50      | 0             | 113  | 63.3-137      | 0             |      |           |      |
| Carbon disulfide            | 103.3  | 10  | 100     | 0             | 103  | 74.1-123      | 0             |      |           |      |
| Carbon tetrachloride        | 63.52  | 5.0 | 50      | 0             | 127  | 74.7-120      | 0             |      |           | S    |
| Chlorobenzene               | 60.17  | 5.0 | 50      | 0             | 120  | 80-120        | 0             |      |           | S    |
| Chloroethane                | 53.27  | 5.0 | 50      | 0             | 107  | 74.7-126      | 0             |      |           |      |
| Chloroform                  | 65.68  | 5.0 | 50      | 0             | 131  | 80-120        | 0             |      |           | S    |
| Chloromethane               | 54.43  | 5.0 | 50      | 0             | 109  | 64.5-132      | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 61.45  | 5.0 | 50      | 0             | 123  | 80-120        | 0             |      |           | S    |
| Dibromochloromethane        | 63.98  | 5.0 | 50      | 0             | 128  | 80-120        | 0             |      |           | S    |
| Ethylbenzene                | 56.89  | 5.0 | 50      | 0             | 114  | 80-120        | 0             |      |           |      |
| m,p-Xylene                  | 114.6  | 10  | 100     | 0             | 115  | 80-120        | 0             |      |           |      |
| Methylene chloride          | 67.11  | 10  | 50      | 0             | 134  | 76.2-120      | 0             |      |           | S    |
| Styrene                     | 57.42  | 5.0 | 50      | 0             | 115  | 80-120        | 0             |      |           |      |
| Tetrachloroethene           | 59.03  | 5.0 | 50      | 0             | 118  | 68.5-130      | 0             |      |           |      |
| Toluene                     | 57.17  | 5.0 | 50      | 0             | 114  | 80-120        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 60.76  | 5.0 | 50      | 0             | 122  | 80-120        | 0             |      |           | S    |
| Trichloroethene             | 60.4   | 5.0 | 50      | 0             | 121  | 78.9-120      | 0             |      |           | S    |
| Vinyl acetate               | 116    | 10  | 100     | 0             | 116  | 62.4-133      | 0             |      |           |      |
| Vinyl chloride              | 48.03  | 2.0 | 50      | 0             | 96.1 | 72.7-128      | 0             |      |           |      |
| Xylenes, Total              | 173.7  | 15  | 150     | 0             | 116  | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 49.74  | 5.0 | 50      | 0             | 99.5 | 70-130        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 46.03  | 5.0 | 50      | 0             | 92.1 | 70-130        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 49.97  | 5.0 | 50      | 0             | 99.9 | 70-130        | 0             |      |           |      |
| Surr: Toluene-d8            | 47.26  | 5.0 | 50      | 0             | 94.5 | 70-130        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R18596** InstrumentID: **VOA\_I**

MSD Sample ID: **0402005-09AMSD** Test Code: **SW8260** Units: **µg/L** Analysis Date: **02/05/04 1:06**

Client ID: Run ID: **VOA\_I\_040204B** SeqNo: **425166** Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 61.16  | 5.0 | 50      | 0             | 122  | 75.2-120      | 63.79         | 4.22   | 20        | S    |
| 1,1,2,2-Tetrachloroethane   | 57.98  | 5.0 | 50      | 0             | 116  | 72.4-121      | 56.13         | 3.25   | 20        |      |
| 1,1,2-Trichloroethane       | 59.2   | 5.0 | 50      | 0             | 118  | 80-120        | 59.76         | 0.944  | 20        |      |
| 1,1-Dichloroethane          | 63.34  | 5.0 | 50      | 0             | 127  | 76.9-120      | 64.6          | 1.98   | 20        | S    |
| 1,1-Dichloroethene          | 64.76  | 5.0 | 50      | 0             | 130  | 72.6-123      | 67.69         | 4.41   | 20        | S    |
| 1,2-Dichloroethane          | 67.15  | 5.0 | 50      | 0             | 134  | 80-120        | 65.7          | 2.19   | 20        | S    |
| 2-Butanone                  | 104.6  | 10  | 100     | 0             | 105  | 70-130        | 105.5         | 0.87   | 20        |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 45.5-135      | 0             | 0      | 20        | S    |
| 2-Hexanone                  | 92.11  | 10  | 100     | 0             | 92.1 | 55.6-126      | 92.32         | 0.229  | 20        |      |
| 4-Methyl-2-pentanone        | 111.6  | 10  | 100     | 0             | 112  | 67.4-121      | 109.7         | 1.8    | 20        |      |
| Acetone                     | 123.7  | 10  | 100     | 0             | 124  | 64.4-140      | 123.8         | 0.0567 | 20        |      |
| Benzene                     | 60.34  | 5.0 | 50      | 0             | 121  | 80-120        | 60.48         | 0.235  | 20        | S    |
| Bromodichloromethane        | 65.96  | 5.0 | 50      | 0             | 132  | 80-120        | 64.7          | 1.94   | 20        | S    |
| Bromoform                   | 61.95  | 5.0 | 50      | 0             | 124  | 77.9-121      | 61.64         | 0.505  | 20        | S    |
| Bromomethane                | 60.6   | 5.0 | 50      | 0             | 121  | 63.3-137      | 56.52         | 6.98   | 20        |      |
| Carbon disulfide            | 100.6  | 10  | 100     | 0             | 101  | 74.1-123      | 103.3         | 2.62   | 20        |      |
| Carbon tetrachloride        | 61.62  | 5.0 | 50      | 0             | 123  | 74.7-120      | 63.52         | 3.03   | 20        | S    |
| Chlorobenzene               | 59.27  | 5.0 | 50      | 0             | 119  | 80-120        | 60.17         | 1.5    | 20        |      |
| Chloroethane                | 52.83  | 5.0 | 50      | 0             | 106  | 74.7-126      | 53.27         | 0.823  | 20        |      |
| Chloroform                  | 64.31  | 5.0 | 50      | 0             | 129  | 80-120        | 65.68         | 2.11   | 20        | S    |
| Chloromethane               | 54.87  | 5.0 | 50      | 0             | 110  | 64.5-132      | 54.43         | 0.811  | 20        |      |
| cis-1,3-Dichloropropene     | 60.8   | 5.0 | 50      | 0             | 122  | 80-120        | 61.45         | 1.08   | 20        | S    |
| Dibromochloromethane        | 63.18  | 5.0 | 50      | 0             | 126  | 80-120        | 63.98         | 1.26   | 20        | S    |
| Ethylbenzene                | 54.7   | 5.0 | 50      | 0             | 109  | 80-120        | 56.89         | 3.93   | 20        |      |
| m,p-Xylene                  | 112.9  | 10  | 100     | 0             | 113  | 80-120        | 114.6         | 1.5    | 20        |      |
| Methylene chloride          | 66.64  | 10  | 50      | 0             | 133  | 76.2-120      | 67.11         | 0.709  | 20        | S    |
| Styrene                     | 52.49  | 5.0 | 50      | 0             | 105  | 80-120        | 57.42         | 8.98   | 20        |      |
| Tetrachloroethene           | 56.49  | 5.0 | 50      | 0             | 113  | 68.5-130      | 59.03         | 4.4    | 20        |      |
| Toluene                     | 55.44  | 5.0 | 50      | 0             | 111  | 80-120        | 57.17         | 3.08   | 20        |      |
| trans-1,3-Dichloropropene   | 59.22  | 5.0 | 50      | 0             | 118  | 80-120        | 60.76         | 2.57   | 20        |      |
| Trichloroethene             | 60.2   | 5.0 | 50      | 0             | 120  | 78.9-120      | 60.4          | 0.335  | 20        | S    |
| Vinyl acetate               | 110.1  | 10  | 100     | 0             | 110  | 62.4-133      | 116           | 5.27   | 20        |      |
| Vinyl chloride              | 48.39  | 2.0 | 50      | 0             | 96.8 | 72.7-128      | 48.03         | 0.743  | 20        |      |
| Xylenes, Total              | 171.5  | 15  | 150     | 0             | 114  | 80-120        | 173.7         | 1.28   | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 49.81  | 5.0 | 50      | 0             | 99.6 | 70-130        | 49.74         | 0.154  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 46.09  | 5.0 | 50      | 0             | 92.2 | 70-130        | 46.03         | 0.126  | 20        |      |
| Surr: Dibromofluoromethane  | 49.74  | 5.0 | 50      | 0             | 99.5 | 70-130        | 49.97         | 0.462  | 20        |      |
| Surr: Toluene-d8            | 45.99  | 5.0 | 50      | 0             | 92   | 70-130        | 47.26         | 2.72   | 20        |      |

The following samples were analyzed in this batch:

0402010-01A 0402010-02A 0402010-04A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18576 InstrumentID: IC201

MBLK Sample ID: WBLKW1-020304 Test Code: E300 Units: mg/L Analysis Date: 02/03/04 13:02

Client ID: Run ID: IC201\_040203A SeqNo: 424742 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.94   | 0.10 | 5       | 0             | 98.8 | 80-120        | 0             |      |           |      |

LCS Sample ID: WLCSW1-020304 Test Code: E300 Units: mg/L Analysis Date: 02/03/04 13:30

Client ID: Run ID: IC201\_040203A SeqNo: 424743 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.4    | 0.50 | 10      | 0             | 94   | 80-120        | 0             |      |           |      |
| Fluoride                         | 1.92   | 0.10 | 2       | 0             | 96   | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.45   | 1.0  | 10      | 0             | 94.5 | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.29   | 0.10 | 5       | 0             | 85.8 | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-02030 Test Code: E300 Units: mg/L Analysis Date: 02/03/04 13:59

Client ID: Run ID: IC201\_040203A SeqNo: 424744 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 9.42   | 0.50 | 10      | 0             | 94.2 | 80-120        | 9.4           | 0.213 | 20        |      |
| Fluoride                         | 1.87   | 0.10 | 2       | 0             | 93.5 | 80-120        | 1.92          | 2.64  | 20        |      |
| Sulfate                          | 9.39   | 1.0  | 10      | 0             | 93.9 | 80-120        | 9.45          | 0.637 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 4.45   | 0.10 | 5       | 0             | 89   | 80-120        | 4.29          | 3.66  | 20        |      |

MS Sample ID: 0402017-02BMS Test Code: E300 Units: mg/L Analysis Date: 02/04/04 14:41

Client ID: Run ID: IC201\_040203A SeqNo: 424767 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 8.99   | 0.50 | 10      | 0             | 89.9 | 75-125        | 0             |      |           |      |
| Fluoride                         | 1.93   | 0.10 | 2       | 0             | 96.5 | 75-125        | 0             |      |           |      |
| Sulfate                          | 9.46   | 1.0  | 10      | 0             | 94.6 | 75-125        | 0             |      |           |      |
| Nitrate/Nitrite (as N)           | 3.76   | 0.10 | 4       | 0             | 94   | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.75   | 0.10 | 5       | 0             | 95   | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18576 InstrumentID: IC201

MSD Sample ID: 0402017-02BMSD Test Code: E300 Units: mg/L Analysis Date: 02/04/04 15:10

Client ID: Run ID: IC201\_040203A SeqNo: 424768 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 8.86   | 0.50 | 10      | 0             | 88.6 | 75-125        | 8.99          | 1.46 | 20        |      |
| Fluoride                         | 1.93   | 0.10 | 2       | 0             | 96.5 | 75-125        | 1.93          | 0    | 20        |      |
| Sulfate                          | 9.22   | 1.0  | 10      | 0             | 92.2 | 75-125        | 9.46          | 2.57 | 20        |      |
| Nitrate/Nitrite (as N)           | 3.84   | 0.10 | 4       | 0             | 96   | 75-125        | 3.76          | 2.11 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 4.69   | 0.10 | 5       | 0             | 93.8 | 80-120        | 4.75          | 1.27 | 20        |      |

DUP Sample ID: 0402008-09CDUP Test Code: E300 Units: mg/L Analysis Date: 02/04/04 10:25

Client ID: Run ID: IC201\_040203A SeqNo: 424761 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Fluoride                         | 1.17   | 0.10 | 0       | 0             | 0    | 0-0           | 1.22          | 4.18 | 20        |      |
| Sulfate                          | ND     | 1.0  | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Surr: Dichloroacetic acid (surr) | 4.54   | 0.10 | 5       | 0             | 90.8 | 80-120        | 4.96          | 8.84 | 20        |      |

DUP Sample ID: 0402017-02BDUP Test Code: E300 Units: mg/L Analysis Date: 02/04/04 14:13

Client ID: Run ID: IC201\_040203A SeqNo: 424766 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Fluoride                         | ND     | 0.10 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Sulfate                          | ND     | 1.0  | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Surr: Dichloroacetic acid (surr) | 4.78   | 0.10 | 5       | 0             | 95.6 | 80-120        | 5             | 4.5  | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0402010-01B | 0402010-02B | 0402010-03B |
| 0402010-04B | 0402010-05B |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18670 InstrumentID: UV-2101PC

MBLK Sample ID: WMBW1-020904 Test Code: E335.3 Units: mg/L Analysis Date: 02/09/04 0:00

Client ID: Run ID: UV-2101PC\_040209A SeqNo: 426814 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-020904 Test Code: E335.3 Units: mg/L Analysis Date: 02/09/04 0:00

Client ID: Run ID: UV-2101PC\_040209A SeqNo: 426815 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2063 | 0.020 | 0.2     | 0             | 103  | 80-120        | 0             |      |           |      |

MS Sample ID: 0402017-02CMS Test Code: E335.3 Units: mg/L Analysis Date: 02/09/04 0:00

Client ID: Run ID: UV-2101PC\_040209A SeqNo: 426946 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2055 | 0.020 | 0.2     | 0.002         | 102  | 75-125        | 0             |      |           |      |

MSD Sample ID: 0402017-02CMSD Test Code: E335.3 Units: mg/L Analysis Date: 02/09/04 0:00

Client ID: Run ID: UV-2101PC\_040209A SeqNo: 426947 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1983 | 0.020 | 0.2     | 0.002         | 98.1 | 75-125        | 0.2055        | 3.57 | 25        |      |

DUP Sample ID: 0402017-02CDUP Test Code: E335.3 Units: mg/L Analysis Date: 02/09/04 0:00

Client ID: Run ID: UV-2101PC\_040209A SeqNo: 426945 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 | 0       | 0             | 0    | 0-0           | 0.002         | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0402010-01D | 0402010-02D | 0402010-03D |
| 0402010-04D | 0402010-05D |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R18676** InstrumentID: **IC201**

**MBLK** Sample ID: **WBLKW1-020604** Test Code: **E300** Units: **mg/L** Analysis Date: **02/06/04 12:48**

Client ID: Run ID: **IC201\_040206A** SeqNo: **426952** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.89   | 0.10 | 5       | 0             | 97.8 | 80-120        | 0             |      |           |      |

**LCS** Sample ID: **WLCSW1-020604** Test Code: **E300** Units: **mg/L** Analysis Date: **02/06/04 13:17**

Client ID: Run ID: **IC201\_040206A** SeqNo: **426953** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.34   | 0.50 | 10      | 0             | 93.4 | 80-120        | 0             |      |           |      |
| Fluoride                         | 1.92   | 0.10 | 2       | 0             | 96   | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.34   | 1.0  | 10      | 0             | 93.4 | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.52   | 0.10 | 5       | 0             | 90.4 | 80-120        | 0             |      |           |      |

**LCSD** Sample ID: **WLCSDW1-02060** Test Code: **E300** Units: **mg/L** Analysis Date: **02/06/04 13:45**

Client ID: Run ID: **IC201\_040206A** SeqNo: **426954** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 9.35   | 0.50 | 10      | 0             | 93.5 | 80-120        | 9.34          | 0.107 | 20        |      |
| Fluoride                         | 1.9    | 0.10 | 2       | 0             | 95   | 80-120        | 1.92          | 1.05  | 20        |      |
| Sulfate                          | 9.41   | 1.0  | 10      | 0             | 94.1 | 80-120        | 9.34          | 0.747 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 4.36   | 0.10 | 5       | 0             | 87.2 | 80-120        | 4.52          | 3.6   | 20        |      |

**MS** Sample ID: **0402010-01BMS** Test Code: **E300** Units: **mg/L** Analysis Date: **02/06/04 15:11**

Client ID: **MW-59** Run ID: **IC201\_040206A** SeqNo: **426957** Prep Date: DF: **100**

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 1040   | 50  | 1000    | 235           | 80.5 | 75-125        | 0             |      |           |      |
| Fluoride                         | 188    | 10  | 200     | 0             | 94   | 75-125        | 0             |      |           |      |
| Sulfate                          | 2363   | 100 | 1000    | 1434          | 92.9 | 75-125        | 0             |      |           |      |
| Nitrate/Nitrite (as N)           | 391    | 10  | 400     | 0             | 97.8 | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 481    | 10  | 500     | 0             | 96.2 | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0402010  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18676 InstrumentID: IC201

MSD Sample ID: 0402010-01BMSD Test Code: E300 Units: mg/L Analysis Date: 02/06/04 15:39

Client ID: MW-59 Run ID: IC201\_040206A SeqNo: 426958 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 1028   | 50  | 1000    | 235           | 79.3 | 75-125        | 1040          | 1.16  | 20        |      |
| Fluoride                         | 186    | 10  | 200     | 0             | 93   | 75-125        | 188           | 1.07  | 20        |      |
| Sulfate                          | 2338   | 100 | 1000    | 1434          | 90.4 | 75-125        | 2363          | 1.06  | 20        |      |
| Nitrate/Nitrite (as N)           | 373    | 10  | 400     | 0             | 93.2 | 75-125        | 391           | 4.71  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 477    | 10  | 500     | 0             | 95.4 | 80-120        | 481           | 0.835 | 20        |      |

DUP Sample ID: 0402010-01BDUP Test Code: E300 Units: mg/L Analysis Date: 02/06/04 14:42

Client ID: MW-59 Run ID: IC201\_040206A SeqNo: 426956 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 235    | 50  | 0       | 0             | 0    | 0-0           | 235           | 0    | 20        |      |
| Fluoride                         | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Sulfate                          | 1424   | 100 | 0       | 0             | 0    | 0-0           | 1434          | 0.7  | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Surr: Dichloroacetic acid (surr) | 486    | 10  | 500     | 0             | 97.2 | 80-120        | 513           | 5.41 | 20        |      |

DUP Sample ID: 0402010-05BDUP Test Code: E300 Units: mg/L Analysis Date: 02/06/04 18:30

Client ID: TEL-1 Run ID: IC201\_040206A SeqNo: 426964 Prep Date: DF: 50

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 187.5  | 25  | 0       | 0             | 0    | 0-0           | 187.5         | 0      | 20        |      |
| Fluoride                         | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0      | 20        |      |
| Sulfate                          | 1318   | 50  | 0       | 0             | 0    | 0-0           | 1319          | 0.0379 | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0      | 20        |      |
| Surr: Dichloroacetic acid (surr) | 248    | 5.0 | 250     | 0             | 99.2 | 80-120        | 245.5         | 1.01   | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0402010-01B | 0402010-03B | 0402010-04B |
| 0402010-05B |             |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0402010  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R18698** InstrumentID: **Wet Chemistry**

**MBLK** Sample ID: **WBLKW1-021004** Test Code: **E310.1** Units: **mg/L** Analysis Date: **02/10/04 0:00**

Client ID: Run ID: **WET CHEMISTRY\_0402** SeqNo: **427611** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

**LCS** Sample ID: **WLCSW1-021004** Test Code: **E310.1** Units: **mg/L** Analysis Date: **02/10/04 0:00**

Client ID: Run ID: **WET CHEMISTRY\_0402** SeqNo: **427612** Prep Date: DF: **1**

| Analyte                      | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Total (As CaCO3) | 950.2  | 5.0 | 1000    | 0             | 95   | 80-120        | 0             |      |           |      |

**DUP** Sample ID: **0402010-01BDUP** Test Code: **E310.1** Units: **mg/L** Analysis Date: **02/10/04 0:00**

Client ID: **MW-59** Run ID: **WET CHEMISTRY\_0402** SeqNo: **427618** Prep Date: DF: **1**

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 500.1  | 5.0 | 0       | 0             | 0    | 0-0           | 500.1         | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 500.1  | 5.0 | 0       | 0             | 0    | 0-0           | 500.1         | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0402010-01B | 0402010-02B | 0402010-03B |
| 0402010-04B | 0402010-05B |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

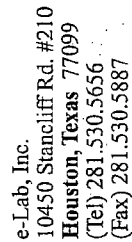
R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



## Chain of Custody Form

☐ e-Lab, Inc.  
3352 128th Avenue  
**Holland, Michigan 49424**  
(Tel) 616.399.6070  
(Fax) 616.399.6185

Page 1 of 1

[illegible]

**Note: 1.** Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.

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e-Lab, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 2/3/2004 9:20:00 AM

Work Order Number 0402010

Received by: RSZ

Checklist completed by

RICHARD SANCHEZ 2-3-04  
Signature Date

Reviewed by

[Signature] 2/3/04  
Initials Date

Matrix: W

Carrier name FedEx

|                                                         |                                         |                                        |                                                 |
|---------------------------------------------------------|-----------------------------------------|----------------------------------------|-------------------------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | Not Present <input type="checkbox"/>            |
| Custody seals intact on shipping container/cooler?      | Yes <input type="checkbox"/>            | No <input type="checkbox"/>            | Not Present <input checked="" type="checkbox"/> |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/>            | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Chain of custody agrees with sample labels?             | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |                                                 |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Temperature(s)/Thermometer(s):                          | <u>4.0c, 3.1c</u>                       | <u>002</u>                             |                                                 |
| Water - VOA vials have zero headspace?                  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | No VOA vials submitted <input type="checkbox"/> |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | N/A <input type="checkbox"/>                    |

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Login Notes: MW-59 is labeled as MW-58; logged in as MW-59 per COC. VOC, Wet Chem analysis, Cyanide, and SVOC containers for TEL-3 are labeled as TEL-4; logged in as TEL-3 per COC and differentiated as TEL-3 per sample label times.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments:

CONTAINERS FOR MW-59 ARE MARKED AS BEING SAMPLED ON 1-13-04/11:00;  
LOGGED IN AS 2-1-04/11:00 PER COC.

Corrective Action \_\_\_\_\_



**e-Lab, Inc.**

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

January 28, 2004

Jeff Byrd  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

Tel: (505) 746-5468  
Fax: (505) 746-5421

Re: NCL/TEL

Work Order : **0401088**

Dear Jeff Byrd,

e-Lab, Inc. received 9 samples on 1/13/2004 8:40:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Inc. The total number of pages in this report is 62.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

*Lora Terrill*

Electronically approved by: Patrina A. Dathorne

Lora Terrill  
VP Lab Operations

e-Lab, Inc.

