

GW - 028

**ANNUAL
REPORT**

GW Monitor Wells

2009

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Friday, April 16, 2010 11:39 AM
To: 'Moore, Darrell'
Subject: Navajo Refining Company- Artesia (GW-028) & Lovington (GW-014) Refineries Annual Reports and "Ground Water & Treatment System Annual Monitoring Report for Lea Refinery (Lovington)"

Darrell:

The OCD is in receipt of the above subject reports.

Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
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(Pollution Prevention Guidance is under "Publications")



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April 15, 2010

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division,
Environmental Bureau
1220 South St. Francis Dr.,
Santa Fe, New Mexico 87505

RE: 2009 ANNUAL REPORT FOR ARTESIA (GW-028)
NAVAJO REFINING COMPANY, LLC

Dear Carl,

Enclosed, please find the annual report for Navajo Refining Company Discharge Permit GW-028. If there are any questions concerning these submissions, please call me at 575-746-5281. Thank you for your attention to this matter.

Sincerely,
NAVAJO REFINING COMPANY, LLC

Darrell Moore
Environmental Manager for Water and Waste

Encl:

File: Artesia OCD Discharge Permit 5E4B

**2009 ANNUAL REPORT
NAVAJO REFINING COMPANY
DISCHARGE PERMIT GW-028**

EXECUTIVE SUMMARY

This report is being written as a requirement of Navajo Refining Company's Discharge Permit GW-028 which states that an Annual Report will be written by April 15 of each year and will include at a minimum :

- A. A summary of all major refinery activities or events.
- B. Results of all sampling or monitoring events.
- C. Summary of the sump and underground wastewater lines tested.
- D. Summary of all leaks, spills, and releases and corrective action taken.
- E. Summary of discovery of new groundwater contamination.
- F. Summary and copy of all EPA/NMED RCRA Activity.

2009 was an eventful year at Navajo with the major highlight being an expansion that boosted production at the refinery to 100,000 bbls a day. This expansion included building new units, new tanks, and adding infrastructure to accommodate the expansion. While most of the construction of these units occurred in 2008, the actual start-ups occurred in 2009.

We also performed the two semi-annual sampling events that include over 100 monitor wells stretching from the refinery east to the evaporation ponds. (Figure 1) Those results are included in the **"2009 Annual Groundwater Report"** that is sent to OCD under separate cover. However, highlights and results in the form of a spreadsheet will be included here. (Table 1)