Date: January 28, 2004

CLIENT: Navajo Refining Company  
Project: NCL/TEL  
Work Order: 0401088

## Work Order Sample Summary

| <u>Lab Sample ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|----------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0401088-01           | MW-53                   | Water         |                   | 1/12/2004 08:20        | 1/13/2004 08:40      | <input type="checkbox"/> |
| 0401088-02           | NCL-49                  | Water         |                   | 1/12/2004 09:45        | 1/13/2004 08:40      | <input type="checkbox"/> |
| 0401088-03           | NCL-32                  | Water         |                   | 1/12/2004 10:40        | 1/13/2004 08:40      | <input type="checkbox"/> |
| 0401088-04           | MW-55                   | Water         |                   | 1/12/2004 11:20        | 1/13/2004 08:40      | <input type="checkbox"/> |
| 0401088-05           | MW-54A                  | Water         |                   | 1/12/2004 11:40        | 1/13/2004 08:40      | <input type="checkbox"/> |
| 0401088-06           | MW-59                   | Water         |                   | 1/12/2004 13:15        | 1/13/2004 08:40      | <input type="checkbox"/> |
| 0401088-07           | NCL-44                  | Water         |                   | 1/12/2004 13:45        | 1/13/2004 08:40      | <input type="checkbox"/> |
| 0401088-08           | NCL-33                  | Water         |                   | 1/12/2004 14:00        | 1/13/2004 08:40      | <input type="checkbox"/> |
| 0401088-09           | NCL-34                  | Water         |                   | 1/12/2004 15:30        | 1/13/2004 08:40      | <input type="checkbox"/> |

## e-Lab, Inc.

Date: January 28, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL  
 Lab ID: 0401088-01

Client Sample ID: MW-53  
 Collection Date: 1/12/2004 8:20:00 AM  
 Matrix: WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor      | Date Analyzed         |
|---------------------------------------|---------|---------------|------|-------|----------------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                      |                       |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: 1/13/2004 | Analyst: JCJ          |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                    | 1/14/2004 5:01:50 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                      |                       |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: 1/19/2004 | Analyst: ALR          |
| Aluminum                              | 0.0111  | 0.0100        |      | mg/L  | 1                    | 1/23/2004 2:36:00 PM  |
| Arsenic                               | ND      | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Barium                                | 0.0309  | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                    | 1/22/2004 10:29:00 PM |
| Boron                                 | 0.396   | 0.0200        |      | mg/L  | 1                    | 1/22/2004 10:29:00 PM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Calcium                               | 115     | 10.0          |      | mg/L  | 20                   | 1/23/2004 3:29:00 PM  |
| Chromium                              | ND      | 0.00200       |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Cobalt                                | 0.00644 | 0.00200       |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Copper                                | 0.00380 | 0.00200       |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Iron                                  | 1.40    | 0.200         |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Magnesium                             | 68.2    | 4.00          |      | mg/L  | 20                   | 1/23/2004 3:29:00 PM  |
| Manganese                             | 0.778   | 0.100         |      | mg/L  | 20                   | 1/23/2004 3:29:00 PM  |
| Nickel                                | 0.0103  | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Potassium                             | 1.18    | 0.200         |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Sodium                                | 49.6    | 4.00          |      | mg/L  | 20                   | 1/23/2004 3:29:00 PM  |
| Vanadium                              | 0.00880 | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| Zinc                                  | 0.0116  | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:34:00 AM |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                      |                       |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: 1/14/2004 | Analyst: HV           |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |
| Aniline                               | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 12:55:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-01

**Client Sample ID:** MW-53  
**Collection Date:** 1/12/2004 8:20:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit | Qual | Units         | Dilution Factor    | Date Analyzed         |
|----------------------------|--------|--------------|------|---------------|--------------------|-----------------------|
| Anthracene                 | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| Benzidine                  | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| Hexachloroethane           | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| Isophorone                 | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| Naphthalene                | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| Nitrobenzene               | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| Pentachlorophenol          | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| Phenanthrene               | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| Phenol                     | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| Pyrene                     | ND     | 10           |      | µg/L          | 1                  | 1/22/2004 12:55:00 AM |
| Surr: 2,4,6-Tribromophenol | 93.1   | 39-153       |      | %REC          | 1                  | 1/22/2004 12:55:00 AM |
| Surr: 2-Fluorobiphenyl     | 96.0   | 40-147       |      | %REC          | 1                  | 1/22/2004 12:55:00 AM |
| Surr: 2-Fluorophenol       | 32.6   | 21-100       |      | %REC          | 1                  | 1/22/2004 12:55:00 AM |
| Surr: 4-Terphenyl-d14      | 97.8   | 39-141       |      | %REC          | 1                  | 1/22/2004 12:55:00 AM |
| Surr: Nitrobenzene-d5      | 84.5   | 37-140       |      | %REC          | 1                  | 1/22/2004 12:55:00 AM |
| Surr: Phenol-d6            | 18.7   | 11-100       |      | %REC          | 1                  | 1/22/2004 12:55:00 AM |
| <b>VOLATILES BY GC/MS</b>  |        |              |      | <b>SW8260</b> | <b>Analyst: PC</b> |                       |
| 1,1,1-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0          |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| 1,1,2-Trichloroethane      | ND     | 5.0          |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| 1,1-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| 1,1-Dichloroethene         | ND     | 5.0          |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| 1,2-Dichloroethane         | ND     | 5.0          |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| 2-Butanone                 | ND     | 10           |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| 2-Chloroethyl vinyl ether  | ND     | 10           |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| 2-Hexanone                 | ND     | 10           |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| 4-Methyl-2-pentanone       | ND     | 10           |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| Acetone                    | ND     | 10           |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| Benzene                    | ND     | 5.0          |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| Bromodichloromethane       | ND     | 5.0          |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| Bromoform                  | ND     | 5.0          |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| Bromomethane               | ND     | 5.0          |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| Carbon disulfide           | ND     | 10           |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| Carbon tetrachloride       | ND     | 5.0          |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |
| Chlorobenzene              | ND     | 5.0          |      | µg/L          | 1                  | 1/13/2004 9:42:00 PM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-01

**Client Sample ID:** MW-53  
**Collection Date:** 1/12/2004 8:20:00 AM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 1/13/2004 9:42:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 93.3   | 70-130        |      | %REC                | 1               | 1/13/2004 9:42:00 PM  |
| Surr: 4-Bromofluorobenzene          | 94.3   | 70-130        |      | %REC                | 1               | 1/13/2004 9:42:00 PM  |
| Surr: Dibromofluoromethane          | 95.1   | 70-130        |      | %REC                | 1               | 1/13/2004 9:42:00 PM  |
| Surr: Toluene-d8                    | 88.7   | 70-130        |      | %REC                | 1               | 1/13/2004 9:42:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                       |
| Chloride                            | 52.8   | 2.50          |      | mg/L                | 5               | 1/13/2004 11:58:00 PM |
| Fluoride                            | 1.46   | 0.100         |      | mg/L                | 1               | 1/13/2004 4:22:00 PM  |
| Sulfate                             | 1,140  | 100           |      | mg/L                | 100             | 1/22/2004 3:54:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 1/13/2004 4:22:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 106    | 80-120        |      | %REC                | 1               | 1/13/2004 4:22:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 115    | 80-120        |      | %REC                | 5               | 1/13/2004 11:58:00 PM |
| Surr: Dichloroacetic acid (surr)    | 103    | 80-120        |      | %REC                | 100             | 1/22/2004 3:54:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 314    | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Total (As CaCO3)        | 314    | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 1/16/2004             |

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P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-02

**Client Sample ID:** NCL-49  
**Collection Date:** 1/12/2004 9:45:00 AM

**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor             | Date Analyzed         |
|---------------------------------------|---------|---------------|------|-------|-----------------------------|-----------------------|
| <hr/>                                 |         |               |      |       |                             |                       |
| <b>MERCURY, TOTAL</b>                 |         | <b>SW7470</b> |      |       | Prep Date: <b>1/13/2004</b> | Analyst: <b>JCJ</b>   |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                           | 1/14/2004 5:03:23 PM  |
| <hr/>                                 |         |               |      |       |                             |                       |
| <b>ICP METALS, TOTAL</b>              |         | <b>SW6020</b> |      |       | Prep Date: <b>1/19/2004</b> | Analyst: <b>ALR</b>   |
| Aluminum                              | 0.0132  | 0.0100        |      | mg/L  | 1                           | 1/23/2004 2:41:00 PM  |
| Arsenic                               | ND      | 0.00500       |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Barium                                | 0.0122  | 0.00500       |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                           | 1/22/2004 10:34:00 PM |
| Boron                                 | 0.281   | 0.0200        |      | mg/L  | 1                           | 1/22/2004 10:34:00 PM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Calcium                               | 515     | 25.0          |      | mg/L  | 50                          | 1/23/2004 3:34:00 PM  |
| Chromium                              | 0.00556 | 0.00200       |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Cobalt                                | ND      | 0.00200       |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Copper                                | 0.310   | 0.00200       |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Iron                                  | 2.53    | 0.200         |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Magnesium                             | 236     | 10.0          |      | mg/L  | 50                          | 1/23/2004 3:34:00 PM  |
| Manganese                             | ND      | 0.00500       |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Nickel                                | 0.00833 | 0.00500       |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Potassium                             | 0.794   | 0.200         |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Selenium                              | 0.0106  | 0.00500       |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Sodium                                | 125     | 10.0          |      | mg/L  | 50                          | 1/23/2004 3:34:00 PM  |
| Vanadium                              | 0.0114  | 0.00500       |      | mg/L  | 1                           | 1/22/2004 12:39:00 AM |
| Zinc                                  | 1.00    | 0.0500        |      | mg/L  | 10                          | 1/23/2004 4:23:00 PM  |
| <hr/>                                 |         |               |      |       |                             |                       |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         | <b>SW8270</b> |      |       | Prep Date: <b>1/14/2004</b> | Analyst: <b>HV</b>    |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |
| Aniline                               | ND      | 10            |      | µg/L  | 1                           | 1/22/2004 1:23:00 AM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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## e-Lab, Inc.

Date: January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-02

**Client Sample ID:** NCL-49  
**Collection Date:** 1/12/2004 9:45:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed        |
|----------------------------|--------|---------------|------|-------|--------------------|----------------------|
| Anthracene                 | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| Benz(a)anthracene          | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| Benzidine                  | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| Hexachloroethane           | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| Isophorone                 | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| Naphthalene                | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| Nitrobenzene               | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| Pentachlorophenol          | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| Phenanthrene               | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| Phenol                     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| Pyrene                     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 1:23:00 AM |
| Surr: 2,4,6-Tribromophenol | 89.0   | 39-153        |      | %REC  | 1                  | 1/22/2004 1:23:00 AM |
| Surr: 2-Fluorobiphenyl     | 95.8   | 40-147        |      | %REC  | 1                  | 1/22/2004 1:23:00 AM |
| Surr: 2-Fluorophenol       | 32.4   | 21-100        |      | %REC  | 1                  | 1/22/2004 1:23:00 AM |
| Surr: 4-Terphenyl-d14      | 100    | 39-141        |      | %REC  | 1                  | 1/22/2004 1:23:00 AM |
| Surr: Nitrobenzene-d5      | 87.5   | 37-140        |      | %REC  | 1                  | 1/22/2004 1:23:00 AM |
| Surr: Phenol-d6            | 17.8   | 11-100        |      | %REC  | 1                  | 1/22/2004 1:23:00 AM |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | <b>Analyst: PC</b> |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| Acetone                    | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| Benzene                    | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |
| Chlorobenzene              | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 8:26:00 AM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time



## e-Lab, Inc.

Date: January 28, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL  
 Lab ID: 0401088-02

Client Sample ID: NCL-49  
 Collection Date: 1/12/2004 9:45:00 AM  
 Matrix: WATER

| Analyses                                        | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed        |
|-------------------------------------------------|--------|---------------|------|---------------------|-----------------|----------------------|
| Chloroethane                                    | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Chloroform                                      | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Chloromethane                                   | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| cis-1,3-Dichloropropene                         | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Dibromochloromethane                            | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Ethylbenzene                                    | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| m,p-Xylene                                      | ND     | 10            |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Methylene chloride                              | ND     | 10            |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Styrene                                         | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Tetrachloroethene                               | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Toluene                                         | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| trans-1,3-Dichloropropene                       | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Trichloroethene                                 | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Vinyl acetate                                   | ND     | 10            |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Vinyl chloride                                  | ND     | 2.0           |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Xylenes, Total                                  | ND     | 15            |      | µg/L                | 1               | 1/14/2004 8:26:00 AM |
| Surr: 1,2-Dichloroethane-d4                     | 97.1   | 70-130        |      | %REC                | 1               | 1/14/2004 8:26:00 AM |
| Surr: 4-Bromofluorobenzene                      | 92.5   | 70-130        |      | %REC                | 1               | 1/14/2004 8:26:00 AM |
| Surr: Dibromofluoromethane                      | 96.4   | 70-130        |      | %REC                | 1               | 1/14/2004 8:26:00 AM |
| Surr: Toluene-d8                                | 87.8   | 70-130        |      | %REC                | 1               | 1/14/2004 8:26:00 AM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b>             |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                      |
| Chloride                                        | 185    | 5.00          |      | mg/L                | 10              | 1/14/2004 2:08:00 AM |
| Fluoride                                        | 1.00   | 0.100         |      | mg/L                | 1               | 1/13/2004 6:32:00 PM |
| Sulfate                                         | 1,660  | 100           |      | mg/L                | 100             | 1/22/2004 6:04:00 AM |
| Nitrate/Nitrite (as N)                          | ND     | 0.100         |      | mg/L                | 1               | 1/13/2004 6:32:00 PM |
| Surr: Dichloroacetic acid (surr)                | 113    | 80-120        |      | %REC                | 1               | 1/13/2004 6:32:00 PM |
| Surr: Dichloroacetic acid (surr)                | 109    | 80-120        |      | %REC                | 10              | 1/14/2004 2:08:00 AM |
| Surr: Dichloroacetic acid (surr)                | 101    | 80-120        |      | %REC                | 100             | 1/22/2004 6:04:00 AM |
| <b>ALKALINITY</b>                               |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                      |
| Alkalinity, Bicarbonate (As CaCO <sub>3</sub> ) | 206    | 5.00          |      | mg/L                | 1               | 1/14/2004            |
| Alkalinity, Carbonate (As CaCO <sub>3</sub> )   | ND     | 5.00          |      | mg/L                | 1               | 1/14/2004            |
| Alkalinity, Hydroxide (As CaCO <sub>3</sub> )   | ND     | 5.00          |      | mg/L                | 1               | 1/14/2004            |
| Alkalinity, Total (As CaCO <sub>3</sub> )       | 206    | 5.00          |      | mg/L                | 1               | 1/14/2004            |
| <b>CYANIDE, TOTAL</b>                           |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                      |
| Cyanide                                         | ND     | 0.0200        |      | mg/L                | 1               | 1/16/2004            |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL  
Lab ID: 0401088-03

Client Sample ID: NCL-32  
Collection Date: 1/12/2004 10:40:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 1/14/2004 5:04:54 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Barium                                | 0.0154  | 0.00500      |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 1/22/2004 10:39:00 PM |
| Boron                                 | 0.292   | 0.0200       |      | mg/L  | 1               | 1/22/2004 10:39:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Calcium                               | 454     | 25.0         |      | mg/L  | 50              | 1/23/2004 3:38:00 PM  |
| Chromium                              | 0.00589 | 0.00200      |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Cobalt                                | 0.00424 | 0.00200      |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Copper                                | 0.693   | 0.0200       |      | mg/L  | 10              | 1/26/2004 2:24:00 PM  |
| Iron                                  | 2.69    | 0.200        |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Magnesium                             | 171     | 2.00         |      | mg/L  | 10              | 1/23/2004 4:27:00 PM  |
| Manganese                             | 0.950   | 0.0500       |      | mg/L  | 10              | 1/23/2004 4:27:00 PM  |
| Nickel                                | 0.0126  | 0.00500      |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Potassium                             | 3.70    | 0.200        |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Sodium                                | 84.7    | 2.00         |      | mg/L  | 10              | 1/23/2004 4:27:00 PM  |
| Vanadium                              | 0.0111  | 0.00500      |      | mg/L  | 1               | 1/22/2004 12:44:00 AM |
| Zinc                                  | 1.21    | 0.0500       |      | mg/L  | 10              | 1/23/2004 4:27:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |
| Aniline                               | ND      | 10           |      | µg/L  | 1               | 1/22/2004 1:50:00 AM  |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL  
Lab ID: 0401088-03

Client Sample ID: NCL-32  
Collection Date: 1/12/2004 10:40:00 AM  
Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor | Date Analyzed        |
|----------------------------|--------|---------------|------|-------|-----------------|----------------------|
| Anthracene                 | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| Benz(a)anthracene          | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| Benzidine                  | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| Hexachloroethane           | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| Isophorone                 | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| Naphthalene                | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| Nitrobenzene               | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| Pentachlorophenol          | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| Phenanthrene               | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| Phenol                     | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| Pyrene                     | ND     | 10            |      | µg/L  | 1               | 1/22/2004 1:50:00 AM |
| Surr: 2,4,6-Tribromophenol | 93.5   | 39-153        |      | %REC  | 1               | 1/22/2004 1:50:00 AM |
| Surr: 2-Fluorobiphenyl     | 87.3   | 40-147        |      | %REC  | 1               | 1/22/2004 1:50:00 AM |
| Surr: 2-Fluorophenol       | 25.4   | 21-100        |      | %REC  | 1               | 1/22/2004 1:50:00 AM |
| Surr: 4-Terphenyl-d14      | 89.9   | 39-141        |      | %REC  | 1               | 1/22/2004 1:50:00 AM |
| Surr: Nitrobenzene-d5      | 79.5   | 37-140        |      | %REC  | 1               | 1/22/2004 1:50:00 AM |
| Surr: Phenol-d6            | 15.1   | 11-100        |      | %REC  | 1               | 1/22/2004 1:50:00 AM |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | Analyst: PC     |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| Acetone                    | ND     | 10            |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| Benzene                    | ND     | 5.0           |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |
| Chlorobenzene              | ND     | 5.0           |      | µg/L  | 1               | 1/14/2004 8:53:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL  
Lab ID: 0401088-03

Client Sample ID: NCL-32  
Collection Date: 1/12/2004 10:40:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units | Dilution Factor     | Date Analyzed        |
|-------------------------------------|--------|---------------|------|-------|---------------------|----------------------|
| Chloroethane                        | ND     | 5.0           |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Chloroform                          | ND     | 5.0           |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Chloromethane                       | ND     | 5.0           |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| m,p-Xylene                          | ND     | 10            |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Methylene chloride                  | ND     | 10            |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Styrene                             | ND     | 5.0           |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Toluene                             | ND     | 5.0           |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Vinyl acetate                       | ND     | 10            |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Xylenes, Total                      | ND     | 15            |      | µg/L  | 1                   | 1/14/2004 8:53:00 AM |
| Surr: 1,2-Dichloroethane-d4         | 97.6   | 70-130        |      | %REC  | 1                   | 1/14/2004 8:53:00 AM |
| Surr: 4-Bromofluorobenzene          | 93.8   | 70-130        |      | %REC  | 1                   | 1/14/2004 8:53:00 AM |
| Surr: Dibromofluoromethane          | 95.9   | 70-130        |      | %REC  | 1                   | 1/14/2004 8:53:00 AM |
| Surr: Toluene-d8                    | 88.4   | 70-130        |      | %REC  | 1                   | 1/14/2004 8:53:00 AM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      |       | Analyst: <b>MG</b>  |                      |
| Chloride                            | 224    | 5.00          |      | mg/L  | 10                  | 1/14/2004 3:13:00 AM |
| Fluoride                            | 1.59   | 0.100         |      | mg/L  | 1                   | 1/13/2004 7:05:00 PM |
| Sulfate                             | 1,210  | 100           |      | mg/L  | 100                 | 1/22/2004 6:36:00 AM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L  | 1                   | 1/13/2004 7:05:00 PM |
| Surr: Dichloroacetic acid (surr)    | 97.8   | 80-120        |      | %REC  | 1                   | 1/13/2004 7:05:00 PM |
| Surr: Dichloroacetic acid (surr)    | 116    | 80-120        |      | %REC  | 10                  | 1/14/2004 3:13:00 AM |
| Surr: Dichloroacetic acid (surr)    | 101    | 80-120        |      | %REC  | 100                 | 1/22/2004 6:36:00 AM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      |       | Analyst: <b>LMD</b> |                      |
| Alkalinity, Bicarbonate (As CaCO3)  | 324    | 5.00          |      | mg/L  | 1                   | 1/14/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 1/14/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L  | 1                   | 1/14/2004            |
| Alkalinity, Total (As CaCO3)        | 324    | 5.00          |      | mg/L  | 1                   | 1/14/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      |       | Analyst: <b>LMD</b> |                      |
| Cyanide                             | ND     | 0.0200        |      | mg/L  | 1                   | 1/16/2004            |

Qualifiers: ND - Not Detected at the Reporting Limit  
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B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL  
Lab ID: 0401088-04

Client Sample ID: MW-55  
Collection Date: 1/12/2004 11:20:00 AM  
Matrix: WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor      | Date Analyzed         |
|---------------------------------------|---------|---------------|------|-------|----------------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |               |      |       |                      |                       |
|                                       |         | <b>SW7470</b> |      |       | Prep Date: 1/13/2004 | Analyst: JCJ          |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                    | 1/14/2004 5:06:25 PM  |
| <b>ICP METALS, TOTAL</b>              |         |               |      |       |                      |                       |
|                                       |         | <b>SW6020</b> |      |       | Prep Date: 1/19/2004 | Analyst: ALR          |
| Aluminum                              | 0.0236  | 0.0100        |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Arsenic                               | 0.00782 | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Barium                                | 0.0116  | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                    | 1/22/2004 10:43:00 PM |
| Boron                                 | 0.513   | 0.0200        |      | mg/L  | 1                    | 1/22/2004 10:43:00 PM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Calcium                               | 417     | 25.0          |      | mg/L  | 50                   | 1/23/2004 3:43:00 PM  |
| Chromium                              | 0.00374 | 0.00200       |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Cobalt                                | 0.00224 | 0.00200       |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Copper                                | 0.541   | 0.0100        |      | mg/L  | 5                    | 1/26/2004 2:29:00 PM  |
| Iron                                  | 2.20    | 0.200         |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Magnesium                             | 245     | 10.0          |      | mg/L  | 50                   | 1/23/2004 3:43:00 PM  |
| Manganese                             | 0.488   | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Nickel                                | 0.0140  | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Potassium                             | 0.903   | 0.200         |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Selenium                              | 0.00895 | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Sodium                                | 186     | 10.0          |      | mg/L  | 50                   | 1/23/2004 3:43:00 PM  |
| Vanadium                              | 0.0153  | 0.00500       |      | mg/L  | 1                    | 1/22/2004 12:49:00 AM |
| Zinc                                  | 0.437   | 0.0250        |      | mg/L  | 5                    | 1/23/2004 4:32:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |               |      |       |                      |                       |
|                                       |         | <b>SW8270</b> |      |       | Prep Date: 1/14/2004 | Analyst: HV           |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |
| Aniline                               | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 2:17:00 AM  |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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## e-Lab, Inc.

Date: January 28, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL  
 Lab ID: 0401088-04

Client Sample ID: MW-55  
 Collection Date: 1/12/2004 11:20:00 AM  
 Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed         |
|----------------------------|--------|---------------|------|-------|--------------------|-----------------------|
| Anthracene                 | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| Benz(a)anthracene          | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| Benzidine                  | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| Hexachloroethane           | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| Isophorone                 | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| Naphthalene                | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| Nitrobenzene               | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| Pentachlorophenol          | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| Phenanthrene               | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| Phenol                     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| Pyrene                     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:17:00 AM  |
| Surr: 2,4,6-Tribromophenol | 91.4   | 39-153        |      | %REC  | 1                  | 1/22/2004 2:17:00 AM  |
| Surr: 2-Fluorobiphenyl     | 98.6   | 40-147        |      | %REC  | 1                  | 1/22/2004 2:17:00 AM  |
| Surr: 2-Fluorophenol       | 31.7   | 21-100        |      | %REC  | 1                  | 1/22/2004 2:17:00 AM  |
| Surr: 4-Terphenyl-d14      | 94.5   | 39-141        |      | %REC  | 1                  | 1/22/2004 2:17:00 AM  |
| Surr: Nitrobenzene-d5      | 86.6   | 37-140        |      | %REC  | 1                  | 1/22/2004 2:17:00 AM  |
| Surr: Phenol-d6            | 17.2   | 11-100        |      | %REC  | 1                  | 1/22/2004 2:17:00 AM  |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | <b>Analyst: PC</b> |                       |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| Acetone                    | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| Benzene                    | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |
| Chlorobenzene              | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:18:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

## e-Lab, Inc.

Date: January 28, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL  
 Lab ID: 0401088-04

Client Sample ID: MW-55  
 Collection Date: 1/12/2004 11:20:00 AM  
 Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 1/14/2004 12:18:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 99.0   | 70-130        |      | %REC                | 1               | 1/14/2004 12:18:00 PM |
| Surr: 4-Bromofluorobenzene          | 95.1   | 70-130        |      | %REC                | 1               | 1/14/2004 12:18:00 PM |
| Surr: Dibromofluoromethane          | 97.6   | 70-130        |      | %REC                | 1               | 1/14/2004 12:18:00 PM |
| Surr: Toluene-d8                    | 88.3   | 70-130        |      | %REC                | 1               | 1/14/2004 12:18:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                       |
| Chloride                            | 258    | 5.00          |      | mg/L                | 10              | 1/14/2004 4:18:00 AM  |
| Fluoride                            | 1.27   | 0.100         |      | mg/L                | 1               | 1/13/2004 7:37:00 PM  |
| Sulfate                             | 1,470  | 100           |      | mg/L                | 100             | 1/22/2004 7:09:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 1/13/2004 7:37:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 97.0   | 80-120        |      | %REC                | 1               | 1/13/2004 7:37:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 119    | 80-120        |      | %REC                | 10              | 1/14/2004 4:18:00 AM  |
| Surr: Dichloroacetic acid (surr)    | 100    | 80-120        |      | %REC                | 100             | 1/22/2004 7:09:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 382    | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Total (As CaCO3)        | 382    | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 1/16/2004             |

Qualifiers: ND - Not Detected at the Reporting Limit  
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S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-05

**Client Sample ID:** MW-54A  
**Collection Date:** 1/12/2004 11:40:00 AM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 1/14/2004 5:08:05 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | 0.0227  | 0.0100       |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Arsenic                               | 0.00707 | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Barium                                | 0.0182  | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 1/22/2004 10:48:00 PM |
| Boron                                 | 0.305   | 0.0200       |      | mg/L  | 1               | 1/22/2004 10:48:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Calcium                               | 331     | 25.0         |      | mg/L  | 50              | 1/23/2004 3:47:00 PM  |
| Chromium                              | 0.00333 | 0.00200      |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Cobalt                                | 0.00319 | 0.00200      |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Copper                                | 0.695   | 0.0100       |      | mg/L  | 5               | 1/26/2004 2:33:00 PM  |
| Iron                                  | 2.35    | 0.200        |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Magnesium                             | 110     | 10.0         |      | mg/L  | 50              | 1/23/2004 3:47:00 PM  |
| Manganese                             | 0.417   | 0.0250       |      | mg/L  | 5               | 1/23/2004 4:37:00 PM  |
| Nickel                                | 0.0101  | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Potassium                             | 0.223   | 0.200        |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Sodium                                | 46.7    | 1.00         |      | mg/L  | 5               | 1/23/2004 4:37:00 PM  |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:40:00 AM  |
| Zinc                                  | 0.446   | 0.0250       |      | mg/L  | 5               | 1/23/2004 4:37:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |
| Aniline                               | ND      | 10           |      | µg/L  | 1               | 1/22/2004 2:44:00 AM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab, Inc.**

Date: January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-05

**Client Sample ID:** MW-54A  
**Collection Date:** 1/12/2004 11:40:00 AM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed         |
|----------------------------|--------|---------------|------|-------|--------------------|-----------------------|
| Anthracene                 | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| Benz(a)anthracene          | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| Benzidine                  | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| Hexachloroethane           | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| Isophorone                 | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| Naphthalene                | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| Nitrobenzene               | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| Pentachlorophenol          | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| Phenanthrene               | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| Phenol                     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| Pyrene                     | ND     | 10            |      | µg/L  | 1                  | 1/22/2004 2:44:00 AM  |
| Surr: 2,4,6-Tribromophenol | 107    | 39-153        |      | %REC  | 1                  | 1/22/2004 2:44:00 AM  |
| Surr: 2-Fluorobiphenyl     | 99.5   | 40-147        |      | %REC  | 1                  | 1/22/2004 2:44:00 AM  |
| Surr: 2-Fluorophenol       | 34.6   | 21-100        |      | %REC  | 1                  | 1/22/2004 2:44:00 AM  |
| Surr: 4-Terphenyl-d14      | 99.6   | 39-141        |      | %REC  | 1                  | 1/22/2004 2:44:00 AM  |
| Surr: Nitrobenzene-d5      | 97.5   | 37-140        |      | %REC  | 1                  | 1/22/2004 2:44:00 AM  |
| Surr: Phenol-d6            | 22.5   | 11-100        |      | %REC  | 1                  | 1/22/2004 2:44:00 AM  |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | <b>Analyst: PC</b> |                       |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| Acetone                    | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| Benzene                    | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |
| Chlorobenzene              | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 12:45:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab, Inc.**

Date: January 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL  
Lab ID: 0401088-05

Client Sample ID: MW-54A  
Collection Date: 1/12/2004 11:40:00 AM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 1/14/2004 12:45:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 98.9   | 70-130        |      | %REC                | 1               | 1/14/2004 12:45:00 PM |
| Surr: 4-Bromofluorobenzene          | 93.6   | 70-130        |      | %REC                | 1               | 1/14/2004 12:45:00 PM |
| Surr: Dibromofluoromethane          | 97.7   | 70-130        |      | %REC                | 1               | 1/14/2004 12:45:00 PM |
| Surr: Toluene-d8                    | 88.0   | 70-130        |      | %REC                | 1               | 1/14/2004 12:45:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                       |
| Chloride                            | 170    | 5.00          |      | mg/L                | 10              | 1/14/2004 5:23:00 AM  |
| Fluoride                            | 1.10   | 0.100         |      | mg/L                | 1               | 1/13/2004 9:15:00 PM  |
| Sulfate                             | 624    | 20.0          |      | mg/L                | 20              | 1/22/2004 8:46:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 1/13/2004 9:15:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 98.0   | 80-120        |      | %REC                | 1               | 1/13/2004 9:15:00 PM  |
| Surr: Dichloroacetic acid (surr)    | 116    | 80-120        |      | %REC                | 10              | 1/14/2004 5:23:00 AM  |
| Surr: Dichloroacetic acid (surr)    | 100    | 80-120        |      | %REC                | 20              | 1/22/2004 8:46:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 461    | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Total (As CaCO3)        | 461    | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 1/16/2004             |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-06

**Client Sample ID:** MW-59  
**Collection Date:** 1/12/2004 1:15:00 PM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit  | Qual | Units | Dilution Factor      | Date Analyzed         |
|---------------------------------------|---------|---------------|------|-------|----------------------|-----------------------|
| <hr/>                                 |         |               |      |       |                      |                       |
| <b>MERCURY, TOTAL</b>                 |         | <b>SW7470</b> |      |       | Prep Date: 1/13/2004 | Analyst: JCJ          |
| Mercury                               | ND      | 0.000200      |      | mg/L  | 1                    | 1/14/2004 5:12:42 PM  |
| <hr/>                                 |         |               |      |       |                      |                       |
| <b>ICP METALS, TOTAL</b>              |         | <b>SW6020</b> |      |       | Prep Date: 1/19/2004 | Analyst: ALR          |
| Aluminum                              | 0.102   | 0.0100        |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Arsenic                               | 0.0684  | 0.00500       |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Barium                                | 0.0120  | 0.00500       |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Beryllium                             | ND      | 0.00200       |      | mg/L  | 1                    | 1/22/2004 10:53:00 PM |
| Boron                                 | 0.490   | 0.0200        |      | mg/L  | 1                    | 1/22/2004 10:53:00 PM |
| Cadmium                               | ND      | 0.00100       |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Calcium                               | 347     | 25.0          |      | mg/L  | 50                   | 1/23/2004 3:51:00 PM  |
| Chromium                              | 0.00267 | 0.00200       |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Cobalt                                | 0.00858 | 0.00200       |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Copper                                | 0.793   | 0.0100        |      | mg/L  | 5                    | 1/26/2004 2:38:00 PM  |
| Iron                                  | 4.81    | 0.200         |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Lead                                  | ND      | 0.00500       |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Magnesium                             | 294     | 10.0          |      | mg/L  | 50                   | 1/23/2004 3:51:00 PM  |
| Manganese                             | 0.688   | 0.0250        |      | mg/L  | 5                    | 1/23/2004 4:41:00 PM  |
| Nickel                                | 0.0137  | 0.00500       |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Potassium                             | 0.374   | 0.200         |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Selenium                              | ND      | 0.00500       |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Silver                                | ND      | 0.00500       |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Sodium                                | 224     | 10.0          |      | mg/L  | 50                   | 1/23/2004 3:51:00 PM  |
| Vanadium                              | ND      | 0.00500       |      | mg/L  | 1                    | 1/22/2004 1:45:00 AM  |
| Zinc                                  | 0.386   | 0.0250        |      | mg/L  | 5                    | 1/23/2004 4:41:00 PM  |
| <hr/>                                 |         |               |      |       |                      |                       |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         | <b>SW8270</b> |      |       | Prep Date: 1/14/2004 | Analyst: HV           |
| 1,2,4-Trichlorobenzene                | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| 2,4,5-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| 2,4,6-Trichlorophenol                 | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| 2-Methylnaphthalene                   | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| 2-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| 2-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| 2-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| 3-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| 4-Methylphenol                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| 4-Nitroaniline                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| 4-Nitrophenol                         | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| Acenaphthene                          | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| Acenaphthylene                        | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |
| Aniline                               | ND      | 10            |      | µg/L  | 1                    | 1/22/2004 3:12:00 AM  |

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\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL  
Lab ID: 0401088-06

Client Sample ID: MW-59  
Collection Date: 1/12/2004 1:15:00 PM  
Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units              | Dilution Factor | Date Analyzed        |
|----------------------------|--------|---------------|------|--------------------|-----------------|----------------------|
| Anthracene                 | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| Benz(a)anthracene          | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| Benzidine                  | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| Hexachloroethane           | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| Isophorone                 | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| Naphthalene                | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| Nitrobenzene               | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| Pentachlorophenol          | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| Phenanthrene               | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| Phenol                     | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| Pyrene                     | ND     | 10            |      | µg/L               | 1               | 1/22/2004 3:12:00 AM |
| Surr: 2,4,6-Tribromophenol | 108    | 39-153        |      | %REC               | 1               | 1/22/2004 3:12:00 AM |
| Surr: 2-Fluorobiphenyl     | 97.7   | 40-147        |      | %REC               | 1               | 1/22/2004 3:12:00 AM |
| Surr: 2-Fluorophenol       | 34.5   | 21-100        |      | %REC               | 1               | 1/22/2004 3:12:00 AM |
| Surr: 4-Terphenyl-d14      | 97.5   | 39-141        |      | %REC               | 1               | 1/22/2004 3:12:00 AM |
| Surr: Nitrobenzene-d5      | 90.0   | 37-140        |      | %REC               | 1               | 1/22/2004 3:12:00 AM |
| Surr: Phenol-d6            | 19.0   | 11-100        |      | %REC               | 1               | 1/22/2004 3:12:00 AM |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      | <b>Analyst: PC</b> |                 |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| Acetone                    | ND     | 10            |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| Benzene                    | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |
| Chlorobenzene              | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 1:11:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
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P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab, Inc.**

Date: January 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL  
Lab ID: 0401088-06

Client Sample ID: MW-59  
Collection Date: 1/12/2004 1:15:00 PM  
Matrix: WATER

| Analyses                            | Result | Report Limit  | Qual                | Units | Dilution Factor | Date Analyzed        |
|-------------------------------------|--------|---------------|---------------------|-------|-----------------|----------------------|
| Chloroethane                        | ND     | 5.0           |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Chloroform                          | ND     | 5.0           |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Chloromethane                       | ND     | 5.0           |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| cis-1,3-Dichloropropene             | ND     | 5.0           |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Dibromochloromethane                | ND     | 5.0           |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Ethylbenzene                        | ND     | 5.0           |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| m,p-Xylene                          | ND     | 10            |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Methylene chloride                  | ND     | 10            |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Styrene                             | ND     | 5.0           |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Tetrachloroethene                   | ND     | 5.0           |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Toluene                             | ND     | 5.0           |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| trans-1,3-Dichloropropene           | ND     | 5.0           |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Trichloroethene                     | ND     | 5.0           |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Vinyl acetate                       | ND     | 10            |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Vinyl chloride                      | ND     | 2.0           |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Xylenes, Total                      | ND     | 15            |                     | µg/L  | 1               | 1/14/2004 1:11:00 PM |
| Surr: 1,2-Dichloroethane-d4         | 97.9   | 70-130        |                     | %REC  | 1               | 1/14/2004 1:11:00 PM |
| Surr: 4-Bromofluorobenzene          | 96.5   | 70-130        |                     | %REC  | 1               | 1/14/2004 1:11:00 PM |
| Surr: Dibromofluoromethane          | 96.5   | 70-130        |                     | %REC  | 1               | 1/14/2004 1:11:00 PM |
| Surr: Toluene-d8                    | 86.9   | 70-130        |                     | %REC  | 1               | 1/14/2004 1:11:00 PM |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   | Analyst: <b>MG</b>  |       |                 |                      |
| Chloride                            | 204    | 5.00          |                     | mg/L  | 10              | 1/14/2004 7:33:00 AM |
| Fluoride                            | 1.51   | 0.100         |                     | mg/L  | 1               | 1/13/2004 9:47:00 PM |
| Sulfate                             | 1,630  | 100           |                     | mg/L  | 100             | 1/22/2004 9:19:00 AM |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |                     | mg/L  | 1               | 1/13/2004 9:47:00 PM |
| Surr: Dichloroacetic acid (surr)    | 102    | 80-120        |                     | %REC  | 1               | 1/13/2004 9:47:00 PM |
| Surr: Dichloroacetic acid (surr)    | 116    | 80-120        |                     | %REC  | 10              | 1/14/2004 7:33:00 AM |
| Surr: Dichloroacetic acid (surr)    | 97.4   | 80-120        |                     | %REC  | 100             | 1/22/2004 9:19:00 AM |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> | Analyst: <b>LMD</b> |       |                 |                      |
| Alkalinity, Bicarbonate (As CaCO3)  | 530    | 5.00          |                     | mg/L  | 1               | 1/14/2004            |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |                     | mg/L  | 1               | 1/14/2004            |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |                     | mg/L  | 1               | 1/14/2004            |
| Alkalinity, Total (As CaCO3)        | 530    | 5.00          |                     | mg/L  | 1               | 1/14/2004            |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> | Analyst: <b>LMD</b> |       |                 |                      |
| Cyanide                             | ND     | 0.0200        |                     | mg/L  | 1               | 1/16/2004            |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL  
Lab ID: 0401088-07

Client Sample ID: NCL-44  
Collection Date: 1/12/2004 1:45:00 PM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 1/14/2004 5:14:16 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | 0.0111  | 0.0100       |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Arsenic                               | 0.0132  | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Barium                                | 0.0314  | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Beryllium                             | 0.00233 | 0.00200      |      | mg/L  | 1               | 1/22/2004 10:57:00 PM |
| Boron                                 | 0.327   | 0.0200       |      | mg/L  | 1               | 1/22/2004 10:57:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Calcium                               | 301     | 25.0         |      | mg/L  | 50              | 1/23/2004 3:56:00 PM  |
| Chromium                              | 0.00622 | 0.00200      |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Cobalt                                | 0.00471 | 0.00200      |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Copper                                | 0.328   | 0.0100       |      | mg/L  | 5               | 1/26/2004 2:42:00 PM  |
| Iron                                  | 3.30    | 0.200        |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Magnesium                             | 124     | 10.0         |      | mg/L  | 50              | 1/23/2004 3:56:00 PM  |
| Manganese                             | 0.719   | 0.0500       |      | mg/L  | 10              | 1/23/2004 4:46:00 PM  |
| Nickel                                | 0.00953 | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Potassium                             | 2.69    | 0.200        |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Sodium                                | ND      | 0.200        |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:49:00 AM  |
| Zinc                                  | 1.24    | 0.0500       |      | mg/L  | 10              | 1/23/2004 4:46:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Aniline                               | ND      | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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## e-Lab, Inc.

Date: January 28, 2004

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL  
 Lab ID: 0401088-07

Client Sample ID: NCL-44  
 Collection Date: 1/12/2004 1:45:00 PM  
 Matrix: WATER

| Analyses                   | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|----------------------------|--------|--------------|------|-------|-----------------|-----------------------|
| Anthracene                 | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Benz(a)anthracene          | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Benzidine                  | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Hexachloroethane           | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Isophorone                 | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| N-Nitrosodi-n-propylamine  | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| N-Nitrosodimethylamine     | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| N-Nitrosodiphenylamine     | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Naphthalene                | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Nitrobenzene               | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Pentachlorophenol          | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Phenanthrene               | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Phenol                     | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Pyrene                     | ND     | 10           |      | µg/L  | 1               | 1/27/2004 12:47:00 AM |
| Surr: 2,4,6-Tribromophenol | 108    | 39-153       |      | %REC  | 1               | 1/27/2004 12:47:00 AM |
| Surr: 2-Fluorobiphenyl     | 93.7   | 40-147       |      | %REC  | 1               | 1/27/2004 12:47:00 AM |
| Surr: 2-Fluorophenol       | 38.0   | 21-100       |      | %REC  | 1               | 1/27/2004 12:47:00 AM |
| Surr: 4-Terphenyl-d14      | 90.8   | 39-141       |      | %REC  | 1               | 1/27/2004 12:47:00 AM |
| Surr: Nitrobenzene-d5      | 88.1   | 37-140       |      | %REC  | 1               | 1/27/2004 12:47:00 AM |
| Surr: Phenol-d6            | 24.4   | 11-100       |      | %REC  | 1               | 1/27/2004 12:47:00 AM |

## VOLATILES BY GC/MS

SW8260

Analyst: PC

|                           |    |     |  |      |   |                      |
|---------------------------|----|-----|--|------|---|----------------------|
| 1,1,1-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| 1,1,2-Trichloroethane     | ND | 5.0 |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| 1,1-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| 1,1-Dichloroethene        | ND | 5.0 |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| 1,2-Dichloroethane        | ND | 5.0 |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| 2-Butanone                | ND | 10  |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| 2-Chloroethyl vinyl ether | ND | 10  |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| 2-Hexanone                | ND | 10  |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| 4-Methyl-2-pentanone      | ND | 10  |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| Acetone                   | ND | 10  |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| Benzene                   | ND | 5.0 |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| Bromodichloromethane      | ND | 5.0 |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| Bromoform                 | ND | 5.0 |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| Bromomethane              | ND | 5.0 |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| Carbon disulfide          | ND | 10  |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| Carbon tetrachloride      | ND | 5.0 |  | µg/L | 1 | 1/14/2004 2:32:00 PM |
| Chlorobenzene             | ND | 5.0 |  | µg/L | 1 | 1/14/2004 2:32:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

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**e-Lab, Inc.**

Date: January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-07

**Client Sample ID:** NCL-44  
**Collection Date:** 1/12/2004 1:45:00 PM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 1/14/2004 2:32:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 85.2   | 70-130        |      | %REC                | 1               | 1/14/2004 2:32:00 PM  |
| Surr: 4-Bromofluorobenzene          | 95.6   | 70-130        |      | %REC                | 1               | 1/14/2004 2:32:00 PM  |
| Surr: Dibromofluoromethane          | 86.9   | 70-130        |      | %REC                | 1               | 1/14/2004 2:32:00 PM  |
| Surr: Toluene-d8                    | 87.5   | 70-130        |      | %REC                | 1               | 1/14/2004 2:32:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                       |
| Chloride                            | 210    | 5.00          |      | mg/L                | 10              | 1/14/2004 8:38:00 AM  |
| Fluoride                            | 1.41   | 0.100         |      | mg/L                | 1               | 1/13/2004 10:20:00 PM |
| Sulfate                             | 458    | 10.0          |      | mg/L                | 10              | 1/14/2004 8:38:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 1/13/2004 10:20:00 PM |
| Surr: Dichloroacetic acid (surr)    | 114    | 80-120        |      | %REC                | 1               | 1/13/2004 10:20:00 PM |
| Surr: Dichloroacetic acid (surr)    | 115    | 80-120        |      | %REC                | 10              | 1/14/2004 8:38:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 520    | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Total (As CaCO3)        | 520    | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 1/16/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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\* - Value exceeds Maximum Contaminant Level

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P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time



**e-Lab, Inc.**

Date: January 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL  
Lab ID: 0401088-08

Client Sample ID: NCL-33  
Collection Date: 1/12/2004 2:00:00 PM  
Matrix: WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 1/14/2004 5:15:49 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | 0.0447  | 0.0100       |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Barium                                | 0.0470  | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Beryllium                             | ND      | 0.00200      |      | mg/L  | 1               | 1/22/2004 11:02:00 PM |
| Boron                                 | 0.631   | 0.0200       |      | mg/L  | 1               | 1/22/2004 11:02:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Calcium                               | 303     | 10.0         |      | mg/L  | 20              | 1/23/2004 4:00:00 PM  |
| Chromium                              | 0.00380 | 0.00200      |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Copper                                | 1.42    | 0.0200       |      | mg/L  | 10              | 1/26/2004 2:47:00 PM  |
| Iron                                  | 4.34    | 0.200        |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Magnesium                             | 110     | 4.00         |      | mg/L  | 20              | 1/23/2004 4:00:00 PM  |
| Manganese                             | 0.0867  | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Nickel                                | 0.00708 | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Potassium                             | 4.46    | 0.200        |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Selenium                              | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Sodium                                | 90.4    | 4.00         |      | mg/L  | 20              | 1/23/2004 4:00:00 PM  |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:54:00 AM  |
| Zinc                                  | 0.517   | 0.0500       |      | mg/L  | 10              | 1/23/2004 4:50:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |
| Aniline                               | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:12:00 AM  |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

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**e-Lab, Inc.**

Date: January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-08

**Client Sample ID:** NCL-33  
**Collection Date:** 1/12/2004 2:00:00 PM  
**Matrix:** WATER

| Analyses                   | Result | Report Limit  | Qual | Units | Dilution Factor    | Date Analyzed        |
|----------------------------|--------|---------------|------|-------|--------------------|----------------------|
| Anthracene                 | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| Benz(a)anthracene          | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| Benzidine                  | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| Hexachloroethane           | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| Isophorone                 | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| Naphthalene                | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| Nitrobenzene               | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| Pentachlorophenol          | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| Phenanthrene               | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| Phenol                     | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| Pyrene                     | ND     | 10            |      | µg/L  | 1                  | 1/27/2004 1:12:00 AM |
| Surr: 2,4,6-Tribromophenol | 109    | 39-153        |      | %REC  | 1                  | 1/27/2004 1:12:00 AM |
| Surr: 2-Fluorobiphenyl     | 94.2   | 40-147        |      | %REC  | 1                  | 1/27/2004 1:12:00 AM |
| Surr: 2-Fluorophenol       | 36.7   | 21-100        |      | %REC  | 1                  | 1/27/2004 1:12:00 AM |
| Surr: 4-Terphenyl-d14      | 89.7   | 39-141        |      | %REC  | 1                  | 1/27/2004 1:12:00 AM |
| Surr: Nitrobenzene-d5      | 90.4   | 37-140        |      | %REC  | 1                  | 1/27/2004 1:12:00 AM |
| Surr: Phenol-d6            | 24.2   | 11-100        |      | %REC  | 1                  | 1/27/2004 1:12:00 AM |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      |       | <b>Analyst: PC</b> |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| Acetone                    | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| Benzene                    | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |
| Chlorobenzene              | ND     | 5.0           |      | µg/L  | 1                  | 1/14/2004 2:59:00 PM |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-08

**Client Sample ID:** NCL-33  
**Collection Date:** 1/12/2004 2:00:00 PM  
**Matrix:** WATER

| Analyses                            | Result | Report Limit  | Qual | Units               | Dilution Factor | Date Analyzed         |
|-------------------------------------|--------|---------------|------|---------------------|-----------------|-----------------------|
| Chloroethane                        | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Chloroform                          | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Chloromethane                       | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| cis-1,3-Dichloropropene             | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Dibromochloromethane                | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Ethylbenzene                        | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| m,p-Xylene                          | ND     | 10            |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Methylene chloride                  | ND     | 10            |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Styrene                             | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Tetrachloroethene                   | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Toluene                             | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| trans-1,3-Dichloropropene           | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Trichloroethene                     | ND     | 5.0           |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Vinyl acetate                       | ND     | 10            |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Vinyl chloride                      | ND     | 2.0           |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Xylenes, Total                      | ND     | 15            |      | µg/L                | 1               | 1/14/2004 2:59:00 PM  |
| Surr: 1,2-Dichloroethane-d4         | 85.5   | 70-130        |      | %REC                | 1               | 1/14/2004 2:59:00 PM  |
| Surr: 4-Bromofluorobenzene          | 97.4   | 70-130        |      | %REC                | 1               | 1/14/2004 2:59:00 PM  |
| Surr: Dibromofluoromethane          | 85.6   | 70-130        |      | %REC                | 1               | 1/14/2004 2:59:00 PM  |
| Surr: Toluene-d8                    | 91.2   | 70-130        |      | %REC                | 1               | 1/14/2004 2:59:00 PM  |
| <b>ANIONS BY ION CHROMATOGRAPHY</b> |        | <b>E300</b>   |      | Analyst: <b>MG</b>  |                 |                       |
| Chloride                            | 302    | 5.00          |      | mg/L                | 10              | 1/22/2004 9:51:00 AM  |
| Fluoride                            | 2.77   | 0.100         |      | mg/L                | 1               | 1/13/2004 10:53:00 PM |
| Sulfate                             | 307    | 10.0          |      | mg/L                | 10              | 1/22/2004 9:51:00 AM  |
| Nitrate/Nitrite (as N)              | ND     | 0.100         |      | mg/L                | 1               | 1/13/2004 10:53:00 PM |
| Surr: Dichloroacetic acid (surr)    | 95.2   | 80-120        |      | %REC                | 1               | 1/13/2004 10:53:00 PM |
| Surr: Dichloroacetic acid (surr)    | 99.0   | 80-120        |      | %REC                | 10              | 1/22/2004 9:51:00 AM  |
| <b>ALKALINITY</b>                   |        | <b>E310.1</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Alkalinity, Bicarbonate (As CaCO3)  | 628    | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Carbonate (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Hydroxide (As CaCO3)    | ND     | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| Alkalinity, Total (As CaCO3)        | 628    | 5.00          |      | mg/L                | 1               | 1/14/2004             |
| <b>CYANIDE, TOTAL</b>               |        | <b>E335.3</b> |      | Analyst: <b>LMD</b> |                 |                       |
| Cyanide                             | ND     | 0.0200        |      | mg/L                | 1               | 1/16/2004             |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-09