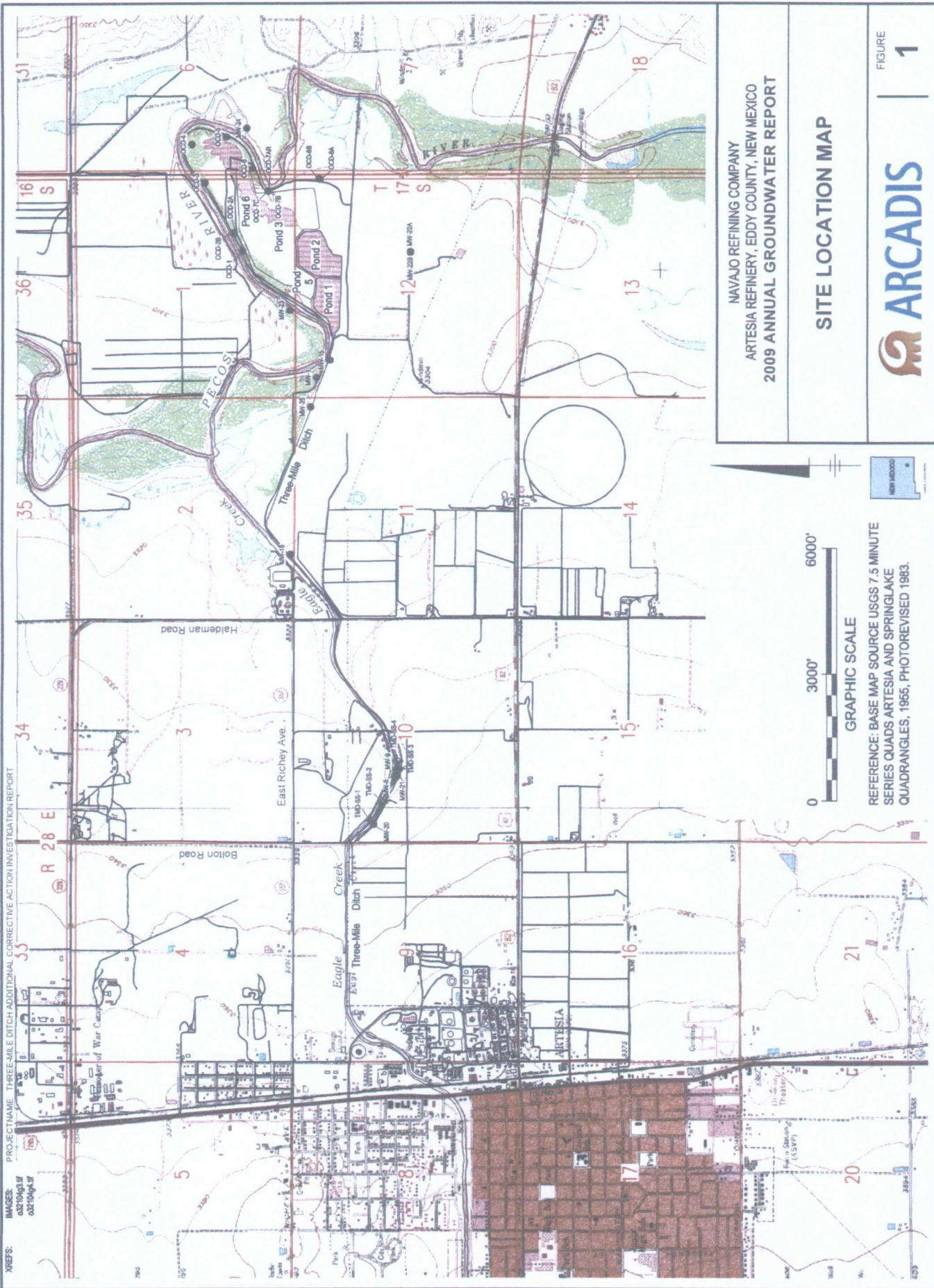
As part of our ongoing work, we test 20% of the sumps and underground wastewater lines every year. By doing this, we ensure that all lines are tested every 5 years. A spreadsheet and analysis is included later in this report that summarizes those test results and any repairs that were necessary. (Table 4)

Unfortunately, during the year Navajo experienced several spills and fires that required reporting. Navajo's policy on spills is to remove contaminated soil and dispose. Reportable spills, releases and fires numbered twenty-one (21). There were eleven (11) spills ranging from hydrocarbon to mercury to Process WasteWater and ten (10) fires

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PROJECT NAME: THREE-MILE DITCH ADDITIONAL CORRECTIVE ACTION INVESTIGATION REPORT

XREFS: IMAGES: 03210463.dwg
 03210464.dwg



NAVAJO REFINING COMPANY
 ARTESIA REFINERY, EDDY COUNTY, NEW MEXICO
 2009 ANNUAL GROUNDWATER REPORT

SITE LOCATION MAP



FIGURE
 1

during 2009. The hydrocarbon spills, of which there were four (4) accounted for a total of 515 barrels of hydrocarbons spilled with 260 of those barrels recovered by vacuum truck. We also had five (5) spills of Process Wastewater resulting a loss of 245 bbls with 193 of those bbls recovered by vacuum truck. We also had two spills of K170 hazardous waste with a loss of 335 bbls total and a recovery of 268 bbls by vacuum truck. Finally, we discovered an historical mercury spill in the south plant. Each of those C-141's is included.

During the year, we found no new groundwater contamination. We continue to remediate known areas of contamination and have upgraded our remediation program to be more aggressive in recovering free phase hydrocarbons. This includes hiring one person whose sole job is to maintain recovery wells, bail wells that have no pump, and maintain records of those activities. Those steps will be expanded on in the section on remediation.