**Client Sample ID:** NCL-34  
**Collection Date:** 1/12/2004 3:30:00 PM  
**Matrix:** WATER

| Analyses                              | Result  | Report Limit | Qual | Units | Dilution Factor | Date Analyzed         |
|---------------------------------------|---------|--------------|------|-------|-----------------|-----------------------|
| <b>MERCURY, TOTAL</b>                 |         |              |      |       |                 |                       |
| Mercury                               | ND      | 0.000200     |      | mg/L  | 1               | 1/14/2004 5:17:23 PM  |
| <b>ICP METALS, TOTAL</b>              |         |              |      |       |                 |                       |
| Aluminum                              | ND      | 0.0100       |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Arsenic                               | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Barium                                | 0.520   | 0.0250       |      | mg/L  | 5               | 1/23/2004 4:55:00 PM  |
| Beryllium                             | 0.00359 | 0.00200      |      | mg/L  | 1               | 1/22/2004 11:07:00 PM |
| Boron                                 | 0.316   | 0.0200       |      | mg/L  | 1               | 1/22/2004 11:07:00 PM |
| Cadmium                               | ND      | 0.00100      |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Calcium                               | 273     | 25.0         |      | mg/L  | 50              | 1/23/2004 4:05:00 PM  |
| Chromium                              | 0.00382 | 0.00200      |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Cobalt                                | ND      | 0.00200      |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Copper                                | 0.538   | 0.0100       |      | mg/L  | 5               | 1/26/2004 2:52:00 PM  |
| Iron                                  | 1.98    | 0.200        |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Lead                                  | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Magnesium                             | 93.2    | 1.00         |      | mg/L  | 5               | 1/23/2004 4:55:00 PM  |
| Manganese                             | 0.108   | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Nickel                                | 0.00669 | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Potassium                             | 1.16    | 0.200        |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Selenium                              | 0.00519 | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Silver                                | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Sodium                                | 149     | 10.0         |      | mg/L  | 50              | 1/23/2004 4:05:00 PM  |
| Vanadium                              | ND      | 0.00500      |      | mg/L  | 1               | 1/22/2004 1:59:00 AM  |
| Zinc                                  | 0.408   | 0.0250       |      | mg/L  | 5               | 1/23/2004 4:55:00 PM  |
| <b>SEMIVOLATILE ORGANICS BY GC/MS</b> |         |              |      |       |                 |                       |
| 1,2,4-Trichlorobenzene                | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| 2,4,5-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| 2,4,6-Trichlorophenol                 | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| 2-Methylnaphthalene                   | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| 2-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| 2-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| 2-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| 3-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| 4-Methylphenol                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| 4-Nitroaniline                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| 4-Nitrophenol                         | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| Acenaphthene                          | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| Acenaphthylene                        | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |
| Aniline                               | ND      | 10           |      | µg/L  | 1               | 1/27/2004 1:37:00 AM  |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL  
Lab ID: 0401088-09

Client Sample ID: NCL-34  
Collection Date: 1/12/2004 3:30:00 PM  
Matrix: WATER

| Analyses                   | Result | Report Limit  | Qual | Units              | Dilution Factor | Date Analyzed        |
|----------------------------|--------|---------------|------|--------------------|-----------------|----------------------|
| Anthracene                 | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| Benz(a)anthracene          | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| Benzidine                  | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| Hexachloroethane           | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| Indeno(1,2,3-cd)pyrene     | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| Isophorone                 | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| N-Nitrosodi-n-propylamine  | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| N-Nitrosodimethylamine     | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| N-Nitrosodiphenylamine     | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| Naphthalene                | 18     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| Nitrobenzene               | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| Pentachlorophenol          | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| Phenanthrene               | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| Phenol                     | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| Pyrene                     | ND     | 10            |      | µg/L               | 1               | 1/27/2004 1:37:00 AM |
| Surr: 2,4,6-Tribromophenol | 108    | 39-153        |      | %REC               | 1               | 1/27/2004 1:37:00 AM |
| Surr: 2-Fluorobiphenyl     | 70.9   | 40-147        |      | %REC               | 1               | 1/27/2004 1:37:00 AM |
| Surr: 2-Fluorophenol       | 37.4   | 21-100        |      | %REC               | 1               | 1/27/2004 1:37:00 AM |
| Surr: 4-Terphenyl-d14      | 82.8   | 39-141        |      | %REC               | 1               | 1/27/2004 1:37:00 AM |
| Surr: Nitrobenzene-d5      | 93.4   | 37-140        |      | %REC               | 1               | 1/27/2004 1:37:00 AM |
| Surr: Phenol-d6            | 23.8   | 11-100        |      | %REC               | 1               | 1/27/2004 1:37:00 AM |
| <b>VOLATILES BY GC/MS</b>  |        | <b>SW8260</b> |      | <b>Analyst: PC</b> |                 |                      |
| 1,1,1-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| 1,1,2,2-Tetrachloroethane  | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| 1,1,2-Trichloroethane      | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| 1,1-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| 1,1-Dichloroethene         | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| 1,2-Dichloroethane         | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| 2-Butanone                 | ND     | 10            |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| 2-Chloroethyl vinyl ether  | ND     | 10            |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| 2-Hexanone                 | ND     | 10            |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| 4-Methyl-2-pentanone       | ND     | 10            |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| Acetone                    | ND     | 10            |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| Benzene                    | 4,200  | 250           |      | µg/L               | 50              | 1/14/2004 9:48:00 PM |
| Bromodichloromethane       | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| Bromoform                  | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| Bromomethane               | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| Carbon disulfide           | ND     | 10            |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| Carbon tetrachloride       | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |
| Chlorobenzene              | ND     | 5.0           |      | µg/L               | 1               | 1/14/2004 3:26:00 PM |

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

Date: January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-09

**Client Sample ID:** NCL-34  
**Collection Date:** 1/12/2004 3:30:00 PM  
**Matrix:** WATER

| Analyses                    | Result | Report Limit | Qual | Units | Dilution Factor | Date Analyzed        |
|-----------------------------|--------|--------------|------|-------|-----------------|----------------------|
| Chloroethane                | ND     | 5.0          |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Chloroform                  | ND     | 5.0          |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Chloromethane               | ND     | 5.0          |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| cis-1,3-Dichloropropene     | ND     | 5.0          |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Dibromochloromethane        | ND     | 5.0          |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Ethylbenzene                | 280    | 25           |      | µg/L  | 5               | 1/14/2004 9:21:00 PM |
| m,p-Xylene                  | 240    | 10           |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Methylene chloride          | ND     | 10           |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Styrene                     | ND     | 5.0          |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Tetrachloroethene           | ND     | 5.0          |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Toluene                     | ND     | 5.0          |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| trans-1,3-Dichloropropene   | ND     | 5.0          |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Trichloroethene             | ND     | 5.0          |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Vinyl acetate               | ND     | 10           |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Vinyl chloride              | ND     | 2.0          |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Xylenes, Total              | 240    | 15           |      | µg/L  | 1               | 1/14/2004 3:26:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 90.4   | 70-130       |      | %REC  | 1               | 1/14/2004 3:26:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 89.8   | 70-130       |      | %REC  | 5               | 1/14/2004 9:21:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 89.0   | 70-130       |      | %REC  | 50              | 1/14/2004 9:48:00 PM |
| Surr: 4-Bromofluorobenzene  | 98.4   | 70-130       |      | %REC  | 1               | 1/14/2004 3:26:00 PM |
| Surr: 4-Bromofluorobenzene  | 93.0   | 70-130       |      | %REC  | 5               | 1/14/2004 9:21:00 PM |
| Surr: 4-Bromofluorobenzene  | 94.2   | 70-130       |      | %REC  | 50              | 1/14/2004 9:48:00 PM |
| Surr: Dibromofluoromethane  | 89.9   | 70-130       |      | %REC  | 1               | 1/14/2004 3:26:00 PM |
| Surr: Dibromofluoromethane  | 91.2   | 70-130       |      | %REC  | 5               | 1/14/2004 9:21:00 PM |
| Surr: Dibromofluoromethane  | 91.1   | 70-130       |      | %REC  | 50              | 1/14/2004 9:48:00 PM |
| Surr: Toluene-d8            | 91.6   | 70-130       |      | %REC  | 1               | 1/14/2004 3:26:00 PM |
| Surr: Toluene-d8            | 95.4   | 70-130       |      | %REC  | 5               | 1/14/2004 9:21:00 PM |
| Surr: Toluene-d8            | 96.5   | 70-130       |      | %REC  | 50              | 1/14/2004 9:48:00 PM |

**ANIONS BY ION CHROMATOGRAPHY****E300**Analyst: **MG**

|                                  |      |        |      |    |                       |
|----------------------------------|------|--------|------|----|-----------------------|
| Chloride                         | 369  | 5.00   | mg/L | 10 | 1/22/2004 10:56:00 AM |
| Fluoride                         | 1.32 | 0.100  | mg/L | 1  | 1/13/2004 11:25:00 PM |
| Sulfate                          | 178  | 10.0   | mg/L | 10 | 1/22/2004 10:56:00 AM |
| Nitrate/Nitrite (as N)           | ND   | 0.100  | mg/L | 1  | 1/13/2004 11:25:00 PM |
| Surr: Dichloroacetic acid (surr) | 114  | 80-120 | %REC | 1  | 1/13/2004 11:25:00 PM |
| Surr: Dichloroacetic acid (surr) | 99.4 | 80-120 | %REC | 10 | 1/22/2004 10:56:00 AM |

**ALKALINITY****E310.1**Analyst: **LMD**

|                                    |     |      |      |   |           |
|------------------------------------|-----|------|------|---|-----------|
| Alkalinity, Bicarbonate (As CaCO3) | 618 | 5.00 | mg/L | 1 | 1/14/2004 |
| Alkalinity, Carbonate (As CaCO3)   | ND  | 5.00 | mg/L | 1 | 1/14/2004 |
| Alkalinity, Hydroxide (As CaCO3)   | ND  | 5.00 | mg/L | 1 | 1/14/2004 |
| Alkalinity, Total (As CaCO3)       | 618 | 5.00 | mg/L | 1 | 1/14/2004 |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

**e-Lab, Inc.**

**Date:** January 28, 2004

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL  
**Lab ID:** 0401088-09

**Client Sample ID:** NCL-34  
**Collection Date:** 1/12/2004 3:30:00 PM  
**Matrix:** WATER

| Analyses              | Result | Report<br>Limit | Qual          | Units | Dilution<br>Factor | Date Analyzed       |
|-----------------------|--------|-----------------|---------------|-------|--------------------|---------------------|
| <b>CYANIDE, TOTAL</b> |        |                 | <b>E335.3</b> |       |                    | Analyst: <b>LMD</b> |
| Cyanide               | ND     | 0.0200          |               | mg/L  | 1                  | 1/16/2004           |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
P - Dual Column results percent difference > 40%  
E - Value above quantitation range  
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: Jan 28 2004

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7710 InstrumentID: Mercury

MBLK Sample ID: GBLKW5-011304 Test Code: SW7470 Units: mg/L Analysis Date: 01/14/04 16:33  
 Client ID: Run ID: MERCURY\_040114D SeqNo: 416950 Prep Date: 1/13/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 |         |               |      |               |               |      |           |      |

LCS Sample ID: GLCSW5-011304 Test Code: SW7470 Units: mg/L Analysis Date: 01/14/04 16:34  
 Client ID: Run ID: MERCURY\_040114D SeqNo: 416951 Prep Date: 1/13/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00487 | 0.00020 | 0.005   | 0             | 97.4 | 83-115        | 0             |      |           |      |

LCSD Sample ID: GLCSDW5-011304 Test Code: SW7470 Units: mg/L Analysis Date: 01/14/04 16:36  
 Client ID: Run ID: MERCURY\_040114D SeqNo: 416952 Prep Date: 1/13/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00496 | 0.00020 | 0.005   | 0             | 99.2 | 83-115        | 0.00487       | 1.83 | 20        |      |

MS Sample ID: 0401037-01CMS Test Code: SW7470 Units: mg/L Analysis Date: 01/14/04 16:41  
 Client ID: Run ID: MERCURY\_040114D SeqNo: 416955 Prep Date: 1/13/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00507 | 0.00020 | 0.005   | 0.000045      | 100  | 70-124        | 0             |      |           |      |

MSD Sample ID: 0401037-01CMSD Test Code: SW7470 Units: mg/L Analysis Date: 01/14/04 16:42  
 Client ID: Run ID: MERCURY\_040114D SeqNo: 416956 Prep Date: 1/13/2004 DF: 1

| Analyte | Result  | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | 0.00495 | 0.00020 | 0.005   | 0.000045      | 98.1 | 70-124        | 0.00507       | 2.4  | 20        |      |

DUP Sample ID: 0401037-01CDUP Test Code: SW7470 Units: mg/L Analysis Date: 01/14/04 16:39  
 Client ID: Run ID: MERCURY\_040114D SeqNo: 416954 Prep Date: 1/13/2004 DF: 1

| Analyte | Result | PQL     | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|---------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Mercury | ND     | 0.00020 | 0       | 0             | 0    | 0-0           | 0.000045      | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0401088-01C | 0401088-02C | 0401088-03C |
| 0401088-04C | 0401088-05C | 0401088-06C |
| 0401088-07C | 0401088-08C | 0401088-09C |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is &gt; 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference &gt; 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

QC Page: 1 of 30



CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7756 InstrumentID: ICP4500

MBLK Sample ID: MBLKW3-011904 Test Code: SW6020 Units: mg/L Analysis Date: 01/21/04 23:14

Client ID: Run ID: ICP4500\_040121A SeqNo: 419658 Prep Date: 1/19/2004 DF: 1

| Analyte   | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|-----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | ND        | 0.010  |         |               |      |               |               |      |           |      |
| Arsenic   | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Barium    | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Cadmium   | ND        | 0.0010 |         |               |      |               |               |      |           |      |
| Calcium   | ND        | 0.50   |         |               |      |               |               |      |           |      |
| Chromium  | ND        | 0.0020 |         |               |      |               |               |      |           |      |
| Cobalt    | ND        | 0.0020 |         |               |      |               |               |      |           |      |
| Copper    | 0.0003929 | 0.0020 |         |               |      |               |               |      |           | J    |
| Iron      | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Lead      | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Magnesium | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Manganese | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Nickel    | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Potassium | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Selenium  | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Silver    | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Sodium    | ND        | 0.20   |         |               |      |               |               |      |           |      |
| Vanadium  | ND        | 0.0050 |         |               |      |               |               |      |           |      |
| Zinc      | ND        | 0.0050 |         |               |      |               |               |      |           |      |

MBLK Sample ID: MBLKW3-011904 Test Code: SW6020 Units: mg/L Analysis Date: 01/22/04 21:35

Client ID: Run ID: ICP4500\_040122A SeqNo: 420025 Prep Date: 1/19/2004 DF: 1

| Analyte   | Result | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | ND     | 0.0020 |         |               |      |               |               |      |           |      |
| Boron     | ND     | 0.020  |         |               |      |               |               |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7756 InstrumentID: ICP4500

LCS Sample ID: MLCSW3-011904 Test Code: SW6020 Units: mg/L Analysis Date: 01/21/04 23:45

Client ID: Run ID: ICP4500\_040121A SeqNo: 419664 Prep Date: 1/19/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 0.05287 | 0.010  | 0.05    | 0             | 106  | 80-120        | 0             |      |           |      |
| Arsenic   | 0.05067 | 0.0050 | 0.05    | 0             | 101  | 80-120        | 0             |      |           |      |
| Barium    | 0.04808 | 0.0050 | 0.05    | 0             | 96.2 | 80-120        | 0             |      |           |      |
| Cadmium   | 0.04981 | 0.0010 | 0.05    | 0             | 99.6 | 80-120        | 0             |      |           |      |
| Calcium   | 5.269   | 0.50   | 5       | 0             | 105  | 80-120        | 0             |      |           |      |
| Chromium  | 0.05048 | 0.0020 | 0.05    | 0             | 101  | 80-120        | 0             |      |           |      |
| Cobalt    | 0.0508  | 0.0020 | 0.05    | 0             | 102  | 80-120        | 0             |      |           |      |
| Copper    | 0.04905 | 0.0020 | 0.05    | 0             | 98.1 | 80-120        | 0             |      |           |      |
| Iron      | 5.354   | 0.20   | 5       | 0             | 107  | 80-120        | 0             |      |           |      |
| Lead      | 0.0481  | 0.0050 | 0.05    | 0             | 96.2 | 80-120        | 0             |      |           |      |
| Magnesium | 5.454   | 0.20   | 5       | 0             | 109  | 80-120        | 0             |      |           |      |
| Manganese | 0.05029 | 0.0050 | 0.05    | 0             | 101  | 80-120        | 0             |      |           |      |
| Nickel    | 0.05197 | 0.0050 | 0.05    | 0             | 104  | 80-120        | 0             |      |           |      |
| Potassium | 5.369   | 0.20   | 5       | 0             | 107  | 80-120        | 0             |      |           |      |
| Selenium  | 0.04698 | 0.0050 | 0.05    | 0             | 94   | 80-120        | 0             |      |           |      |
| Silver    | 0.0494  | 0.0050 | 0.05    | 0             | 98.8 | 80-120        | 0             |      |           |      |
| Sodium    | 5.317   | 0.20   | 5       | 0             | 106  | 80-120        | 0             |      |           |      |
| Vanadium  | 0.04967 | 0.0050 | 0.05    | 0             | 99.3 | 80-120        | 0             |      |           |      |
| Zinc      | 0.05036 | 0.0050 | 0.05    | 0             | 101  | 80-120        | 0             |      |           |      |

LCS Sample ID: MLCSW3-011904 Test Code: SW6020 Units: mg/L Analysis Date: 01/22/04 21:40

Client ID: Run ID: ICP4500\_040122A SeqNo: 420026 Prep Date: 1/19/2004 DF: 1

| Analyte   | Result  | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|---------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | 0.04555 | 0.0020 | 0.05    | 0             | 91.1 | 80-120        | 0             |      |           |      |
| Boron     | 0.5045  | 0.020  | 0.5     | 0             | 101  | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7756 InstrumentID: ICP4500

| MS         |         | Sample ID: 0401092-10BMS |         | Test Code: SW6020 |      | Units: mg/L          |               | Analysis Date: 01/22/04 2:13 |           |      |
|------------|---------|--------------------------|---------|-------------------|------|----------------------|---------------|------------------------------|-----------|------|
| Client ID: |         | Run ID: ICP4500_040121A  |         | SeqNo: 419690     |      | Prep Date: 1/19/2004 |               | DF: 1                        |           |      |
| Analyte    | Result  | PQL                      | SPK Val | SPK Ref Value     | %REC | Control Limit        | RPD Ref Value | %RPD                         | RPD Limit | Qual |
| Aluminum   | 7.945   | 0.010                    | 0.05    | 5.457             | 4980 | 75-125               | 0             |                              |           | SEO  |
| Arsenic    | 0.1244  | 0.0050                   | 0.05    | 0.07855           | 91.7 | 75-125               | 0             |                              |           |      |
| Barium     | 0.342   | 0.0050                   | 0.05    | 0.2921            | 99.8 | 75-125               | 0             |                              |           | O    |
| Cadmium    | 0.0438  | 0.0010                   | 0.05    | 0.0001638         | 87.3 | 75-125               | 0             |                              |           |      |
| Calcium    | 107.6   | 0.50                     | 5       | 106.7             | 18   | 75-125               | 0             |                              |           | SEO  |
| Chromium   | 0.06582 | 0.0020                   | 0.05    | 0.01557           | 100  | 75-125               | 0             |                              |           |      |
| Cobalt     | 0.1054  | 0.0020                   | 0.05    | 0.05934           | 92.1 | 75-125               | 0             |                              |           |      |
| Copper     | 0.06031 | 0.0020                   | 0.05    | 0.01649           | 87.6 | 75-125               | 0             |                              |           |      |
| Iron       | 23.08   | 0.20                     | 5       | 17.25             | 117  | 75-125               | 0             |                              |           |      |
| Lead       | 0.07105 | 0.0050                   | 0.05    | 0.02069           | 101  | 75-125               | 0             |                              |           |      |
| Magnesium  | 53.87   | 0.20                     | 5       | 51.82             | 41   | 75-125               | 0             |                              |           | SEO  |
| Manganese  | 4.487   | 0.0050                   | 0.05    | 4.586             | -198 | 75-125               | 0             |                              |           | SEO  |
| Nickel     | 0.07367 | 0.0050                   | 0.05    | 0.02927           | 88.8 | 75-125               | 0             |                              |           |      |
| Potassium  | 8.656   | 0.20                     | 5       | 3.468             | 104  | 75-125               | 0             |                              |           |      |
| Selenium   | 0.05191 | 0.0050                   | 0.05    | 0.008553          | 86.7 | 75-125               | 0             |                              |           |      |
| Silver     | 0.044   | 0.0050                   | 0.05    | 0.000006642       | 88   | 75-125               | 0             |                              |           |      |
| Sodium     | 20      | 0.20                     | 5       | 0                 | 400  | 75-125               | 0             |                              |           | S    |
| Vanadium   | 0.07031 | 0.0050                   | 0.05    | 0.01866           | 103  | 75-125               | 0             |                              |           |      |
| Zinc       | 0.1012  | 0.0050                   | 0.05    | 0.05987           | 82.7 | 75-125               | 0             |                              |           |      |

| MS         |        | Sample ID: 0401092-10BMS |         | Test Code: SW6020 |      | Units: mg/L          |               | Analysis Date: 01/22/04 23:29 |           |      |
|------------|--------|--------------------------|---------|-------------------|------|----------------------|---------------|-------------------------------|-----------|------|
| Client ID: |        | Run ID: ICP4500_040122A  |         | SeqNo: 420050     |      | Prep Date: 1/19/2004 |               | DF: 1                         |           |      |
| Analyte    | Result | PQL                      | SPK Val | SPK Ref Value     | %REC | Control Limit        | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Boron      | 0.5113 | 0.020                    | 0.5     | 0.03648           | 95   | 75-125               | 0             |                               |           |      |

| MS         |         | Sample ID: 0401092-10BMS |         | Test Code: SW6020 |      | Units: mg/L          |               | Analysis Date: 01/23/04 14:09 |           |      |
|------------|---------|--------------------------|---------|-------------------|------|----------------------|---------------|-------------------------------|-----------|------|
| Client ID: |         | Run ID: ICP4500_040123A  |         | SeqNo: 420091     |      | Prep Date: 1/19/2004 |               | DF: 1                         |           |      |
| Analyte    | Result  | PQL                      | SPK Val | SPK Ref Value     | %REC | Control Limit        | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Beryllium  | 0.05216 | 0.0020                   | 0.05    | 0.006872          | 90.6 | 75-125               | 0             |                               |           |      |

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7756 InstrumentID: ICP4500

| MSD        |         | Sample ID: 0401092-10BMSD |         | Test Code: SW6020 |      | Units: mg/L          |               | Analysis Date: 01/22/04 2:17 |           |      |
|------------|---------|---------------------------|---------|-------------------|------|----------------------|---------------|------------------------------|-----------|------|
| Client ID: |         | Run ID: ICP4500_040121A   |         | SeqNo: 419691     |      | Prep Date: 1/19/2004 |               | DF: 1                        |           |      |
| Analyte    | Result  | PQL                       | SPK Val | SPK Ref Value     | %REC | Control Limit        | RPD Ref Value | %RPD                         | RPD Limit | Qual |
| Aluminum   | 9.166   | 0.010                     | 0.05    | 5.457             | 7420 | 75-125               | 7.945         | 14.3                         | 25        | SEO  |
| Arsenic    | 0.1242  | 0.0050                    | 0.05    | 0.07855           | 91.3 | 75-125               | 0.1244        | 0.161                        | 25        |      |
| Barium     | 0.3439  | 0.0050                    | 0.05    | 0.2921            | 104  | 75-125               | 0.342         | 0.554                        | 25        | O    |
| Cadmium    | 0.04449 | 0.0010                    | 0.05    | 0.0001638         | 88.7 | 75-125               | 0.0438        | 1.56                         | 25        |      |
| Calcium    | 105.2   | 0.50                      | 5       | 106.7             | -30  | 75-125               | 107.6         | 2.26                         | 25        | SEO  |
| Chromium   | 0.06529 | 0.0020                    | 0.05    | 0.01557           | 99.4 | 75-125               | 0.06582       | 0.808                        | 25        |      |
| Cobalt     | 0.1047  | 0.0020                    | 0.05    | 0.05934           | 90.7 | 75-125               | 0.1054        | 0.666                        | 25        |      |
| Copper     | 0.0599  | 0.0020                    | 0.05    | 0.01649           | 86.8 | 75-125               | 0.06031       | 0.682                        | 25        |      |
| Iron       | 23.55   | 0.20                      | 5       | 17.25             | 126  | 75-125               | 23.08         | 2.02                         | 25        | S    |
| Lead       | 0.07141 | 0.0050                    | 0.05    | 0.02069           | 101  | 75-125               | 0.07105       | 0.505                        | 25        |      |
| Magnesium  | 53.31   | 0.20                      | 5       | 51.82             | 29.8 | 75-125               | 53.87         | 1.04                         | 25        | SEO  |
| Manganese  | 4.466   | 0.0050                    | 0.05    | 4.586             | -240 | 75-125               | 4.487         | 0.469                        | 25        | SEO  |
| Nickel     | 0.07446 | 0.0050                    | 0.05    | 0.02927           | 90.4 | 75-125               | 0.07367       | 1.07                         | 25        |      |
| Potassium  | 8.617   | 0.20                      | 5       | 3.468             | 103  | 75-125               | 8.656         | 0.452                        | 25        |      |
| Selenium   | 0.04973 | 0.0050                    | 0.05    | 0.008553          | 82.4 | 75-125               | 0.05191       | 4.29                         | 25        |      |
| Silver     | 0.04354 | 0.0050                    | 0.05    | 0.00006642        | 87.1 | 75-125               | 0.044         | 1.05                         | 25        |      |
| Sodium     | 20      | 0.20                      | 5       | 0                 | 400  | 75-125               | 20            | 0                            | 25        | S    |
| Vanadium   | 0.07042 | 0.0050                    | 0.05    | 0.01866           | 104  | 75-125               | 0.07031       | 0.156                        | 25        |      |
| Zinc       | 0.1013  | 0.0050                    | 0.05    | 0.05987           | 82.9 | 75-125               | 0.1012        | 0.0988                       | 25        |      |

| MSD        |        | Sample ID: 0401092-10BMSD |         | Test Code: SW6020 |      | Units: mg/L          |               | Analysis Date: 01/22/04 23:34 |           |      |
|------------|--------|---------------------------|---------|-------------------|------|----------------------|---------------|-------------------------------|-----------|------|
| Client ID: |        | Run ID: ICP4500_040122A   |         | SeqNo: 420051     |      | Prep Date: 1/19/2004 |               | DF: 1                         |           |      |
| Analyte    | Result | PQL                       | SPK Val | SPK Ref Value     | %REC | Control Limit        | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Boron      | 0.5084 | 0.020                     | 0.5     | 0.03648           | 94.4 | 75-125               | 0.5113        | 0.569                         | 25        |      |

| MSD        |         | Sample ID: 0401092-10BMSD |         | Test Code: SW6020 |      | Units: mg/L          |               | Analysis Date: 01/23/04 14:14 |           |      |
|------------|---------|---------------------------|---------|-------------------|------|----------------------|---------------|-------------------------------|-----------|------|
| Client ID: |         | Run ID: ICP4500_040123A   |         | SeqNo: 420092     |      | Prep Date: 1/19/2004 |               | DF: 1                         |           |      |
| Analyte    | Result  | PQL                       | SPK Val | SPK Ref Value     | %REC | Control Limit        | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Beryllium  | 0.05244 | 0.0020                    | 0.05    | 0.006872          | 91.1 | 75-125               | 0.05216       | 0.535                         | 25        |      |

ND - Not Detected at the Reporting Limit

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

# QC BATCH REPORT

Batch ID: 7756 InstrumentID: ICP4500

DUP Sample ID: 0401092-10BDUP Test Code: SW6020 Units: mg/L Analysis Date: 01/22/04 2:08

Client ID: Run ID: ICP4500\_040121A SeqNo: 419689 Prep Date: 1/19/2004 DF: 1

| Analyte   | Result    | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|-----------|-----------|--------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Arsenic   | 0.0758    | 0.0050 | 0       | 0             | 0    | 0-0           | 0.07855       | 3.56  | 25        |      |
| Barium    | 0.2881    | 0.0050 | 0       | 0             | 0    | 0-0           | 0.2921        | 1.38  | 25        |      |
| Cadmium   | 0.0001789 | 0.0010 | 0       | 0             | 0    | 0-0           | 0.0001638     | 0     | 25        | J    |
| Chromium  | 0.01639   | 0.0020 | 0       | 0             | 0    | 0-0           | 0.01557       | 5.13  | 25        |      |
| Cobalt    | 0.05802   | 0.0020 | 0       | 0             | 0    | 0-0           | 0.05934       | 2.25  | 25        |      |
| Copper    | 0.01673   | 0.0020 | 0       | 0             | 0    | 0-0           | 0.01649       | 1.44  | 25        |      |
| Iron      | 17.56     | 0.20   | 0       | 0             | 0    | 0-0           | 17.25         | 1.78  | 25        |      |
| Lead      | 0.02057   | 0.0050 | 0       | 0             | 0    | 0-0           | 0.02069       | 0.582 | 25        |      |
| Nickel    | 0.02877   | 0.0050 | 0       | 0             | 0    | 0-0           | 0.02927       | 1.72  | 25        |      |
| Potassium | 3.544     | 0.20   | 0       | 0             | 0    | 0-0           | 3.468         | 2.17  | 25        |      |
| Selenium  | 0.002879  | 0.0050 | 0       | 0             | 0    | 0-0           | 0.008553      | 0     | 25        | J    |
| Silver    | ND        | 0.0050 | 0       | 0             | 0    | 0-0           | 0.000006642   | 0     | 25        |      |
| Vanadium  | 0.01941   | 0.0050 | 0       | 0             | 0    | 0-0           | 0.01866       | 3.94  | 25        |      |
| Zinc      | 0.05854   | 0.0050 | 0       | 0             | 0    | 0-0           | 0.05987       | 2.25  | 25        |      |

DUP Sample ID: 0401092-10BDUP Test Code: SW6020 Units: mg/L Analysis Date: 01/22/04 23:25

Client ID: Run ID: ICP4500\_040122A SeqNo: 420049 Prep Date: 1/19/2004 DF: 1

| Analyte | Result  | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|---------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Boron   | 0.02975 | 0.020 | 0       | 0             | 0    | 0-0           | 0.03648       | 20.3 | 25        |      |

DUP Sample ID: 0401092-10BDUP Test Code: SW6020 Units: mg/L Analysis Date: 01/23/04 14:04

Client ID: Run ID: ICP4500\_040123A SeqNo: 420090 Prep Date: 1/19/2004 DF: 1

| Analyte   | Result   | PQL    | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|----------|--------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Beryllium | 0.007307 | 0.0020 | 0       | 0             | 0    | 0-0           | 0.006872      | 6.14 | 25        |      |

DUP Sample ID: 0401092-10BDUP Test Code: SW6020 Units: mg/L Analysis Date: 01/26/04 14:03

Client ID: Run ID: ICP4500\_040129A SeqNo: 420732 Prep Date: 1/19/2004 DF: 50

| Analyte   | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Aluminum  | 4.829  | 0.50 | 0       | 0             | 0    | 0-0           | 5.425         | 11.6 | 25        |      |
| Manganese | 3.463  | 0.25 | 0       | 0             | 0    | 0-0           | 4.272         | 20.9 | 25        |      |
| Sodium    | 244.8  | 10   | 0       | 0             | 0    | 0-0           | 0             | 200  | 25        | R    |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7756 InstrumentID: ICP4500

DUP Sample ID: 0401092-10BDUP Test Code: SW6020 Units: mg/L Analysis Date: 01/26/04 14:11

Client ID: Run ID: ICP4500\_040129A SeqNo: 420734 Prep Date: 1/19/2004 DF: 10

| Analyte   | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Calcium   | 103    | 5.0 | 0       | 0             | 0    | 0-0           | 100.1         | 2.86 | 25        |      |
| Magnesium | 51.78  | 2.0 | 0       | 0             | 0    | 0-0           | 47.33         | 8.98 | 25        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0401088-01C | 0401088-02C | 0401088-03C |
| 0401088-04C | 0401088-05C | 0401088-06C |
| 0401088-07C | 0401088-08C | 0401088-09C |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

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CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7723 InstrumentID: SV-2

MBLK Sample ID: SBLKW1-040114 Test Code: SW8270 Units: µg/L Analysis Date: 01/20/04 16:40  
 Client ID: Run ID: SV-2\_040114D SeqNo: 418921 Prep Date: 1/14/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,5-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2,4,6-Trichlorophenol      | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylnaphthalene        | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| 3-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methylphenol             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitroaniline             | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Nitrophenol              | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Acenaphthylene             | ND     | 10  |         |               |      |               |               |      |           |      |
| Aniline                    | ND     | 10  |         |               |      |               |               |      |           |      |
| Anthracene                 | ND     | 10  |         |               |      |               |               |      |           |      |
| Benz(a)anthracene          | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzidine                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Hexachloroethane           | ND     | 10  |         |               |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene     | ND     | 10  |         |               |      |               |               |      |           |      |
| Isophorone                 | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodi-n-propylamine  | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodimethylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| N-Nitrosodiphenylamine     | ND     | 10  |         |               |      |               |               |      |           |      |
| Naphthalene                | ND     | 10  |         |               |      |               |               |      |           |      |
| Nitrobenzene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Pentachlorophenol          | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenanthrene               | ND     | 10  |         |               |      |               |               |      |           |      |
| Phenol                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Pyrene                     | ND     | 10  |         |               |      |               |               |      |           |      |
| 1,4-Dichlorobenzene-d4     | 40     | 0   |         |               |      |               |               |      |           |      |
| Acenaphthene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Chrysene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Naphthalene-d8             | 40     | 0   |         |               |      |               |               |      |           |      |
| Perylene-d12               | 40     | 0   |         |               |      |               |               |      |           |      |
| Phenanthrene-d10           | 40     | 0   |         |               |      |               |               |      |           |      |
| Surr: 2,4,6-Tribromophenol | 105.3  | 0   | 100     | 0             | 105  | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 96.07  | 0   | 100     | 0             | 96.1 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 62.28  | 0   | 100     | 0             | 62.3 | 21-100        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 99.52  | 0   | 100     | 0             | 99.5 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 97.08  | 0   | 100     | 0             | 97.1 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 40.29  | 0   | 100     | 0             | 40.3 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7723 InstrumentID: SV-2

LCS Sample ID: SLCSW1-040114 Test Code: SW8270 Units: µg/L Analysis Date: 01/20/04 17:07

Client ID: Run ID: SV-2\_040114D SeqNo: 418922 Prep Date: 1/14/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 46.88  | 10  | 50      | 0             | 93.8 | 50-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 103.1  | 10  | 100     | 0             | 103  | 72-118        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 102.5  | 10  | 100     | 0             | 103  | 72-117        | 0             |      |           |      |
| 2-Methylnaphthalene        | 45.86  | 10  | 50      | 0             | 91.7 | 47-122        | 0             |      |           |      |
| 2-Methylphenol             | 89.88  | 10  | 100     | 0             | 89.9 | 51-115        | 0             |      |           |      |
| 2-Nitroaniline             | 53.28  | 10  | 50      | 0             | 107  | 73-119        | 0             |      |           |      |
| 2-Nitrophenol              | 100.4  | 10  | 100     | 0             | 100  | 60-119        | 0             |      |           |      |
| 3-Nitroaniline             | 42.65  | 10  | 50      | 0             | 85.3 | 61-118        | 0             |      |           |      |
| 4-Methylphenol             | 127.2  | 10  | 150     | 0             | 84.8 | 44-115        | 0             |      |           |      |
| 4-Nitroaniline             | 46.05  | 10  | 50      | 0             | 92.1 | 61-123        | 0             |      |           |      |
| 4-Nitrophenol              | 60.51  | 10  | 100     | 0             | 60.5 | 17-100        | 0             |      |           |      |
| Acenaphthene               | 47.27  | 10  | 50      | 0             | 94.5 | 68-115        | 0             |      |           |      |
| Acenaphthylene             | 47.27  | 10  | 50      | 0             | 94.5 | 67-116        | 0             |      |           |      |
| Aniline                    | 35.9   | 10  | 50      | 0             | 71.8 | 40-130        | 0             |      |           |      |
| Anthracene                 | 54.02  | 10  | 50      | 0             | 108  | 72-124        | 0             |      |           |      |
| Benz(a)anthracene          | 47.09  | 10  | 50      | 0             | 94.2 | 55-131        | 0             |      |           |      |
| Benzidine                  | 20.56  | 10  | 50      | 0             | 41.1 | 10-115        | 0             |      |           |      |
| Hexachloroethane           | 47.81  | 10  | 50      | 0             | 95.6 | 46-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 41.48  | 10  | 50      | 0             | 83   | 42-123        | 0             |      |           |      |
| Isophorone                 | 51.35  | 10  | 50      | 0             | 103  | 63-117        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 48.47  | 10  | 50      | 0             | 96.9 | 67-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 35.21  | 10  | 50      | 0             | 70.4 | 28-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 58.94  | 10  | 50      | 0             | 118  | 72-144        | 0             |      |           |      |
| Naphthalene                | 45.32  | 10  | 50      | 0             | 90.6 | 52-115        | 0             |      |           |      |
| Nitrobenzene               | 49.29  | 10  | 50      | 0             | 98.6 | 65-115        | 0             |      |           |      |
| Pentachlorophenol          | 108.8  | 10  | 100     | 0             | 109  | 65-123        | 0             |      |           |      |
| Phenanthrene               | 51.34  | 10  | 50      | 0             | 103  | 69-119        | 0             |      |           |      |
| Phenol                     | 51.33  | 10  | 100     | 0             | 51.3 | 16-115        | 0             |      |           |      |
| Pyrene                     | 44.55  | 10  | 50      | 0             | 89.1 | 51-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 111.9  | 0   | 100     | 0             | 112  | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 95.45  | 0   | 100     | 0             | 95.5 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 70.5   | 0   | 100     | 0             | 70.5 | 21-100        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 97.53  | 0   | 100     | 0             | 97.5 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 98.89  | 0   | 100     | 0             | 98.9 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 48.37  | 0   | 100     | 0             | 48.4 | 11-100        | 0             |      |           |      |

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P - Dual Column results percent difference > 40%

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U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7723 InstrumentID: SV-2

MS Sample ID: 0401093-04EMS Test Code: SW8270 Units: µg/L Analysis Date: 01/20/04 18:02

Client ID: Run ID: SV-2\_040114D SeqNo: 418924 Prep Date: 1/14/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 43.05  | 10  | 50      | 0             | 86.1 | 45-115        | 0             |      |           |      |
| 2,4,5-Trichlorophenol      | 102.3  | 10  | 100     | 0             | 102  | 47-129        | 0             |      |           |      |
| 2,4,6-Trichlorophenol      | 102.6  | 10  | 100     | 0             | 103  | 45-127        | 0             |      |           |      |
| 2-Methylnaphthalene        | 44.59  | 10  | 50      | 0             | 89.2 | 30-144        | 0             |      |           |      |
| 2-Methylphenol             | 73.53  | 10  | 100     | 0             | 73.5 | 42-115        | 0             |      |           |      |
| 2-Nitroaniline             | 52.24  | 10  | 50      | 0             | 104  | 48-129        | 0             |      |           |      |
| 2-Nitrophenol              | 99.31  | 10  | 100     | 0             | 99.3 | 32-144        | 0             |      |           |      |
| 3-Nitroaniline             | 41.25  | 10  | 50      | 0             | 82.5 | 23-122        | 0             |      |           |      |
| 4-Methylphenol             | 88.9   | 10  | 150     | 0             | 59.3 | 35-115        | 0             |      |           |      |
| 4-Nitroaniline             | 44.95  | 10  | 50      | 0             | 89.9 | 12-138        | 0             |      |           |      |
| 4-Nitrophenol              | 48.62  | 10  | 100     | 0             | 48.6 | 10-80         | 0             |      |           |      |
| Acenaphthene               | 45.86  | 10  | 50      | 0             | 91.7 | 55-117        | 0             |      |           |      |
| Acenaphthylene             | 46.09  | 10  | 50      | 0             | 92.2 | 39-128        | 0             |      |           |      |
| Aniline                    | 33.92  | 10  | 50      | 0             | 67.8 | 40-130        | 0             |      |           |      |
| Anthracene                 | 52.18  | 10  | 50      | 0             | 104  | 58-129        | 0             |      |           |      |
| Benz(a)anthracene          | 45.64  | 10  | 50      | 0             | 91.3 | 42-135        | 0             |      |           |      |
| Benzidine                  | 14.64  | 10  | 50      | 0             | 29.3 | 10-127        | 0             |      |           |      |
| Hexachloroethane           | 41.51  | 10  | 50      | 0             | 83   | 45-115        | 0             |      |           |      |
| Indeno(1,2,3-cd)pyrene     | 40.44  | 10  | 50      | 0             | 80.9 | 32-132        | 0             |      |           |      |
| Isophorone                 | 50.02  | 10  | 50      | 0             | 100  | 51-122        | 0             |      |           |      |
| N-Nitrosodi-n-propylamine  | 47.83  | 10  | 50      | 0             | 95.7 | 55-115        | 0             |      |           |      |
| N-Nitrosodimethylamine     | 29.58  | 10  | 50      | 0             | 59.2 | 30-115        | 0             |      |           |      |
| N-Nitrosodiphenylamine     | 55.02  | 10  | 50      | 0             | 110  | 47-146        | 0             |      |           |      |
| Naphthalene                | 43.41  | 10  | 50      | 0             | 86.8 | 46-116        | 0             |      |           |      |
| Nitrobenzene               | 47.85  | 10  | 50      | 0             | 95.7 | 48-126        | 0             |      |           |      |
| Pentachlorophenol          | 115.1  | 10  | 100     | 0             | 115  | 53-134        | 0             |      |           |      |
| Phenanthrene               | 48.69  | 10  | 50      | 0             | 97.4 | 57-123        | 0             |      |           |      |
| Phenol                     | 39.86  | 10  | 100     | 0             | 39.9 | 10-115        | 0             |      |           |      |
| Pyrene                     | 43.3   | 10  | 50      | 0             | 86.6 | 40-130        | 0             |      |           |      |
| Surr: 2,4,6-Tribromophenol | 108.2  | 0   | 100     | 0             | 108  | 39-153        | 0             |      |           |      |
| Surr: 2-Fluorobiphenyl     | 91.77  | 0   | 100     | 0             | 91.8 | 40-147        | 0             |      |           |      |
| Surr: 2-Fluorophenol       | 53.6   | 0   | 100     | 0             | 53.6 | 21-100        | 0             |      |           |      |
| Surr: 4-Terphenyl-d14      | 95.11  | 0   | 100     | 0             | 95.1 | 39-141        | 0             |      |           |      |
| Surr: Nitrobenzene-d5      | 95.4   | 0   | 100     | 0             | 95.4 | 37-140        | 0             |      |           |      |
| Surr: Phenol-d6            | 39.31  | 0   | 100     | 0             | 39.3 | 11-100        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: 7723 InstrumentID: SV-2

MSD Sample ID: 0401093-04EMSD Test Code: SW8270 Units: µg/L Analysis Date: 01/20/04 18:29

Client ID: Run ID: SV-2\_040114D SeqNo: 418925 Prep Date: 1/14/2004 DF: 1

| Analyte                    | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,2,4-Trichlorobenzene     | 46.41  | 10  | 50      | 0             | 92.8 | 45-115        | 43.05         | 7.51 | 30        |      |
| 2,4,5-Trichlorophenol      | 108.8  | 10  | 100     | 0             | 109  | 47-129        | 102.3         | 6.17 | 30        |      |
| 2,4,6-Trichlorophenol      | 107    | 10  | 100     | 0             | 107  | 45-127        | 102.6         | 4.15 | 30        |      |
| 2-Methylnaphthalene        | 48.26  | 10  | 50      | 0             | 96.5 | 30-144        | 44.59         | 7.91 | 30        |      |
| 2-Methylphenol             | 78.92  | 10  | 100     | 0             | 78.9 | 42-115        | 73.53         | 7.06 | 30        |      |
| 2-Nitroaniline             | 57.36  | 10  | 50      | 0             | 115  | 48-129        | 52.24         | 9.33 | 30        |      |
| 2-Nitrophenol              | 107.3  | 10  | 100     | 0             | 107  | 32-144        | 99.31         | 7.7  | 30        |      |
| 3-Nitroaniline             | 47.24  | 10  | 50      | 0             | 94.5 | 23-122        | 41.25         | 13.5 | 30        |      |
| 4-Methylphenol             | 94.91  | 10  | 150     | 0             | 63.3 | 35-115        | 88.9          | 6.54 | 30        |      |
| 4-Nitroaniline             | 48.94  | 10  | 50      | 0             | 97.9 | 12-138        | 44.95         | 8.51 | 30        |      |
| 4-Nitrophenol              | 52.95  | 10  | 100     | 0             | 52.9 | 10-80         | 48.62         | 8.51 | 30        |      |
| Acenaphthene               | 48.98  | 10  | 50      | 0             | 98   | 55-117        | 45.86         | 6.58 | 30        |      |
| Acenaphthylene             | 49.73  | 10  | 50      | 0             | 99.5 | 39-128        | 46.09         | 7.6  | 30        |      |
| Aniline                    | 39     | 10  | 50      | 0             | 78   | 40-130        | 33.92         | 13.9 | 30        |      |
| Anthracene                 | 55.47  | 10  | 50      | 0             | 111  | 58-129        | 52.18         | 6.11 | 30        |      |
| Benz(a)anthracene          | 49.16  | 10  | 50      | 0             | 98.3 | 42-135        | 45.64         | 7.42 | 30        |      |
| Benzidine                  | 19.16  | 10  | 50      | 0             | 38.3 | 10-127        | 14.64         | 26.8 | 30        |      |
| Hexachloroethane           | 43.66  | 10  | 50      | 0             | 87.3 | 45-115        | 41.51         | 5.05 | 30        |      |
| Indeno(1,2,3-cd)pyrene     | 42.39  | 10  | 50      | 0             | 84.8 | 32-132        | 40.44         | 4.73 | 30        |      |
| Isophorone                 | 55.25  | 10  | 50      | 0             | 110  | 51-122        | 50.02         | 9.94 | 30        |      |
| N-Nitrosodi-n-propylamine  | 52.39  | 10  | 50      | 0             | 105  | 55-115        | 47.83         | 9.1  | 30        |      |
| N-Nitrosodimethylamine     | 31.2   | 10  | 50      | 0             | 62.4 | 30-115        | 29.58         | 5.35 | 30        |      |
| N-Nitrosodiphenylamine     | 59.74  | 10  | 50      | 0             | 119  | 47-146        | 55.02         | 8.22 | 30        |      |
| Naphthalene                | 46.55  | 10  | 50      | 0             | 93.1 | 46-116        | 43.41         | 6.99 | 30        |      |
| Nitrobenzene               | 50.72  | 10  | 50      | 0             | 101  | 48-126        | 47.85         | 5.83 | 30        |      |
| Pentachlorophenol          | 118.8  | 10  | 100     | 0             | 119  | 53-134        | 115.1         | 3.19 | 30        |      |
| Phenanthrene               | 52.07  | 10  | 50      | 0             | 104  | 57-123        | 48.69         | 6.7  | 30        |      |
| Phenol                     | 42.51  | 10  | 100     | 0             | 42.5 | 10-115        | 39.86         | 6.45 | 30        |      |
| Pyrene                     | 47.31  | 10  | 50      | 0             | 94.6 | 40-130        | 43.3          | 8.86 | 30        |      |
| Surr: 2,4,6-Tribromophenol | 121.8  | 0   | 100     | 0             | 122  | 39-153        | 108.2         | 11.9 | 30        |      |
| Surr: 2-Fluorobiphenyl     | 101.4  | 0   | 100     | 0             | 101  | 40-147        | 91.77         | 9.92 | 30        |      |
| Surr: 2-Fluorophenol       | 57.46  | 0   | 100     | 0             | 57.5 | 21-100        | 53.6          | 6.94 | 30        |      |
| Surr: 4-Terphenyl-d14      | 104    | 0   | 100     | 0             | 104  | 39-141        | 95.11         | 8.91 | 30        |      |
| Surr: Nitrobenzene-d5      | 104.5  | 0   | 100     | 0             | 105  | 37-140        | 95.4          | 9.11 | 30        |      |
| Surr: Phenol-d6            | 42.55  | 0   | 100     | 0             | 42.6 | 11-100        | 39.31         | 7.92 | 30        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0401088-01E | 0401088-02E | 0401088-03E |
| 0401088-04E | 0401088-05E | 0401088-06E |
| 0401088-07E | 0401088-08E | 0401088-09E |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18228 InstrumentID: VOA\_I

MBLK Sample ID: VBLKW-0113 Test Code: SW8260 Units: µg/L Analysis Date: 01/13/04 11:22

Client ID: Run ID: VOA\_I\_040113A SeqNo: 416622 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46     | 5.0 | 50      | 0             | 92   | 70-130        |               | 0    |           |      |
| Surr: 4-Bromofluorobenzene  | 48.08  | 5.0 | 50      | 0             | 96.2 | 70-130        |               | 0    |           |      |
| Surr: Dibromofluoromethane  | 47.06  | 5.0 | 50      | 0             | 94.1 | 70-130        |               | 0    |           |      |
| Surr: Toluene-d8            | 46.05  | 5.0 | 50      | 0             | 92.1 | 70-130        |               | 0    |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18228 InstrumentID: VOA\_I

LCS Sample ID: VLCSW-0113 Test Code: SW8260 Units: µg/L Analysis Date: 01/13/04 10:28