MAJOR REFINERY ACTIVITIES

In 2009, Navajo finished construction on several new units that increased our output to 100,000 bbls a day. These units include a Mild Hydrocracking Unit (MHU), a Hydrogen Unit, a new ROSE Unit, and a new Sulphur Recovery Unit (SRU).

The Mild Hydrocracking Unit takes Gas Oil and partially “cracks” part of this feed into naphtha and diesel. The rest of the feed is sweetened for FCC feed. The Mild Hydrocracker uses hydrogen to “crack” the molecules in the gas oil. That is why a new hydrogen unit was also built.

The **Residuum Oil Supercritical Extraction Unit** or ROSE Unit will deasphalt vacuum residue. The deasphalted oil (DAO) extracted by the ROSE process is a premium feed for the fluid catalytic cracking (FCC) unit. This gives Navajo a cost effective means to produce FCC feedstock from asphalt which enables us to make more gasoline from each barrel of crude. Additionally, the ROSE unit enables Navajo to process a wider variety of crudes and improves our asphalt quality.

The new Sulphur Recovery Unit (SRU) is a 100 ton/day SRU that removes sulphur from our products. As you probably know, Navajo already had one SRU. The new SRU is for added sulphur recovery capacity due to the expansion.

RESULTS OF SAMPLING AND MONITORING EVENTS

The activities performed during 2009 included installation of additional groundwater monitoring wells in support of various investigations, as well as collection of field data, collection of groundwater samples for chemical analyses, and remediation system monitoring. Analytical results are shown in Table 1. Summary of field observations are shown in Table 2. We have also included the RO Reject analytical data in Table 3. There are no new surprises in this stream as it has stayed consistent for well over 10 years. Some exceptions to the planned groundwater monitoring occurred, as follows:

Table 1

Miscellaneous

Table 1
2009 Groundwater Monitoring Program Analytical Results
Navajo Refinery, Artesia, New Mexico

[illegible]