Client ID: Run ID: VOA\_I\_040113A SeqNo: 416621 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 48.27  | 5.0 | 50      | 0             | 96.5 | 75-118        | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 47.46  | 5.0 | 50      | 0             | 94.9 | 79-120        | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 48.13  | 5.0 | 50      | 0             | 96.3 | 81-119        | 0             |      |           |      |
| 1,1-Dichloroethane          | 46.83  | 5.0 | 50      | 0             | 93.7 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethene          | 46.32  | 5.0 | 50      | 0             | 92.6 | 80-120        | 0             |      |           |      |
| 1,2-Dichloroethane          | 53.01  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 98.39  | 10  | 100     | 0             | 98.4 | 70-130        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 90.24  | 10  | 100     | 0             | 90.2 | 72-120        | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 93.51  | 10  | 100     | 0             | 93.5 | 78-120        | 0             |      |           |      |
| Acetone                     | 113.7  | 10  | 100     | 0             | 114  | 60-135        | 0             |      |           |      |
| Benzene                     | 46.07  | 5.0 | 50      | 0             | 92.1 | 82-119        | 0             |      |           |      |
| Bromodichloromethane        | 51.5   | 5.0 | 50      | 0             | 103  | 81-119        | 0             |      |           |      |
| Bromoform                   | 50.25  | 5.0 | 50      | 0             | 100  | 80-120        | 0             |      |           |      |
| Bromomethane                | 44.31  | 5.0 | 50      | 0             | 88.6 | 75-130        | 0             |      |           |      |
| Carbon disulfide            | 89.23  | 10  | 100     | 0             | 89.2 | 78-120        | 0             |      |           |      |
| Carbon tetrachloride        | 49.21  | 5.0 | 50      | 0             | 98.4 | 77-120        | 0             |      |           |      |
| Chlorobenzene               | 47.05  | 5.0 | 50      | 0             | 94.1 | 82-118        | 0             |      |           |      |
| Chloroethane                | 46.72  | 5.0 | 50      | 0             | 93.4 | 78-122        | 0             |      |           |      |
| Chloroform                  | 49.02  | 5.0 | 50      | 0             | 98   | 78-120        | 0             |      |           |      |
| Chloromethane               | 58.33  | 5.0 | 50      | 0             | 117  | 75-125        | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 50.41  | 5.0 | 50      | 0             | 101  | 81-120        | 0             |      |           |      |
| Dibromochloromethane        | 52.1   | 5.0 | 50      | 0             | 104  | 81-118        | 0             |      |           |      |
| Ethylbenzene                | 46.77  | 5.0 | 50      | 0             | 93.5 | 82-120        | 0             |      |           |      |
| m,p-Xylene                  | 90.81  | 10  | 100     | 0             | 90.8 | 82-122        | 0             |      |           |      |
| Methylene chloride          | 47.03  | 10  | 50      | 0             | 94.1 | 80-122        | 0             |      |           |      |
| Styrene                     | 47.64  | 5.0 | 50      | 0             | 95.3 | 82-121        | 0             |      |           |      |
| Tetrachloroethene           | 47.51  | 5.0 | 50      | 0             | 95   | 79-118        | 0             |      |           |      |
| Toluene                     | 45.44  | 5.0 | 50      | 0             | 90.9 | 81-119        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 50.2   | 5.0 | 50      | 0             | 100  | 82-121        | 0             |      |           |      |
| Trichloroethene             | 49.17  | 5.0 | 50      | 0             | 98.3 | 78-118        | 0             |      |           |      |
| Vinyl acetate               | 98.67  | 10  | 100     | 0             | 98.7 | 75-120        | 0             |      |           |      |
| Vinyl chloride              | 45.63  | 2.0 | 50      | 0             | 91.3 | 73-127        | 0             |      |           |      |
| Xylenes, Total              | 138.2  | 15  | 150     | 0             | 92.1 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 45.82  | 5.0 | 50      | 0             | 91.6 | 70-130        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.79  | 5.0 | 50      | 0             | 97.6 | 70-130        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.9   | 5.0 | 50      | 0             | 93.8 | 70-130        | 0             |      |           |      |
| Surr: Toluene-d8            | 45.11  | 5.0 | 50      | 0             | 90.2 | 70-130        | 0             |      |           |      |

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E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18228 InstrumentID: VOA\_I

| MS                          |        | Sample ID: 0401069-08AMS |         | Test Code: SW8260 |      | Units: µg/L   |               | Analysis Date: 01/13/04 13:36 |           |      |
|-----------------------------|--------|--------------------------|---------|-------------------|------|---------------|---------------|-------------------------------|-----------|------|
| Client ID:                  |        | Run ID: VOA_I_040113A    |         | SeqNo: 416623     |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                     | Result | PQL                      | SPK Val | SPK Ref Value     | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 44.27  | 5.0                      | 50      | 0                 | 88.5 | 75-125        | 0             |                               |           |      |
| 1,1,2,2-Tetrachloroethane   | 43.73  | 5.0                      | 50      | 0                 | 87.5 | 75-125        | 0             |                               |           |      |
| 1,1,2-Trichloroethane       | 45.29  | 5.0                      | 50      | 0                 | 90.6 | 75-125        | 0             |                               |           |      |
| 1,1-Dichloroethane          | 71.66  | 5.0                      | 50      | 31.2              | 80.9 | 75-125        | 0             |                               |           |      |
| 1,1-Dichloroethene          | 104.2  | 5.0                      | 50      | 72.85             | 62.8 | 65-130        | 0             |                               |           | S    |
| 1,2-Dichloroethane          | 49.86  | 5.0                      | 50      | 0                 | 99.7 | 70-130        | 0             |                               |           |      |
| 2-Butanone                  | 91.73  | 10                       | 100     | 0                 | 91.7 | 64-128        | 0             |                               |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10                       | 100     | 0                 | 0    | 75-125        | 0             |                               |           | S    |
| 4-Methyl-2-pentanone        | 95.27  | 10                       | 100     | 0                 | 95.3 | 75-125        | 0             |                               |           |      |
| Acetone                     | 100.1  | 10                       | 100     | 0                 | 100  | 60-130        | 0             |                               |           |      |
| Benzene                     | 44.02  | 5.0                      | 50      | 0                 | 88   | 76-127        | 0             |                               |           |      |
| Bromodichloromethane        | 48.53  | 5.0                      | 50      | 0                 | 97.1 | 75-125        | 0             |                               |           |      |
| Bromoform                   | 47.61  | 5.0                      | 50      | 0                 | 95.2 | 75-125        | 0             |                               |           |      |
| Bromomethane                | 40.26  | 5.0                      | 50      | 0                 | 80.5 | 75-125        | 0             |                               |           |      |
| Carbon disulfide            | 81.69  | 10                       | 100     | 0                 | 81.7 | 75-125        | 0             |                               |           |      |
| Carbon tetrachloride        | 44.78  | 5.0                      | 50      | 0                 | 89.6 | 70-130        | 0             |                               |           |      |
| Chlorobenzene               | 44.91  | 5.0                      | 50      | 0                 | 89.8 | 75-126        | 0             |                               |           |      |
| Chloroethane                | 41.03  | 5.0                      | 50      | 0                 | 82.1 | 70-130        | 0             |                               |           |      |
| Chloroform                  | 47.25  | 5.0                      | 50      | 0                 | 94.5 | 75-125        | 0             |                               |           |      |
| Chloromethane               | 53.47  | 5.0                      | 50      | 0                 | 107  | 75-125        | 0             |                               |           |      |
| cis-1,3-Dichloropropene     | 47.2   | 5.0                      | 50      | 0                 | 94.4 | 75-125        | 0             |                               |           |      |
| Dibromochloromethane        | 49.07  | 5.0                      | 50      | 0                 | 98.1 | 75-125        | 0             |                               |           |      |
| Ethylbenzene                | 43.36  | 5.0                      | 50      | 0                 | 86.7 | 75-125        | 0             |                               |           |      |
| m,p-Xylene                  | 85.04  | 10                       | 100     | 0                 | 85   | 75-125        | 0             |                               |           |      |
| Methylene chloride          | 45.19  | 10                       | 50      | 0                 | 90.4 | 75-125        | 0             |                               |           |      |
| Styrene                     | 40.66  | 5.0                      | 50      | 0                 | 81.3 | 75-125        | 0             |                               |           |      |
| Tetrachloroethene           | 43.81  | 5.0                      | 50      | 0                 | 87.6 | 75-125        | 0             |                               |           |      |
| Toluene                     | 42.83  | 5.0                      | 50      | 0                 | 85.7 | 76-125        | 0             |                               |           |      |
| trans-1,3-Dichloropropene   | 48.07  | 5.0                      | 50      | 0                 | 96.1 | 70-130        | 0             |                               |           |      |
| Trichloroethene             | 47.03  | 5.0                      | 50      | 0                 | 94.1 | 71-120        | 0             |                               |           |      |
| Vinyl acetate               | 88.29  | 10                       | 100     | 0                 | 88.3 | 75-125        | 0             |                               |           |      |
| Vinyl chloride              | 39.74  | 2.0                      | 50      | 0                 | 79.5 | 60-135        | 0             |                               |           |      |
| Xylenes, Total              | 129    | 15                       | 150     | 0                 | 86   | 75-125        | 0             |                               |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.19  | 5.0                      | 50      | 0                 | 92.4 | 70-130        | 0             |                               |           |      |
| Surr: 4-Bromofluorobenzene  | 49.78  | 5.0                      | 50      | 0                 | 99.6 | 70-130        | 0             |                               |           |      |
| Surr: Dibromofluoromethane  | 47.52  | 5.0                      | 50      | 0                 | 95   | 70-130        | 0             |                               |           |      |
| Surr: Toluene-d8            | 45.36  | 5.0                      | 50      | 0                 | 90.7 | 70-130        | 0             |                               |           |      |

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CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18228 InstrumentID: VOA\_I

MSD Sample ID: 0401069-08AMSD Test Code: SW8260 Units: µg/L Analysis Date: 01/13/04 14:03

Client ID: Run ID: VOA\_I\_040113A SeqNo: 416624 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,1,1-Trichloroethane       | 51.32  | 5.0 | 50      | 0             | 103  | 75-125        | 44.27         | 14.8  | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 47.81  | 5.0 | 50      | 0             | 95.6 | 75-125        | 43.73         | 8.9   | 20        |      |
| 1,1,2-Trichloroethane       | 49.39  | 5.0 | 50      | 0             | 98.8 | 75-125        | 45.29         | 8.66  | 20        |      |
| 1,1-Dichloroethane          | 77.65  | 5.0 | 50      | 31.2          | 92.9 | 75-125        | 71.66         | 8.03  | 20        |      |
| 1,1-Dichloroethene          | 115.3  | 5.0 | 50      | 72.85         | 84.9 | 65-130        | 104.2         | 10.1  | 20        |      |
| 1,2-Dichloroethane          | 53.62  | 5.0 | 50      | 0             | 107  | 70-130        | 49.86         | 7.27  | 20        |      |
| 2-Butanone                  | 103.2  | 10  | 100     | 0             | 103  | 64-128        | 91.73         | 11.8  | 20        |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 75-125        | 0             | 0     | 20        | S    |
| 4-Methyl-2-pentanone        | 100.9  | 10  | 100     | 0             | 101  | 75-125        | 95.27         | 5.77  | 20        |      |
| Acetone                     | 107.4  | 10  | 100     | 0             | 107  | 60-130        | 100.1         | 7.09  | 20        |      |
| Benzene                     | 49.06  | 5.0 | 50      | 0             | 98.1 | 76-127        | 44.02         | 10.8  | 20        |      |
| Bromodichloromethane        | 53.21  | 5.0 | 50      | 0             | 106  | 75-125        | 48.53         | 9.21  | 20        |      |
| Bromoform                   | 51.56  | 5.0 | 50      | 0             | 103  | 75-125        | 47.61         | 7.95  | 20        |      |
| Bromomethane                | 49.35  | 5.0 | 50      | 0             | 98.7 | 75-125        | 40.26         | 20.3  | 20        | R    |
| Carbon disulfide            | 96.66  | 10  | 100     | 0             | 96.7 | 75-125        | 81.69         | 16.8  | 20        |      |
| Carbon tetrachloride        | 52.5   | 5.0 | 50      | 0             | 105  | 70-130        | 44.78         | 15.9  | 20        |      |
| Chlorobenzene               | 49.89  | 5.0 | 50      | 0             | 99.8 | 75-126        | 44.91         | 10.5  | 20        |      |
| Chloroethane                | 49.74  | 5.0 | 50      | 0             | 99.5 | 70-130        | 41.03         | 19.2  | 20        |      |
| Chloroform                  | 51.66  | 5.0 | 50      | 0             | 103  | 75-125        | 47.25         | 8.93  | 20        |      |
| Chloromethane               | 59.73  | 5.0 | 50      | 0             | 119  | 75-125        | 53.47         | 11.1  | 20        |      |
| cis-1,3-Dichloropropene     | 52.48  | 5.0 | 50      | 0             | 105  | 75-125        | 47.2          | 10.6  | 20        |      |
| Dibromochloromethane        | 52.99  | 5.0 | 50      | 0             | 106  | 75-125        | 49.07         | 7.7   | 20        |      |
| Ethylbenzene                | 49.24  | 5.0 | 50      | 0             | 98.5 | 75-125        | 43.36         | 12.7  | 20        |      |
| m,p-Xylene                  | 97.66  | 10  | 100     | 0             | 97.7 | 75-125        | 85.04         | 13.8  | 20        |      |
| Methylene chloride          | 49.52  | 10  | 50      | 0             | 99   | 75-125        | 45.19         | 9.15  | 20        |      |
| Styrene                     | 44.29  | 5.0 | 50      | 0             | 88.6 | 75-125        | 40.66         | 8.54  | 20        |      |
| Tetrachloroethene           | 51.19  | 5.0 | 50      | 0             | 102  | 75-125        | 43.81         | 15.5  | 20        |      |
| Toluene                     | 47.76  | 5.0 | 50      | 0             | 95.5 | 76-125        | 42.83         | 10.9  | 20        |      |
| trans-1,3-Dichloropropene   | 52.51  | 5.0 | 50      | 0             | 105  | 70-130        | 48.07         | 8.81  | 20        |      |
| Trichloroethene             | 52.68  | 5.0 | 50      | 0             | 105  | 71-120        | 47.03         | 11.3  | 20        |      |
| Vinyl acetate               | 92.99  | 10  | 100     | 0             | 93   | 75-125        | 88.29         | 5.19  | 20        |      |
| Vinyl chloride              | 47.65  | 2.0 | 50      | 0             | 95.3 | 60-135        | 39.74         | 18.1  | 20        |      |
| Xylenes, Total              | 146.6  | 15  | 150     | 0             | 97.8 | 75-125        | 129           | 12.8  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 46.39  | 5.0 | 50      | 0             | 92.8 | 70-130        | 46.19         | 0.429 | 20        |      |
| Surr: 4-Bromofluorobenzene  | 49.42  | 5.0 | 50      | 0             | 98.8 | 70-130        | 49.78         | 0.719 | 20        |      |
| Surr: Dibromofluoromethane  | 47.17  | 5.0 | 50      | 0             | 94.3 | 70-130        | 47.52         | 0.757 | 20        |      |
| Surr: Toluene-d8            | 45.25  | 5.0 | 50      | 0             | 90.5 | 70-130        | 45.36         | 0.243 | 20        |      |

The following samples were analyzed in this batch:

0401088-01A

ND - Not Detected at the Reporting Limit

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P - Dual Column results percent difference > 40%

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**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL

## QC BATCH REPORT

Batch ID: **R18234** InstrumentID: **VOA\_I**

**MBLK** Sample ID: **VBLKW-0113** Test Code: **SW8260** Units: **µg/L** Analysis Date: **01/14/04 0:49**

Client ID: Run ID: **VOA\_I\_040113D** SeqNo: **416728** Prep Date: DF: **1**

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.63  | 5.0 | 50      | 0             | 93.3 | 70-130        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 47.2   | 5.0 | 50      | 0             | 94.4 | 70-130        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 46.63  | 5.0 | 50      | 0             | 93.3 | 70-130        | 0             |      |           |      |
| Surr: Toluene-d8            | 44.49  | 5.0 | 50      | 0             | 89   | 70-130        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18234 InstrumentID: VOA\_I

LCS Sample ID: VLCSW-0113 Test Code: SW8260 Units: µg/L Analysis Date: 01/13/04 23:28

Client ID: Run ID: VOA\_I\_040113D SeqNo: 416726 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 49.1   | 5.0 | 50      | 0             | 98.2 | 75-118        | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 43.9   | 5.0 | 50      | 0             | 87.8 | 79-120        | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 46.48  | 5.0 | 50      | 0             | 93   | 81-119        | 0             |      |           |      |
| 1,1-Dichloroethane          | 46.91  | 5.0 | 50      | 0             | 93.8 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethene          | 47.47  | 5.0 | 50      | 0             | 94.9 | 80-120        | 0             |      |           |      |
| 1,2-Dichloroethane          | 52.16  | 5.0 | 50      | 0             | 104  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 106.2  | 10  | 100     | 0             | 106  | 70-130        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 88.05  | 10  | 100     | 0             | 88   | 72-120        | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 90.69  | 10  | 100     | 0             | 90.7 | 78-120        | 0             |      |           |      |
| Acetone                     | 127.5  | 10  | 100     | 0             | 127  | 60-135        | 0             |      |           |      |
| Benzene                     | 46.08  | 5.0 | 50      | 0             | 92.2 | 82-119        | 0             |      |           |      |
| Bromodichloromethane        | 51.37  | 5.0 | 50      | 0             | 103  | 81-119        | 0             |      |           |      |
| Bromoform                   | 49.59  | 5.0 | 50      | 0             | 99.2 | 80-120        | 0             |      |           |      |
| Bromomethane                | 50.91  | 5.0 | 50      | 0             | 102  | 75-130        | 0             |      |           |      |
| Carbon disulfide            | 91.87  | 10  | 100     | 0             | 91.9 | 78-120        | 0             |      |           |      |
| Carbon tetrachloride        | 50.02  | 5.0 | 50      | 0             | 100  | 77-120        | 0             |      |           |      |
| Chlorobenzene               | 45.71  | 5.0 | 50      | 0             | 91.4 | 82-118        | 0             |      |           |      |
| Chloroethane                | 46.65  | 5.0 | 50      | 0             | 93.3 | 78-122        | 0             |      |           |      |
| Chloroform                  | 49.54  | 5.0 | 50      | 0             | 99.1 | 78-120        | 0             |      |           |      |
| Chloromethane               | 55.82  | 5.0 | 50      | 0             | 112  | 75-125        | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 49.46  | 5.0 | 50      | 0             | 98.9 | 81-120        | 0             |      |           |      |
| Dibromochloromethane        | 49.82  | 5.0 | 50      | 0             | 99.6 | 81-118        | 0             |      |           |      |
| Ethylbenzene                | 45.02  | 5.0 | 50      | 0             | 90   | 82-120        | 0             |      |           |      |
| m,p-Xylene                  | 88.96  | 10  | 100     | 0             | 89   | 82-122        | 0             |      |           |      |
| Methylene chloride          | 46.23  | 10  | 50      | 0             | 92.5 | 80-122        | 0             |      |           |      |
| Styrene                     | 46.18  | 5.0 | 50      | 0             | 92.4 | 82-121        | 0             |      |           |      |
| Tetrachloroethene           | 46.18  | 5.0 | 50      | 0             | 92.4 | 79-118        | 0             |      |           |      |
| Toluene                     | 44.43  | 5.0 | 50      | 0             | 88.9 | 81-119        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 50.36  | 5.0 | 50      | 0             | 101  | 82-121        | 0             |      |           |      |
| Trichloroethene             | 49.32  | 5.0 | 50      | 0             | 98.6 | 78-118        | 0             |      |           |      |
| Vinyl acetate               | 90.38  | 10  | 100     | 0             | 90.4 | 75-120        | 0             |      |           |      |
| Vinyl chloride              | 44.87  | 2.0 | 50      | 0             | 89.7 | 73-127        | 0             |      |           |      |
| Xylenes, Total              | 134.6  | 15  | 150     | 0             | 89.7 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.35  | 5.0 | 50      | 0             | 92.7 | 70-130        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 47.78  | 5.0 | 50      | 0             | 95.6 | 70-130        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 47.11  | 5.0 | 50      | 0             | 94.2 | 70-130        | 0             |      |           |      |
| Surr: Toluene-d8            | 43.62  | 5.0 | 50      | 0             | 87.2 | 70-130        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

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U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18234 InstrumentID: VOA\_I

LCSD Sample ID: VLCSWD-0113 Test Code: SW8260 Units: µg/L Analysis Date: 01/13/04 23:55

Client ID: Run ID: VOA\_I\_040113D SeqNo: 416727 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 49.08  | 5.0 | 50      | 0             | 98.2 | 75-118        | 49.1          | 0.0365 | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 45.4   | 5.0 | 50      | 0             | 90.8 | 79-120        | 43.9          | 3.37   | 20        |      |
| 1,1,2-Trichloroethane       | 46.7   | 5.0 | 50      | 0             | 93.4 | 81-119        | 46.48         | 0.482  | 20        |      |
| 1,1-Dichloroethane          | 46.15  | 5.0 | 50      | 0             | 92.3 | 80-120        | 46.91         | 1.64   | 20        |      |
| 1,1-Dichloroethene          | 47.26  | 5.0 | 50      | 0             | 94.5 | 80-120        | 47.47         | 0.446  | 20        |      |
| 1,2-Dichloroethane          | 51.13  | 5.0 | 50      | 0             | 102  | 80-120        | 52.16         | 2      | 20        |      |
| 2-Butanone                  | 109    | 10  | 100     | 0             | 109  | 70-130        | 106.2         | 2.57   | 20        |      |
| 2-Chloroethyl vinyl ether   | 89.47  | 10  | 100     | 0             | 89.5 | 72-120        | 88.05         | 1.6    | 20        |      |
| 4-Methyl-2-pentanone        | 94.76  | 10  | 100     | 0             | 94.8 | 78-120        | 90.69         | 4.39   | 20        |      |
| Acetone                     | 127.7  | 10  | 100     | 0             | 128  | 60-135        | 127.5         | 0.123  | 20        |      |
| Benzene                     | 45.11  | 5.0 | 50      | 0             | 90.2 | 82-119        | 46.08         | 2.12   | 20        |      |
| Bromodichloromethane        | 50.78  | 5.0 | 50      | 0             | 102  | 81-119        | 51.37         | 1.15   | 20        |      |
| Bromoform                   | 49.12  | 5.0 | 50      | 0             | 98.2 | 80-120        | 49.59         | 0.951  | 20        |      |
| Bromomethane                | 51.74  | 5.0 | 50      | 0             | 103  | 75-130        | 50.91         | 1.61   | 20        |      |
| Carbon disulfide            | 91.13  | 10  | 100     | 0             | 91.1 | 78-120        | 91.87         | 0.803  | 20        |      |
| Carbon tetrachloride        | 49.79  | 5.0 | 50      | 0             | 99.6 | 77-120        | 50.02         | 0.463  | 20        |      |
| Chlorobenzene               | 45.71  | 5.0 | 50      | 0             | 91.4 | 82-118        | 45.71         | 0.0102 | 20        |      |
| Chloroethane                | 46.84  | 5.0 | 50      | 0             | 93.7 | 78-122        | 46.65         | 0.416  | 20        |      |
| Chloroform                  | 48.88  | 5.0 | 50      | 0             | 97.8 | 78-120        | 49.54         | 1.33   | 20        |      |
| Chloromethane               | 52.47  | 5.0 | 50      | 0             | 105  | 75-125        | 55.82         | 6.19   | 20        |      |
| cis-1,3-Dichloropropene     | 49.05  | 5.0 | 50      | 0             | 98.1 | 81-120        | 49.46         | 0.831  | 20        |      |
| Dibromochloromethane        | 49.55  | 5.0 | 50      | 0             | 99.1 | 81-118        | 49.82         | 0.554  | 20        |      |
| Ethylbenzene                | 45.41  | 5.0 | 50      | 0             | 90.8 | 82-120        | 45.02         | 0.868  | 20        |      |
| m,p-Xylene                  | 89.6   | 10  | 100     | 0             | 89.6 | 82-122        | 88.96         | 0.711  | 20        |      |
| Methylene chloride          | 46.37  | 10  | 50      | 0             | 92.7 | 80-122        | 46.23         | 0.304  | 20        |      |
| Styrene                     | 45.93  | 5.0 | 50      | 0             | 91.9 | 82-121        | 46.18         | 0.553  | 20        |      |
| Tetrachloroethene           | 47.57  | 5.0 | 50      | 0             | 95.1 | 79-118        | 46.18         | 2.96   | 20        |      |
| Toluene                     | 44.38  | 5.0 | 50      | 0             | 88.8 | 81-119        | 44.43         | 0.124  | 20        |      |
| trans-1,3-Dichloropropene   | 48.76  | 5.0 | 50      | 0             | 97.5 | 82-121        | 50.36         | 3.23   | 20        |      |
| Trichloroethene             | 48.5   | 5.0 | 50      | 0             | 97   | 78-118        | 49.32         | 1.69   | 20        |      |
| Vinyl acetate               | 94.12  | 10  | 100     | 0             | 94.1 | 75-120        | 90.38         | 4.06   | 20        |      |
| Vinyl chloride              | 44.6   | 2.0 | 50      | 0             | 89.2 | 73-127        | 44.87         | 0.617  | 20        |      |
| Xylenes, Total              | 134.8  | 15  | 150     | 0             | 89.8 | 80-120        | 134.6         | 0.124  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 46.38  | 5.0 | 50      | 0             | 92.8 | 70-130        | 46.35         | 0.0566 | 20        |      |
| Surr: 4-Bromofluorobenzene  | 48.18  | 5.0 | 50      | 0             | 96.4 | 70-130        | 47.78         | 0.83   | 20        |      |
| Surr: Dibromofluoromethane  | 47.35  | 5.0 | 50      | 0             | 94.7 | 70-130        | 47.11         | 0.508  | 20        |      |
| Surr: Toluene-d8            | 44.82  | 5.0 | 50      | 0             | 89.6 | 70-130        | 43.62         | 2.71   | 20        |      |

ND - Not Detected at the Reporting Limit

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P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18234 InstrumentID: VOA\_I

| MS                          | Sample ID: 0401071-01AMS |                       |         | Test Code: SW8260 |      | Units: µg/L   |               | Analysis Date: 01/14/04 1:43 |           |      |
|-----------------------------|--------------------------|-----------------------|---------|-------------------|------|---------------|---------------|------------------------------|-----------|------|
| Client ID:                  |                          | Run ID: VOA_I_040113D |         | SeqNo: 416730     |      | Prep Date:    |               | DF: 1                        |           |      |
| Analyte                     | Result                   | PQL                   | SPK Val | SPK Ref Value     | %REC | Control Limit | RPD Ref Value | %RPD                         | RPD Limit | Qual |
| 1,1,1-Trichloroethane       | 55.05                    | 5.0                   | 50      | 0                 | 110  | 75-125        | 0             |                              |           |      |
| 1,1,2,2-Tetrachloroethane   | 53.45                    | 5.0                   | 50      | 0                 | 107  | 75-125        | 0             |                              |           |      |
| 1,1,2-Trichloroethane       | 54.38                    | 5.0                   | 50      | 0                 | 109  | 75-125        | 0             |                              |           |      |
| 1,1-Dichloroethane          | 55.02                    | 5.0                   | 50      | 0                 | 110  | 75-125        | 0             |                              |           |      |
| 1,1-Dichloroethene          | 53.12                    | 5.0                   | 50      | 0                 | 106  | 65-130        | 0             |                              |           |      |
| 1,2-Dichloroethane          | 65.57                    | 5.0                   | 50      | 5.779             | 120  | 70-130        | 0             |                              |           |      |
| 2-Butanone                  | 121.5                    | 10                    | 100     | 0                 | 121  | 64-128        | 0             |                              |           |      |
| 2-Chloroethyl vinyl ether   | ND                       | 10                    | 100     | 0                 | 0    | 75-125        | 0             |                              |           | S    |
| 4-Methyl-2-pentanone        | 114.7                    | 10                    | 100     | 0                 | 115  | 75-125        | 0             |                              |           |      |
| Acetone                     | 129.2                    | 10                    | 100     | 0                 | 129  | 60-130        | 0             |                              |           |      |
| Benzene                     | 52.81                    | 5.0                   | 50      | 0                 | 106  | 76-127        | 0             |                              |           |      |
| Bromodichloromethane        | 60.4                     | 5.0                   | 50      | 0                 | 121  | 75-125        | 0             |                              |           |      |
| Bromoform                   | 57.63                    | 5.0                   | 50      | 0                 | 115  | 75-125        | 0             |                              |           |      |
| Bromomethane                | 56.77                    | 5.0                   | 50      | 0                 | 114  | 75-125        | 0             |                              |           |      |
| Carbon disulfide            | 102                      | 10                    | 100     | 0                 | 102  | 75-125        | 0             |                              |           |      |
| Carbon tetrachloride        | 54.75                    | 5.0                   | 50      | 0                 | 110  | 70-130        | 0             |                              |           |      |
| Chlorobenzene               | 52.57                    | 5.0                   | 50      | 0                 | 105  | 75-126        | 0             |                              |           |      |
| Chloroethane                | 51.01                    | 5.0                   | 50      | 0                 | 102  | 70-130        | 0             |                              |           |      |
| Chloroform                  | 58.21                    | 5.0                   | 50      | 0                 | 116  | 75-125        | 0             |                              |           |      |
| Chloromethane               | 60.31                    | 5.0                   | 50      | 0                 | 121  | 75-125        | 0             |                              |           |      |
| cis-1,3-Dichloropropene     | 56.58                    | 5.0                   | 50      | 0                 | 113  | 75-125        | 0             |                              |           |      |
| Dibromochloromethane        | 57.65                    | 5.0                   | 50      | 0                 | 115  | 75-125        | 0             |                              |           |      |
| Ethylbenzene                | 50.61                    | 5.0                   | 50      | 0                 | 101  | 75-125        | 0             |                              |           |      |
| m,p-Xylene                  | 99.78                    | 10                    | 100     | 0                 | 99.8 | 75-125        | 0             |                              |           |      |
| Methylene chloride          | 53.64                    | 10                    | 50      | 0                 | 107  | 75-125        | 0             |                              |           |      |
| Styrene                     | 47.43                    | 5.0                   | 50      | 0                 | 94.9 | 75-125        | 0             |                              |           |      |
| Tetrachloroethene           | 51.12                    | 5.0                   | 50      | 0                 | 102  | 75-125        | 0             |                              |           |      |
| Toluene                     | 49.73                    | 5.0                   | 50      | 0                 | 99.5 | 76-125        | 0             |                              |           |      |
| trans-1,3-Dichloropropene   | 56.88                    | 5.0                   | 50      | 0                 | 114  | 70-130        | 0             |                              |           |      |
| Trichloroethene             | 62.37                    | 5.0                   | 50      | 8.763             | 107  | 71-120        | 0             |                              |           |      |
| Vinyl acetate               | 103.9                    | 10                    | 100     | 0                 | 104  | 75-125        | 0             |                              |           |      |
| Vinyl chloride              | 48.38                    | 2.0                   | 50      | 0                 | 96.8 | 60-135        | 0             |                              |           |      |
| Xylenes, Total              | 150.6                    | 15                    | 150     | 0                 | 100  | 75-125        | 0             |                              |           |      |
| Surr: 1,2-Dichloroethane-d4 | 47.1                     | 5.0                   | 50      | 0                 | 94.2 | 70-130        | 0             |                              |           |      |
| Surr: 4-Bromofluorobenzene  | 47.78                    | 5.0                   | 50      | 0                 | 95.6 | 70-130        | 0             |                              |           |      |
| Surr: Dibromofluoromethane  | 47.25                    | 5.0                   | 50      | 0                 | 94.5 | 70-130        | 0             |                              |           |      |
| Surr: Toluene-d8            | 44.11                    | 5.0                   | 50      | 0                 | 88.2 | 70-130        | 0             |                              |           |      |

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E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18234 InstrumentID: VOA\_I

MSD Sample ID: 0401071-01AMSD Test Code: SW8260 Units: µg/L Analysis Date: 01/14/04 2:10

Client ID: Run ID: VOA\_I\_040113D SeqNo: 416731 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| 1,1,1-Trichloroethane       | 53.22  | 5.0 | 50      | 0             | 106  | 75-125        | 55.05         | 3.39   | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 52.99  | 5.0 | 50      | 0             | 106  | 75-125        | 53.45         | 0.85   | 20        |      |
| 1,1,2-Trichloroethane       | 55.2   | 5.0 | 50      | 0             | 110  | 75-125        | 54.38         | 1.5    | 20        |      |
| 1,1-Dichloroethane          | 55.38  | 5.0 | 50      | 0             | 111  | 75-125        | 55.02         | 0.649  | 20        |      |
| 1,1-Dichloroethene          | 49.83  | 5.0 | 50      | 0             | 99.7 | 65-130        | 53.12         | 6.39   | 20        |      |
| 1,2-Dichloroethane          | 66.49  | 5.0 | 50      | 5.779         | 121  | 70-130        | 65.57         | 1.4    | 20        |      |
| 2-Butanone                  | 118.6  | 10  | 100     | 0             | 119  | 64-128        | 121.5         | 2.41   | 20        |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 75-125        | 0             | 0      | 20        | S    |
| 4-Methyl-2-pentanone        | 118.5  | 10  | 100     | 0             | 119  | 75-125        | 114.7         | 3.3    | 20        |      |
| Acetone                     | 127.4  | 10  | 100     | 0             | 127  | 60-130        | 129.2         | 1.4    | 20        |      |
| Benzene                     | 51.74  | 5.0 | 50      | 0             | 103  | 76-127        | 52.81         | 2.05   | 20        |      |
| Bromodichloromethane        | 59.62  | 5.0 | 50      | 0             | 119  | 75-125        | 60.4          | 1.3    | 20        |      |
| Bromoform                   | 57.53  | 5.0 | 50      | 0             | 115  | 75-125        | 57.63         | 0.166  | 20        |      |
| Bromomethane                | 60.43  | 5.0 | 50      | 0             | 121  | 75-125        | 56.77         | 6.24   | 20        |      |
| Carbon disulfide            | 97.19  | 10  | 100     | 0             | 97.2 | 75-125        | 102           | 4.86   | 20        |      |
| Carbon tetrachloride        | 51.2   | 5.0 | 50      | 0             | 102  | 70-130        | 54.75         | 6.71   | 20        |      |
| Chlorobenzene               | 53.2   | 5.0 | 50      | 0             | 106  | 75-126        | 52.57         | 1.2    | 20        |      |
| Chloroethane                | 51.82  | 5.0 | 50      | 0             | 104  | 70-130        | 51.01         | 1.57   | 20        |      |
| Chloroform                  | 58.31  | 5.0 | 50      | 0             | 117  | 75-125        | 58.21         | 0.161  | 20        |      |
| Chloromethane               | 60.19  | 5.0 | 50      | 0             | 120  | 75-125        | 60.31         | 0.206  | 20        |      |
| cis-1,3-Dichloropropene     | 56.69  | 5.0 | 50      | 0             | 113  | 75-125        | 56.58         | 0.189  | 20        |      |
| Dibromochloromethane        | 59.28  | 5.0 | 50      | 0             | 119  | 75-125        | 57.65         | 2.78   | 20        |      |
| Ethylbenzene                | 49.97  | 5.0 | 50      | 0             | 99.9 | 75-125        | 50.61         | 1.27   | 20        |      |
| m,p-Xylene                  | 101.5  | 10  | 100     | 0             | 101  | 75-125        | 99.78         | 1.67   | 20        |      |
| Methylene chloride          | 55.45  | 10  | 50      | 0             | 111  | 75-125        | 53.64         | 3.32   | 20        |      |
| Styrene                     | 48.48  | 5.0 | 50      | 0             | 97   | 75-125        | 47.43         | 2.18   | 20        |      |
| Tetrachloroethene           | 50.66  | 5.0 | 50      | 0             | 101  | 75-125        | 51.12         | 0.895  | 20        |      |
| Toluene                     | 50.35  | 5.0 | 50      | 0             | 101  | 76-125        | 49.73         | 1.24   | 20        |      |
| trans-1,3-Dichloropropene   | 57.65  | 5.0 | 50      | 0             | 115  | 70-130        | 56.88         | 1.34   | 20        |      |
| Trichloroethene             | 61.23  | 5.0 | 50      | 8.763         | 105  | 71-120        | 62.37         | 1.85   | 20        |      |
| Vinyl acetate               | 105.8  | 10  | 100     | 0             | 106  | 75-125        | 103.9         | 1.84   | 20        |      |
| Vinyl chloride              | 47.58  | 2.0 | 50      | 0             | 95.2 | 60-135        | 48.38         | 1.66   | 20        |      |
| Xylenes, Total              | 153.8  | 15  | 150     | 0             | 103  | 75-125        | 150.6         | 2.04   | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 47.11  | 5.0 | 50      | 0             | 94.2 | 70-130        | 47.1          | 0.0281 | 20        |      |
| Surr: 4-Bromofluorobenzene  | 47.93  | 5.0 | 50      | 0             | 95.9 | 70-130        | 47.78         | 0.313  | 20        |      |
| Surr: Dibromofluoromethane  | 47.6   | 5.0 | 50      | 0             | 95.2 | 70-130        | 47.25         | 0.747  | 20        |      |
| Surr: Toluene-d8            | 45.07  | 5.0 | 50      | 0             | 90.1 | 70-130        | 44.11         | 2.15   | 20        |      |

The following samples were analyzed in this batch:

0401088-02A 0401088-03A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

**CLIENT:** Navajo Refining Company  
**Work Order:** 0401088  
**Project:** NCL/TEL

## QC BATCH REPORT

Batch ID: **R18253** InstrumentID: **VOA\_I**

**MBLK** Sample ID: **VBLKW-0114** Test Code: **SW8260** Units: **µg/L** Analysis Date: **01/14/04 11:51**

Client ID: Run ID: **VOA\_I\_040114A** SeqNo: **417255** Prep Date: DF: **1**

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2,2-Tetrachloroethane   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1,2-Trichloroethane       | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,1-Dichloroethene          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 1,2-Dichloroethane          | ND     | 5.0 |         |               |      |               |               |      |           |      |
| 2-Butanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  |         |               |      |               |               |      |           |      |
| 2-Hexanone                  | ND     | 10  |         |               |      |               |               |      |           |      |
| 4-Methyl-2-pentanone        | ND     | 10  |         |               |      |               |               |      |           |      |
| Acetone                     | ND     | 10  |         |               |      |               |               |      |           |      |
| Benzene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromodichloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromoform                   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Bromomethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Carbon disulfide            | ND     | 10  |         |               |      |               |               |      |           |      |
| Carbon tetrachloride        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chlorobenzene               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroethane                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloroform                  | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Chloromethane               | ND     | 5.0 |         |               |      |               |               |      |           |      |
| cis-1,3-Dichloropropene     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Dibromochloromethane        | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Ethylbenzene                | ND     | 5.0 |         |               |      |               |               |      |           |      |
| m,p-Xylene                  | ND     | 10  |         |               |      |               |               |      |           |      |
| Methylene chloride          | ND     | 10  |         |               |      |               |               |      |           |      |
| Styrene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Tetrachloroethene           | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Toluene                     | ND     | 5.0 |         |               |      |               |               |      |           |      |
| trans-1,3-Dichloropropene   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Trichloroethene             | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Vinyl acetate               | ND     | 10  |         |               |      |               |               |      |           |      |
| Vinyl chloride              | ND     | 2.0 |         |               |      |               |               |      |           |      |
| Xylenes, Total              | ND     | 15  |         |               |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 48.88  | 5.0 | 50      | 0             | 97.8 | 70-130        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.05  | 5.0 | 50      | 0             | 96.1 | 70-130        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.95  | 5.0 | 50      | 0             | 97.9 | 70-130        | 0             |      |           |      |
| Surr: Toluene-d8            | 43.83  | 5.0 | 50      | 0             | 87.7 | 70-130        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18253 InstrumentID: VOA\_I

LCS Sample ID: VLCSW-0114 Test Code: SW8260 Units: µg/L Analysis Date: 01/14/04 10:56

Client ID: Run ID: VOA\_I\_040114A SeqNo: 417254 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 52.52  | 5.0 | 50      | 0             | 105  | 75-118        | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 45.03  | 5.0 | 50      | 0             | 90.1 | 79-120        | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 46.27  | 5.0 | 50      | 0             | 92.5 | 81-119        | 0             |      |           |      |
| 1,1-Dichloroethane          | 48.14  | 5.0 | 50      | 0             | 96.3 | 80-120        | 0             |      |           |      |
| 1,1-Dichloroethene          | 48.97  | 5.0 | 50      | 0             | 97.9 | 80-120        | 0             |      |           |      |
| 1,2-Dichloroethane          | 53.08  | 5.0 | 50      | 0             | 106  | 80-120        | 0             |      |           |      |
| 2-Butanone                  | 110.5  | 10  | 100     | 0             | 111  | 70-130        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | 87.85  | 10  | 100     | 0             | 87.9 | 72-120        | 0             |      |           |      |
| 2-Hexanone                  | 84.46  | 10  | 100     | 0             | 84.5 | 70-130        | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 90.54  | 10  | 100     | 0             | 90.5 | 78-120        | 0             |      |           |      |
| Acetone                     | 129.4  | 10  | 100     | 0             | 129  | 60-135        | 0             |      |           |      |
| Benzene                     | 45.87  | 5.0 | 50      | 0             | 91.7 | 82-119        | 0             |      |           |      |
| Bromodichloromethane        | 51.93  | 5.0 | 50      | 0             | 104  | 81-119        | 0             |      |           |      |
| Bromoform                   | 50.73  | 5.0 | 50      | 0             | 101  | 80-120        | 0             |      |           |      |
| Bromomethane                | 55.15  | 5.0 | 50      | 0             | 110  | 75-130        | 0             |      |           |      |
| Carbon disulfide            | 94.47  | 10  | 100     | 0             | 94.5 | 78-120        | 0             |      |           |      |
| Carbon tetrachloride        | 53.46  | 5.0 | 50      | 0             | 107  | 77-120        | 0             |      |           |      |
| Chlorobenzene               | 46.55  | 5.0 | 50      | 0             | 93.1 | 82-118        | 0             |      |           |      |
| Chloroethane                | 48.16  | 5.0 | 50      | 0             | 96.3 | 78-122        | 0             |      |           |      |
| Chloroform                  | 51.59  | 5.0 | 50      | 0             | 103  | 78-120        | 0             |      |           |      |
| Chloromethane               | 51.27  | 5.0 | 50      | 0             | 103  | 75-125        | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 49.23  | 5.0 | 50      | 0             | 98.5 | 81-120        | 0             |      |           |      |
| Dibromochloromethane        | 50.71  | 5.0 | 50      | 0             | 101  | 81-118        | 0             |      |           |      |
| Ethylbenzene                | 45.53  | 5.0 | 50      | 0             | 91.1 | 82-120        | 0             |      |           |      |
| m,p-Xylene                  | 90.37  | 10  | 100     | 0             | 90.4 | 82-122        | 0             |      |           |      |
| Methylene chloride          | 46.61  | 10  | 50      | 0             | 93.2 | 80-122        | 0             |      |           |      |
| Styrene                     | 45.83  | 5.0 | 50      | 0             | 91.7 | 82-121        | 0             |      |           |      |
| Tetrachloroethene           | 49.19  | 5.0 | 50      | 0             | 98.4 | 79-118        | 0             |      |           |      |
| Toluene                     | 44.37  | 5.0 | 50      | 0             | 88.7 | 81-119        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 50.63  | 5.0 | 50      | 0             | 101  | 82-121        | 0             |      |           |      |
| Trichloroethene             | 50.8   | 5.0 | 50      | 0             | 102  | 78-118        | 0             |      |           |      |
| Vinyl acetate               | 100.5  | 10  | 100     | 0             | 101  | 75-120        | 0             |      |           |      |
| Vinyl chloride              | 46.16  | 2.0 | 50      | 0             | 92.3 | 73-127        | 0             |      |           |      |
| Xylenes, Total              | 136.3  | 15  | 150     | 0             | 90.9 | 80-120        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 47.81  | 5.0 | 50      | 0             | 95.6 | 70-130        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.49  | 5.0 | 50      | 0             | 97   | 70-130        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.77  | 5.0 | 50      | 0             | 97.5 | 70-130        | 0             |      |           |      |
| Surr: Toluene-d8            | 44.19  | 5.0 | 50      | 0             | 88.4 | 70-130        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18253 InstrumentID: VOA\_I

MS Sample ID: 0401088-06AMS Test Code: SW8260 Units: µg/L Analysis Date: 01/14/04 13:38

Client ID: MW-59 Run ID: VOA\_I\_040114A SeqNo: 417259 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| 1,1,1-Trichloroethane       | 50.04  | 5.0 | 50      | 0             | 100  | 75-125        | 0             |      |           |      |
| 1,1,2,2-Tetrachloroethane   | 43.17  | 5.0 | 50      | 0             | 86.3 | 75-125        | 0             |      |           |      |
| 1,1,2-Trichloroethane       | 45.49  | 5.0 | 50      | 0             | 91   | 75-125        | 0             |      |           |      |
| 1,1-Dichloroethane          | 47.34  | 5.0 | 50      | 0             | 94.7 | 75-125        | 0             |      |           |      |
| 1,1-Dichloroethene          | 47.32  | 5.0 | 50      | 0             | 94.6 | 65-130        | 0             |      |           |      |
| 1,2-Dichloroethane          | 55.32  | 5.0 | 50      | 0             | 111  | 70-130        | 0             |      |           |      |
| 2-Butanone                  | 93.34  | 10  | 100     | 0             | 93.3 | 64-128        | 0             |      |           |      |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 75-125        | 0             |      |           | S    |
| 2-Hexanone                  | 91.76  | 10  | 100     | 0             | 91.8 | 72-124        | 0             |      |           |      |
| 4-Methyl-2-pentanone        | 97.94  | 10  | 100     | 0             | 97.9 | 75-125        | 0             |      |           |      |
| Acetone                     | 123.1  | 10  | 100     | 0             | 123  | 60-130        | 0             |      |           |      |
| Benzene                     | 48.45  | 5.0 | 50      | 2.387         | 92.1 | 76-127        | 0             |      |           |      |
| Bromodichloromethane        | 52.93  | 5.0 | 50      | 0             | 106  | 75-125        | 0             |      |           |      |
| Bromoform                   | 49.27  | 5.0 | 50      | 0             | 98.5 | 75-125        | 0             |      |           |      |
| Bromomethane                | 52.54  | 5.0 | 50      | 0             | 105  | 75-125        | 0             |      |           |      |
| Carbon disulfide            | 90.54  | 10  | 100     | 0             | 90.5 | 75-125        | 0             |      |           |      |
| Carbon tetrachloride        | 50.91  | 5.0 | 50      | 0             | 102  | 70-130        | 0             |      |           |      |
| Chlorobenzene               | 44.16  | 5.0 | 50      | 0             | 88.3 | 75-126        | 0             |      |           |      |
| Chloroethane                | 45     | 5.0 | 50      | 0             | 90   | 70-130        | 0             |      |           |      |
| Chloroform                  | 51.41  | 5.0 | 50      | 0             | 103  | 75-125        | 0             |      |           |      |
| Chloromethane               | 50.28  | 5.0 | 50      | 0             | 101  | 75-125        | 0             |      |           |      |
| cis-1,3-Dichloropropene     | 49.77  | 5.0 | 50      | 0             | 99.5 | 75-125        | 0             |      |           |      |
| Dibromochloromethane        | 49.04  | 5.0 | 50      | 0             | 98.1 | 75-125        | 0             |      |           |      |
| Ethylbenzene                | 44.39  | 5.0 | 50      | 1.653         | 85.5 | 75-125        | 0             |      |           |      |
| m,p-Xylene                  | 88.23  | 10  | 100     | 1.385         | 86.8 | 75-125        | 0             |      |           |      |
| Methylene chloride          | 47.46  | 10  | 50      | 0             | 94.9 | 75-125        | 0             |      |           |      |
| Styrene                     | 41.27  | 5.0 | 50      | 0             | 82.5 | 75-125        | 0             |      |           |      |
| Tetrachloroethene           | 45.79  | 5.0 | 50      | 0             | 91.6 | 75-125        | 0             |      |           |      |
| Toluene                     | 42.93  | 5.0 | 50      | 0             | 85.9 | 76-125        | 0             |      |           |      |
| trans-1,3-Dichloropropene   | 51.59  | 5.0 | 50      | 0             | 103  | 70-130        | 0             |      |           |      |
| Trichloroethene             | 49.88  | 5.0 | 50      | 0             | 99.8 | 71-120        | 0             |      |           |      |
| Vinyl acetate               | 84.52  | 10  | 100     | 0             | 84.5 | 75-125        | 0             |      |           |      |
| Vinyl chloride              | 42.55  | 2.0 | 50      | 0             | 85.1 | 60-135        | 0             |      |           |      |
| Xylenes, Total              | 132.9  | 15  | 150     | 0             | 88.6 | 75-125        | 0             |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 48.24  | 5.0 | 50      | 0             | 96.5 | 70-130        | 0             |      |           |      |
| Surr: 4-Bromofluorobenzene  | 48.52  | 5.0 | 50      | 0             | 97   | 70-130        | 0             |      |           |      |
| Surr: Dibromofluoromethane  | 48.95  | 5.0 | 50      | 0             | 97.9 | 70-130        | 0             |      |           |      |
| Surr: Toluene-d8            | 43.5   | 5.0 | 50      | 0             | 87   | 70-130        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

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U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

# QC BATCH REPORT

Batch ID: R18253 InstrumentID: VOA\_I

MSD Sample ID: 0401088-06AMSD Test Code: SW8260 Units: µg/L Analysis Date: 01/14/04 14:05