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| TPH | | | Metals | | | | | | | | | | Volatile Organic Compounds | | | | | | | | | | |
|----------|--------|------------|--------|----------|---------|--------|-------|---------|----------|------|--------|-----------|----------------------------|---------|----------|--------|------|-------------------------|-------------------------|------------------|------------------------------------|-----------------------------|---------|
| Location | Dup | Date | GRO | Aluminum | Arsenic | Barium | Boron | Cadmium | Chromium | Iron | Lead | Magnesium | Manganese | Mercury | Selenium | Silver | Zinc | 1,2,4-Trimethyl benzene | 1,3,5-Trimethyl benzene | 2-Butanone (MEK) | 2-Phenyl butane (sec-butylbenzene) | 4-Methyl-2-Pentanone (MIBK) | Acetone |
| MW-62 | | 04/14/2009 | 7 | 10.2 | <0.012 | 0.445 | | <0.004 | <0.01 | | <0.01 | 106 | | <0.0002 | <0.01 | <0.01 | | 140 | 11 | <10 | 29 | <10 | <10 |
| MW-63 | | 10/01/2009 | 12 | 6.61 | <0.005 | 0.89 | | <0.002 | <0.005 | | <0.005 | 80.8 | | <0.0002 | <0.005 | <0.005 | | 80 | 8.4 | <10 | 7.8 | <10 | <10 |
| MW-65 | | 04/14/2009 | 97 | 12 | <0.01 | 1.45 | | <0.004 | <0.01 | | <0.01 | 86.5 | | <0.0002 | <0.01 | <0.01 | | 19 | <5.0 | <10 | 14 | <10 | <10 |
| MW-66 | | 09/23/2009 | 0.59 | 12.5 | <0.005 | 1.61 | | <0.002 | <0.005 | | <0.005 | 86.4 | | <0.0002 | <0.005 | <0.005 | | 7.2 | <5.0 | <10 | 5.4 | <10 | <10 |
| MW-67 | | 04/14/2009 | 2.7 | | <0.01 | 0.165 | | <0.004 | <0.01 | | <0.01 | 108 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | 9.2 | <10 | <10 |
| MW-67 | | 10/01/2009 | 0.67 | 0.368 | <0.005 | 0.143 | | <0.002 | <0.005 | | <0.005 | 142 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-68 | | 04/03/2009 | <0.05 | | <0.01 | 0.0122 | | <0.004 | <0.01 | | <0.01 | 125 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-68 | | 09/23/2009 | <0.05 | | 0.00566 | 0.0156 | | <0.002 | <0.005 | | <0.005 | 202 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-70 | | 04/02/2009 | 0.8 | 1.42 | 0.0213 | 0.0148 | | <0.004 | <0.01 | | <0.01 | 178 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-70 | | 09/22/2009 | 0.28 | 1.21 | 0.0169 | 0.0164 | | <0.004 | <0.01 | | <0.01 | 153 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-72 | | 03/30/2009 | 0.56 | 110 | 0.0909 | 0.0147 | | <0.004 | <0.01 | | <0.01 | 305 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-72 | | 09/18/2009 | 0.49 | 0.299 | 0.0125 | 0.018 | | <0.002 | <0.005 | | <0.005 | 311 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-73 | | 03/30/2009 | 0.38 | 12 | 0.0707 | 0.0116 | | <0.004 | <0.01 | | <0.01 | 215 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-73 | | 09/18/2009 | 1.3 | 0.226 | 0.0112 | 0.0125 | | <0.002 | <0.005 | | <0.005 | 194 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-74 | | 03/30/2009 | 0.6 | 6.87 | 0.0127 | 0.0141 | | <0.004 | <0.01 | | <0.01 | 132 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-74 | | 09/18/2009 | 0.4 | 1.57 | 0.0102 | 0.0163 | | <0.004 | <0.01 | | <0.01 | 160 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-75 | | 03/30/2009 | 0.58 | 5.59 | 0.0379 | 0.0177 | | <0.004 | <0.01 | | <0.01 | 82.7 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-75 | Dup #1 | 09/18/2009 | 0.16 | 3.76 | 0.0374 | 0.0149 | | <0.002 | <0.005 | | <0.005 | 103 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-75 | | 09/18/2009 | 0.62 | 3.84 | 0.0365 | 0.014 | | <0.002 | <0.005 | | <0.005 | 98.4 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-76 | | 03/31/2009 | 4.2 | 1.44 | 0.0677 | 0.0136 | | <0.004 | <0.01 | | <0.01 | 155 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-76 | | 09/17/2009 | 0.65 | 1.99 | 0.0723 | 0.0135 | | <0.002 | <0.005 | | <0.005 | 171 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-77 | | 03/31/2009 | 5.4 | 2.14 | 0.0831 | 0.0131 | | <0.004 | <0.01 | | <0.01 | 189 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-77 | | 09/17/2009 | 4.8 | 1.53 | 0.0836 | 0.0129 | | <0.004 | <0.01 | | <0.01 | 237 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-78 | | 03/31/2009 | 7.2 | 0.28 | 0.0267 | 0.0211 | | <0.004 | <0.01 | | <0.01 | 184 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-78 | | 09/17/2009 | 0.57 | 0.628 | 0.0268 | 0.0328 | | <0.002 | <0.005 | | <0.01 | 248 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-79 | | 03/31/2009 | 0.54 | 0.235 | 0.0207 | 0.0186 | | <0.004 | <0.01 | | <0.01 | 140 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-79 | Dup #1 | 03/31/2009 | 0.57 | 0.229 | 0.023 | 0.0175 | | <0.0012 | <0.01 | | <0.01 | 166 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-79 | | 09/18/2009 | 0.91 | 0.183 | 0.0165 | 0.0182 | | <0.002 | <0.005 | | <0.005 | 183 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-80 | | 03/31/2009 | 0.11 | 0.0528 | 0.0111 | 0.0157 | | <0.004 | <0.01 | | <0.01 | 134 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-80 | | 09/18/2009 | 0.15 | 0.087 | 0.0146 | 0.0173 | | <0.002 | <0.005 | | <0.01 | 145 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-81 | | 03/31/2009 | 0.59 | 0.138 | 0.0164 | 0.0185 | | <0.004 | <0.01 | | <0.01 | 149 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-81 | | 09/18/2009 | 0.34 | 0.135 | 0.0147 | 0.0186 | | <0.002 | <0.005 | | <0.005 | 166 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-82 | | 03/31/2009 | 2.6 | 1.66 | 0.0198 | 0.0255 | | <0.004 | <0.01 | | <0.01 | 79.1 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-82 | | 09/12/2009 | 3 | 1.61 | 0.0184 | 0.0214 | | <0.002 | <0.005 | | <0.005 | 78.4 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-83 | | 03/31/2009 | 7.3 | 5.32 | 0.132 | 0.0159 | | <0.004 | <0.01 | | <0.01 | 173 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-83 | | 09/12/2009 | 0.45 | 0.298 | 0.0695 | 0.0185 | | <0.002 | <0.005 | | <0.005 | 379 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-84 | | 03/31/2009 | 1.1 | 33.9 | 0.111 | 0.0162 | | <0.004 | <0.01 | | <0.01 | 481 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-84 | | 09/12/2009 | 10 | 1.36 | 0.142 | 0.0173 | | <0.002 | <0.005 | | <0.01 | 512 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-87 | | 04/06/2009 | 0.27 | 0.0518 | 0.0725 | 0.0199 | | <0.002 | <0.005 | | <0.005 | 568 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-87 | | 09/22/2009 | 0.23 | 0.0909 | 0.0763 | 0.021 | | <0.002 | <0.005 | | <0.005 | 569 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-88 | | 04/06/2009 | 0.45 | 0.298 | 0.071 | <0.01 | | <0.004 | <0.01 | | <0.01 | 176 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-88 | Dup #4 | 04/06/2009 | 0.45 | 0.301 | 0.0763 | <0.01 | | <0.0012 | <0.01 | | <0.01 | 166 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-88 | | 09/23/2009 | 0.54 | 0.242 | 0.0713 | 0.0095 | | <0.002 | <0.005 | | <0.005 | 174 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-88 | | 09/23/2009 | 0.43 | 0.226 | 0.0713 | 0.0095 | | <0.002 | <0.005 | | <0.005 | 147 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-89 | | 04/02/2009 | 0.14 | | 0.0197 | 0.0131 | | <0.004 | <0.01 | | <0.01 | 146 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-89 | | 09/17/2009 | 0.084 | | 0.0763 | 0.0137 | | <0.002 | <0.005 | | <0.005 | 129 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-89 | | 04/15/2009 | 0.19 | 0.44 | <0.01 | 0.0218 | | <0.004 | <0.01 | | <0.01 | 266 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-90 | | 10/01/2009 | 0.21 | 0.244 | 0.00747 | 0.0156 | | <0.002 | <0.005 | | <0.005 | 276 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-91 | | 04/15/2009 | 12 | 15.3 | <0.01 | 0.0934 | | <0.004 | <0.01 | | <0.01 | 151 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |
| MW-91 | | 10/01/2009 | 2.6 | 27.5 | 0.00551 | 0.04 | | <0.002 | <0.005 | | <0.005 | 184 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 | <10 |