Client ID: MW-59 Run ID: VOA\_I\_040114A SeqNo: 417260 Prep Date: DF: 1

| Analyte                     | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|-----------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| 1,1,1-Trichloroethane       | 52.61  | 5.0 | 50      | 0             | 105  | 75-125        | 50.04         | 5.01  | 20        |      |
| 1,1,2,2-Tetrachloroethane   | 45.07  | 5.0 | 50      | 0             | 90.1 | 75-125        | 43.17         | 4.3   | 20        |      |
| 1,1,2-Trichloroethane       | 46.33  | 5.0 | 50      | 0             | 92.7 | 75-125        | 45.49         | 1.83  | 20        |      |
| 1,1-Dichloroethane          | 49.92  | 5.0 | 50      | 0             | 99.8 | 75-125        | 47.34         | 5.3   | 20        |      |
| 1,1-Dichloroethene          | 49.9   | 5.0 | 50      | 0             | 99.8 | 65-130        | 47.32         | 5.29  | 20        |      |
| 1,2-Dichloroethane          | 55.86  | 5.0 | 50      | 0             | 112  | 70-130        | 55.32         | 0.982 | 20        |      |
| 2-Butanone                  | 115.5  | 10  | 100     | 0             | 116  | 64-128        | 93.34         | 21.2  | 20        | R    |
| 2-Chloroethyl vinyl ether   | ND     | 10  | 100     | 0             | 0    | 75-125        | 0             | 0     | 20        | S    |
| 2-Hexanone                  | 93.83  | 10  | 100     | 0             | 93.8 | 72-124        | 91.76         | 2.23  | 20        |      |
| 4-Methyl-2-pentanone        | 104    | 10  | 100     | 0             | 104  | 75-125        | 97.94         | 6.03  | 20        |      |
| Acetone                     | 127.7  | 10  | 100     | 0             | 128  | 60-130        | 123.1         | 3.65  | 20        |      |
| Benzene                     | 50.17  | 5.0 | 50      | 2.387         | 95.6 | 76-127        | 48.45         | 3.49  | 20        |      |
| Bromodichloromethane        | 54.87  | 5.0 | 50      | 0             | 110  | 75-125        | 52.93         | 3.58  | 20        |      |
| Bromoform                   | 50.95  | 5.0 | 50      | 0             | 102  | 75-125        | 49.27         | 3.35  | 20        |      |
| Bromomethane                | 55.48  | 5.0 | 50      | 0             | 111  | 75-125        | 52.54         | 5.44  | 20        |      |
| Carbon disulfide            | 95.67  | 10  | 100     | 0             | 95.7 | 75-125        | 90.54         | 5.51  | 20        |      |
| Carbon tetrachloride        | 52.15  | 5.0 | 50      | 0             | 104  | 70-130        | 50.91         | 2.4   | 20        |      |
| Chlorobenzene               | 46.1   | 5.0 | 50      | 0             | 92.2 | 75-126        | 44.16         | 4.29  | 20        |      |
| Chloroethane                | 49.37  | 5.0 | 50      | 0             | 98.7 | 70-130        | 45            | 9.27  | 20        |      |
| Chloroform                  | 53.44  | 5.0 | 50      | 0             | 107  | 75-125        | 51.41         | 3.87  | 20        |      |
| Chloromethane               | 53.22  | 5.0 | 50      | 0             | 106  | 75-125        | 50.28         | 5.68  | 20        |      |
| cis-1,3-Dichloropropene     | 51.15  | 5.0 | 50      | 0             | 102  | 75-125        | 49.77         | 2.74  | 20        |      |
| Dibromochloromethane        | 51.3   | 5.0 | 50      | 0             | 103  | 75-125        | 49.04         | 4.5   | 20        |      |
| Ethylbenzene                | 47.03  | 5.0 | 50      | 1.653         | 90.8 | 75-125        | 44.39         | 5.77  | 20        |      |
| m,p-Xylene                  | 91.21  | 10  | 100     | 1.385         | 89.8 | 75-125        | 88.23         | 3.32  | 20        |      |
| Methylene chloride          | 49.64  | 10  | 50      | 0             | 99.3 | 75-125        | 47.46         | 4.5   | 20        |      |
| Styrene                     | 43.32  | 5.0 | 50      | 0             | 86.6 | 75-125        | 41.27         | 4.85  | 20        |      |
| Tetrachloroethene           | 47.5   | 5.0 | 50      | 0             | 95   | 75-125        | 45.79         | 3.65  | 20        |      |
| Toluene                     | 45.16  | 5.0 | 50      | 0             | 90.3 | 76-125        | 42.93         | 5.08  | 20        |      |
| trans-1,3-Dichloropropene   | 52.72  | 5.0 | 50      | 0             | 105  | 70-130        | 51.59         | 2.18  | 20        |      |
| Trichloroethene             | 51.66  | 5.0 | 50      | 0             | 103  | 71-120        | 49.88         | 3.51  | 20        |      |
| Vinyl acetate               | 96.09  | 10  | 100     | 0             | 96.1 | 75-125        | 84.52         | 12.8  | 20        |      |
| Vinyl chloride              | 45.69  | 2.0 | 50      | 0             | 91.4 | 60-135        | 42.55         | 7.1   | 20        |      |
| Xylenes, Total              | 137.5  | 15  | 150     | 0             | 91.7 | 75-125        | 132.9         | 3.41  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 49.39  | 5.0 | 50      | 0             | 98.8 | 70-130        | 48.24         | 2.34  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 48.72  | 5.0 | 50      | 0             | 97.4 | 70-130        | 48.52         | 0.424 | 20        |      |
| Surr: Dibromofluoromethane  | 49.94  | 5.0 | 50      | 0             | 99.9 | 70-130        | 48.95         | 2.01  | 20        |      |
| Surr: Toluene-d8            | 44.02  | 5.0 | 50      | 0             | 88   | 70-130        | 43.5          | 1.19  | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0401088-04A | 0401088-05A | 0401088-06A |
| 0401088-07A | 0401088-08A | 0401088-09A |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18247 InstrumentID: Wet Chemistry

MBLK Sample ID: WMBW1-011404 Test Code: E310.1 Units: mg/L Analysis Date: 01/14/04 0:00

Client ID: Run ID: WET CHEMISTRY\_0401 SeqNo: 417012 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 |         |               |      |               |               |      |           |      |
| Alkalinity, Total (As CaCO3)       | ND     | 5.0 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCSW1-011404 Test Code: E310.1 Units: mg/L Analysis Date: 01/14/04 0:00

Client ID: Run ID: WET CHEMISTRY\_0401 SeqNo: 417013 Prep Date: DF: 1

| Analyte                      | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Total (As CaCO3) | 980.6  | 5.0 | 1000    | 0             | 98.1 | 80-120        | 0             |      |           |      |

DUP Sample ID: 0401065-03D DUP Test Code: E310.1 Units: mg/L Analysis Date: 01/14/04 0:00

Client ID: Run ID: WET CHEMISTRY\_0401 SeqNo: 417017 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 407    | 5.0 | 0       | 0             | 0    | 0-0           | 407           | 0    | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0    | 20        |      |
| Alkalinity, Total (As CaCO3)       | 407    | 5.0 | 0       | 0             | 0    | 0-0           | 407           | 0    | 20        |      |

DUP Sample ID: 0401088-09B DUP Test Code: E310.1 Units: mg/L Analysis Date: 01/14/04 0:00

Client ID: NCL-34 Run ID: WET CHEMISTRY\_0401 SeqNo: 417038 Prep Date: DF: 1

| Analyte                            | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|------------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Alkalinity, Bicarbonate (As CaCO3) | 612.9  | 5.0 | 0       | 0             | 0    | 0-0           | 617.8         | 0.796 | 20        |      |
| Alkalinity, Carbonate (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Alkalinity, Hydroxide (As CaCO3)   | ND     | 5.0 | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Alkalinity, Total (As CaCO3)       | 612.9  | 5.0 | 0       | 0             | 0    | 0-0           | 617.8         | 0.796 | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0401088-01B | 0401088-02B | 0401088-03B |
| 0401088-04B | 0401088-05B | 0401088-06B |
| 0401088-07B | 0401088-08B | 0401088-09B |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: **R18251** InstrumentID: **IC201**

**MBLK** Sample ID: **WBLKW1-011304** Test Code: **E300** Units: **mg/L** Analysis Date: **01/13/04 14:45**

Client ID: Run ID: **IC201\_040113A** SeqNo: **417179** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.22   | 0.10 | 5       | 0             | 84.4 | 80-120        | 0             |      |           |      |

**LCS** Sample ID: **WLCSW1-011304** Test Code: **E300** Units: **mg/L** Analysis Date: **01/13/04 15:17**

Client ID: Run ID: **IC201\_040113A** SeqNo: **417180** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.39   | 0.50 | 10      | 0             | 93.9 | 80-120        | 0             |      |           |      |
| Fluoride                         | 1.94   | 0.10 | 2       | 0             | 97   | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.64   | 1.0  | 10      | 0             | 96.4 | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.38   | 0.10 | 5       | 0             | 108  | 80-120        | 0             |      |           |      |

**LCS** Sample ID: **WLCSDW1-01130** Test Code: **E300** Units: **mg/L** Analysis Date: **01/13/04 15:50**

Client ID: Run ID: **IC201\_040113A** SeqNo: **417181** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 9.36   | 0.50 | 10      | 0             | 93.6 | 80-120        | 9.39          | 0.32  | 20        |      |
| Fluoride                         | 1.97   | 0.10 | 2       | 0             | 98.5 | 80-120        | 1.94          | 1.53  | 20        |      |
| Sulfate                          | 9.58   | 1.0  | 10      | 0             | 95.8 | 80-120        | 9.64          | 0.624 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.24   | 0.10 | 5       | 0             | 105  | 80-120        | 5.38          | 2.64  | 20        |      |

**MS** Sample ID: **0401088-01BMS** Test Code: **E300** Units: **mg/L** Analysis Date: **01/13/04 17:27**

Client ID: **MW-53** Run ID: **IC201\_040113A** SeqNo: **417184** Prep Date: DF: **1**

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 68.74  | 0.50 | 10      | 58.31         | 104  | 75-125        | 0             |      |           | EO   |
| Fluoride                         | 3.34   | 0.10 | 2       | 1.46          | 94   | 75-125        | 0             |      |           |      |
| Sulfate                          | 1517   | 1.0  | 10      | 1534          | -163 | 75-125        | 0             |      |           | SEO  |
| Nitrate/Nitrite (as N)           | 3.94   | 0.10 | 4       | 0             | 98.5 | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.46   | 0.10 | 5       | 0             | 109  | 80-120        | 0             |      |           |      |

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18251 InstrumentID: IC201

|                                  |                           |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| MSD                              | Sample ID: 0401088-01BMSD |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 01/13/04 18:00 |           |      |
| Client ID: MW-53                 | Run ID: IC201_040113A     |      |         | SeqNo: 417185   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                    | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Chloride                         | 68.67                     | 0.50 | 10      | 58.31           | 104  | 75-125        | 68.74         | 0.102                         | 20        | EO   |
| Fluoride                         | 3.31                      | 0.10 | 2       | 1.46            | 92.5 | 75-125        | 3.34          | 0.902                         | 20        |      |
| Sulfate                          | 1519                      | 1.0  | 10      | 1534            | -147 | 75-125        | 1517          | 0.108                         | 20        | SEO  |
| Nitrate/Nitrite (as N)           | 3.92                      | 0.10 | 4       | 0               | 98   | 75-125        | 3.94          | 0.509                         | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.56                      | 0.10 | 5       | 0               | 111  | 80-120        | 5.46          | 1.81                          | 20        |      |

|                                  |                           |      |         |                 |      |               |               |                               |           |      |
|----------------------------------|---------------------------|------|---------|-----------------|------|---------------|---------------|-------------------------------|-----------|------|
| DUP                              | Sample ID: 0401088-01BDUP |      |         | Test Code: E300 |      | Units: mg/L   |               | Analysis Date: 01/13/04 16:55 |           |      |
| Client ID: MW-53                 | Run ID: IC201_040113A     |      |         | SeqNo: 417183   |      | Prep Date:    |               | DF: 1                         |           |      |
| Analyte                          | Result                    | PQL  | SPK Val | SPK Ref Value   | %REC | Control Limit | RPD Ref Value | %RPD                          | RPD Limit | Qual |
| Fluoride                         | 1.43                      | 0.10 | 0       | 0               | 0    | 0-0           | 1.46          | 2.08                          | 20        |      |
| Nitrate/Nitrite (as N)           | ND                        | 0.10 | 0       | 0               | 0    | 0-0           | 0             | 0                             | 20        |      |
| Surr: Dichloroacetic acid (surr) | 5.28                      | 0.10 | 5       | 0               | 106  | 80-120        | 5.28          | 0                             | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0401088-01B | 0401088-02B | 0401088-03B |
| 0401088-04B | 0401088-05B | 0401088-06B |
| 0401088-07B | 0401088-08B | 0401088-09B |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

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E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18281 InstrumentID: UV-2101PC

MBLK Sample ID: WMBW1-011604 Test Code: E335.3 Units: mg/L Analysis Date: 01/16/04 0:00

Client ID: Run ID: UV-2101PC\_040116A SeqNo: 417865 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 |         |               |      |               |               |      |           |      |

LCS Sample ID: WLCW1-011604 Test Code: E335.3 Units: mg/L Analysis Date: 01/16/04 0:00

Client ID: Run ID: UV-2101PC\_040116A SeqNo: 417866 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.2071 | 0.020 | 0.2     | 0             | 104  | 80-120        | 0             |      |           |      |

MS Sample ID: 0401088-01D MS Test Code: E335.3 Units: mg/L Analysis Date: 01/16/04 0:00

Client ID: MW-53 Run ID: UV-2101PC\_040116A SeqNo: 417882 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1938 | 0.020 | 0.2     | 0.002         | 95.9 | 75-125        | 0             |      |           |      |

MSD Sample ID: 0401088-01D MSD Test Code: E335.3 Units: mg/L Analysis Date: 01/16/04 0:00

Client ID: MW-53 Run ID: UV-2101PC\_040116A SeqNo: 417883 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | 0.1985 | 0.020 | 0.2     | 0.002         | 98.2 | 75-125        | 0.1938        | 2.4  | 25        |      |

DUP Sample ID: 0401088-01D DUP Test Code: E335.3 Units: mg/L Analysis Date: 01/16/04 0:00

Client ID: MW-53 Run ID: UV-2101PC\_040116A SeqNo: 417881 Prep Date: DF: 1

| Analyte | Result | PQL   | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Cyanide | ND     | 0.020 | 0       | 0             | 0    | 0-0           | 0.002         | 0    | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0401088-01D | 0401088-02D | 0401088-03D |
| 0401088-04D | 0401088-05D | 0401088-06D |
| 0401088-07D | 0401088-08D | 0401088-09D |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
 Work Order: 0401088  
 Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18369 InstrumentID: IC201

MBLK Sample ID: WBLKW1-012104 Test Code: E300 Units: mg/L Analysis Date: 01/22/04 2:16

Client ID: Run ID: IC201\_040121A SeqNo: 419927 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | ND     | 0.50 |         |               |      |               |               |      |           |      |
| Fluoride                         | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Sulfate                          | ND     | 1.0  |         |               |      |               |               |      |           |      |
| Nitrate/Nitrite (as N)           | ND     | 0.10 |         |               |      |               |               |      |           |      |
| Surr: Dichloroacetic acid (surr) | 4.65   | 0.10 | 5       | 0             | 93   | 80-120        | 0             |      |           |      |

LCS Sample ID: WLCSW1-012104 Test Code: E300 Units: mg/L Analysis Date: 01/22/04 2:49

Client ID: Run ID: IC201\_040121A SeqNo: 419928 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.25   | 0.50 | 10      | 0             | 92.5 | 80-120        | 0             |      |           |      |
| Fluoride                         | 1.98   | 0.10 | 2       | 0             | 99   | 80-120        | 0             |      |           |      |
| Sulfate                          | 9.77   | 1.0  | 10      | 0             | 97.7 | 80-120        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 5.14   | 0.10 | 5       | 0             | 103  | 80-120        | 0             |      |           |      |

LCSD Sample ID: WLCSDW1-01210 Test Code: E300 Units: mg/L Analysis Date: 01/22/04 3:21

Client ID: Run ID: IC201\_040121A SeqNo: 419930 Prep Date: DF: 1

| Analyte                          | Result | PQL  | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|------|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 9.45   | 0.50 | 10      | 0             | 94.5 | 80-120        | 9.25          | 2.14 | 20        |      |
| Fluoride                         | 2      | 0.10 | 2       | 0             | 100  | 80-120        | 1.98          | 1.01 | 20        |      |
| Sulfate                          | 9.67   | 1.0  | 10      | 0             | 96.7 | 80-120        | 9.77          | 1.03 | 20        |      |
| Surr: Dichloroacetic acid (surr) | 4.98   | 0.10 | 5       | 0             | 99.6 | 80-120        | 5.14          | 3.16 | 20        |      |

MS Sample ID: 0401088-01BMS Test Code: E300 Units: mg/L Analysis Date: 01/22/04 4:59

Client ID: MW-53 Run ID: IC201\_040121A SeqNo: 419933 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Chloride                         | 954    | 50  | 1000    | 160           | 79.4 | 75-125        | 0             |      |           |      |
| Fluoride                         | 200    | 10  | 200     | 0             | 100  | 75-125        | 0             |      |           |      |
| Sulfate                          | 2060   | 100 | 1000    | 1137          | 92.3 | 75-125        | 0             |      |           |      |
| Nitrate/Nitrite (as N)           | 383    | 10  | 400     | 0             | 95.8 | 75-125        | 0             |      |           |      |
| Surr: Dichloroacetic acid (surr) | 495    | 10  | 500     | 0             | 99   | 80-120        | 0             |      |           |      |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company  
Work Order: 0401088  
Project: NCL/TEL

## QC BATCH REPORT

Batch ID: R18369 InstrumentID: IC201

MSD Sample ID: 0401088-01BMSD Test Code: E300 Units: mg/L Analysis Date: 01/22/04 5:31

Client ID: MW-53 Run ID: IC201\_040121A SeqNo: 419934 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 943    | 50  | 1000    | 160           | 78.3 | 75-125        | 954           | 1.16  | 20        |      |
| Fluoride                         | 197    | 10  | 200     | 0             | 98.5 | 75-125        | 200           | 1.51  | 20        |      |
| Sulfate                          | 2040   | 100 | 1000    | 1137          | 90.3 | 75-125        | 2060          | 0.976 | 20        |      |
| Nitrate/Nitrite (as N)           | 377    | 10  | 400     | 0             | 94.2 | 75-125        | 383           | 1.58  | 20        |      |
| Surr: Dichloroacetic acid (surr) | 484    | 10  | 500     | 0             | 96.8 | 80-120        | 495           | 2.25  | 20        |      |

DUP Sample ID: 0401088-08BDUP Test Code: E300 Units: mg/L Analysis Date: 01/22/04 10:24

Client ID: NCL-33 Run ID: IC201\_040121A SeqNo: 419916 Prep Date: DF: 10

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|--------|-----------|------|
| Chloride                         | 301.2  | 5.0 | 0       | 0             | 0    | 0-0           | 301.7         | 0.166  | 20        |      |
| Fluoride                         | 4.8    | 1.0 | 0       | 0             | 0    | 0-0           | 4.7           | 2.11   | 20        |      |
| Sulfate                          | 307    | 10  | 0       | 0             | 0    | 0-0           | 307.1         | 0.0326 | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 1.0 | 0       | 0             | 0    | 0-0           | 0             | 0      | 20        |      |
| Surr: Dichloroacetic acid (surr) | 49.7   | 1.0 | 50      | 0             | 99.4 | 80-120        | 49.5          | 0.403  | 20        |      |

DUP Sample ID: 0401088-01BDUP Test Code: E300 Units: mg/L Analysis Date: 01/22/04 4:26

Client ID: MW-53 Run ID: IC201\_040121A SeqNo: 419932 Prep Date: DF: 100

| Analyte                          | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
|----------------------------------|--------|-----|---------|---------------|------|---------------|---------------|-------|-----------|------|
| Chloride                         | 159    | 50  | 0       | 0             | 0    | 0-0           | 160           | 0.627 | 20        |      |
| Fluoride                         | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Sulfate                          | 1131   | 100 | 0       | 0             | 0    | 0-0           | 1137          | 0.529 | 20        |      |
| Nitrate/Nitrite (as N)           | ND     | 10  | 0       | 0             | 0    | 0-0           | 0             | 0     | 20        |      |
| Surr: Dichloroacetic acid (surr) | 499    | 10  | 500     | 0             | 99.8 | 80-120        | 514           | 2.96  | 20        |      |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 0401088-01B | 0401088-02B | 0401088-03B |
| 0401088-04B | 0401088-05B | 0401088-06B |
| 0401088-08B | 0401088-09B |             |

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

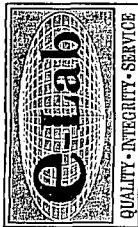
R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range



e-Lab, Inc.  
10450 Stancil Rd. #210  
Houston, Texas 77099  
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(Fax) 281.530.5887

## Chain of Custody Form

Page 1 of 1

☐ e-Lab, Inc.  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

| Customer Information |                    |         |      | Project Information |       |           |   | Parameter/Method Request for Analysis |   |   |   |   |   |   |   |   |      |  |  |
|----------------------|--------------------|---------|------|---------------------|-------|-----------|---|---------------------------------------|---|---|---|---|---|---|---|---|------|--|--|
| Purchase Order       | Project Name       |         |      | Project Number      |       |           |   | A                                     |   |   |   |   |   |   |   |   |      |  |  |
| Work Order           | Project Number     |         |      | Bill To Company     |       |           |   | B                                     |   |   |   |   |   |   |   |   |      |  |  |
| Company Name         | Invoice Attn.      |         |      | Address             |       |           |   | C                                     |   |   |   |   |   |   |   |   |      |  |  |
| Send Report To       | City/State/Zip     |         |      | Phone               |       |           |   | D                                     |   |   |   |   |   |   |   |   |      |  |  |
| Address              | Fax                |         |      | City/State/Zip      |       |           |   | E                                     |   |   |   |   |   |   |   |   |      |  |  |
| City/State/Zip       | Phone              |         |      | Fax                 |       |           |   | F                                     |   |   |   |   |   |   |   |   |      |  |  |
| Phone                | City/State/Zip     |         |      | Phone               |       |           |   | G                                     |   |   |   |   |   |   |   |   |      |  |  |
| Fax                  | City/State/Zip     |         |      | Phone               |       |           |   | H                                     |   |   |   |   |   |   |   |   |      |  |  |
| e-Mail Address       | City/State/Zip     |         |      | Phone               |       |           |   | I                                     |   |   |   |   |   |   |   |   |      |  |  |
|                      | City/State/Zip     |         |      | Phone               |       |           |   | J                                     |   |   |   |   |   |   |   |   |      |  |  |
| No.                  | Sample Description | Date    | Time | Matrix              | Pres. | # Bottles | A | B                                     | C | D | E | F | G | H | I | J | Hold |  |  |
| 1                    | MW-53              | 1/12/04 | 0820 | L                   | 4     | 8         | X |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 2                    | NCL-49             |         | 0945 |                     |       |           | X |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 3                    | NCL-32             |         | 1040 |                     |       |           | X |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 4                    | MW-55              |         | 1120 |                     |       |           | X |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 5                    | MW-54A             |         | 1140 |                     |       |           | X |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 6                    | MW-59              |         | 1315 |                     |       |           | X |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 7                    | NCL-44             |         | 1345 |                     |       |           | X |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 8                    | NCL-33             |         | 1400 |                     |       |           | X |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 9                    | NCL-34             |         | 1530 |                     |       |           | X |                                       |   |   |   |   |   |   |   |   |      |  |  |
| 10                   |                    |         |      |                     |       |           |   |                                       |   |   |   |   |   |   |   |   |      |  |  |

| Sampler(s): Please Print & Sign |                   | Shipment Method:               |                   | Required Turnaround Time:                                           |  | Results Due Date: |  |
|---------------------------------|-------------------|--------------------------------|-------------------|---------------------------------------------------------------------|--|-------------------|--|
|                                 |                   |                                |                   |                                                                     |  |                   |  |
| Relinquished by: <u>Byrd</u>    |                   | Received by: <u>RECHASACHA</u> |                   | 5 Wk Days                                                           |  | 24 Hour           |  |
| Date: <u>1/12/04</u>            | Time: <u>1615</u> | Date: <u>1/30/04</u>           | Time: <u>0800</u> | Notes: <u>NCL-33 contains Mis-labeled, correction noted on bags</u> |  |                   |  |
| Relinquished by: <u>Byrd</u>    |                   | Received by: <u>RECHASACHA</u> |                   | 5 Wk Days                                                           |  | 24 Hour           |  |
| Date: <u>1/12/04</u>            | Time: <u>1615</u> | Date: <u>1/30/04</u>           | Time: <u>0800</u> | Notes: <u>NCL-33 contains Mis-labeled, correction noted on bags</u> |  |                   |  |
| Logged by (Laboratory):         |                   | Checked by (Laboratory):       |                   | QC Package: (Check Box Below)                                       |  |                   |  |
|                                 |                   |                                |                   | Level II: Standard QC                                               |  |                   |  |
|                                 |                   |                                |                   | Level III: Standard QC + Raw Data                                   |  |                   |  |
|                                 |                   |                                |                   | Level IV: SW846 Methods/CLP                                         |  |                   |  |
|                                 |                   |                                |                   | Other:                                                              |  |                   |  |

Note: Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.

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Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 1/13/2004 8:40:00 AM

Work Order Number 0401088

Received by: RSZ

Checklist completed by

RICHARD SANCHEZ 1-13-04  
Signature Date

Reviewed by

[Signature] 1/14/04  
Initials Date

Matrix: W

Carrier name FedEx

|                                                         |                                         |                                        |                                                 |
|---------------------------------------------------------|-----------------------------------------|----------------------------------------|-------------------------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | Not Present <input type="checkbox"/>            |
| Custody seals intact on shipping container/cooler?      | Yes <input type="checkbox"/>            | No <input type="checkbox"/>            | Not Present <input checked="" type="checkbox"/> |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/>            | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Chain of custody agrees with sample labels?             | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |                                                 |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                 |
| Temperature(s)/Thermometer(s):                          | <u>2.2c, 3.5c, 2.7c</u>                 | <u>002</u>                             |                                                 |
| Water - VOA vials have zero headspace?                  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | No VOA vials submitted <input type="checkbox"/> |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | N/A <input type="checkbox"/>                    |

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Login Notes: Client made note of ID difference for NCL-33; logged in as NCL-33 per clients note.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_