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| Location | Dup | TPH | | Metals | | | | | | | | | | | | | | Volatile Organic Compounds | | | | |
|------------------|---------|-------------|-------------|------------------|-----------------|----------------|---------------|-----------------|------------------|--------------|--------------|-------------------|-------------------|-----------------|------------------|----------------|--------------|--|--|-----------------------------|---|--|
| | | DRO mg/L | GRO mg/L | Aluminum mg/L | Arsenic mg/L | Barium mg/L | Boron mg/L | Cadmium mg/L | Chromium mg/L | Iron mg/L | Lead mg/L | Magnesium mg/L | Manganese mg/L | Mercury mg/L | Selenium mg/L | Silver mg/L | Zinc mg/L | 1,2,4- Trimethyl benzene ug/L | 1,3,5- Trimethyl benzene ug/L | 2-Butanone (MEK) ug/L | 2-Phenyl butane (sec- butylbenzene) ug/L | 4-Methyl-2- Pentanone (MIBK) ug/L |
| Units: COWSL: | | 2.00E-01 | -- | 5.00E+00 | 1.00E-02 | 2.00E+00 | 7.50E-01 | 1.00E-03 | 1.00E-01 | 1.00E+00 | 1.50E-02 | -- | 2.00E-01 | 2.00E-03 | 5.00E-02 | 5.00E-01 | 1.00E+01 | -- | -- | -- | -- | -- |
| Source: | | NMED TPH | -- | WQCC Ir | EPA MCL | EPA MCL | WQCC Ir | EPA MCL | EPA MCL | WQCC Dom | EPA MCL | -- | WQCC Dom | EPA MCL | EPA MCL | WQCC HH | WQCC HH | -- | -- | NMED TW | -- | NMED TW |
| Date | | | | | | | | | | | | | | | | | | | | | | |
| MW-92 | | 4.4 | 6.79 | | <0.01 | 0.313 | | <0.004 | <0.01 | | <0.01 | 162 | | <0.0002 | <0.01 | <0.01 | | 6.6 | <5.0 | <10 | 13 | <10 |
| MW-92 | | 4.9 | 9.45 | | 0.0679 | 2.07 | | <0.002 | <0.005 | | <0.005 | 156 | | <0.0002 | <0.005 | <0.005 | | <5.0 | 12 | <10 | 6.3 | <10 |
| MW-93 | | 1.2 | 10.4 | | <0.01 | 0.123 | | <0.004 | 0.0413 | | 0.0392 | 97.2 | | <0.0002 | <0.01 | <0.01 | | 300 | 25 | <10 | 12 | <10 |
| MW-93 | | 1.3 | 5.08 | | 0.0067 | | | <0.002 | <0.005 | | <0.005 | 73.7 | | <0.0002 | <0.005 | <0.005 | | 190 | 16 | <10 | 5.6 | <10 |
| MW-95 | | 1.6 | 0.273 | | <0.01 | 0.0756 | | <0.004 | <0.01 | | <0.01 | 144 | | <0.0001 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| MW-95 | | 1.2 | 0.113 | | <0.005 | 0.0508 | | <0.002 | <0.005 | | <0.005 | 139 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| MW-96 | | 2.4 | 37.3 | | <0.01 | 0.146 | | <0.004 | <0.01 | | <0.01 | 126 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| MW-96 | Dup #8 | 1.5 | 35.2 | | <0.01 | 0.152 | | <0.004 | <0.005 | | <0.01 | 126 | | <0.0004 | <0.005 | <0.005 | | <5.0 | 20 | <10 | 17 | <10 |
| MW-96 | | 1.6 | 38 | | 0.00568 | 0.102 | | <0.002 | <0.005 | | <0.005 | 146 | | <0.0002 | <0.005 | <0.005 | | <5.0 | 11 | <10 | 7.7 | <10 |
| MW-96 | Dup #9 | 1.3 | 38 | | 0.00566 | | | <0.002 | <0.005 | | <0.005 | 147 | | <0.0002 | <0.005 | <0.005 | | <5.0 | 11 | <10 | 8.4 | <10 |
| MW-98 | | 2.5 | 22.9 | | <0.01 | 0.104 | | <0.004 | <0.01 | | <0.01 | 240 | | <0.0002 | <0.01 | <0.01 | | 160 | 34 | <10 | 16 | <10 |
| MW-98 | | 2.7 | 33.9 | | <0.005 | 0.0136 | | <0.002 | <0.005 | | <0.005 | 347 | | <0.0002 | <0.005 | <0.005 | | 320 | 95 | <10 | 9.8 | <10 |
| MW-99 | | 0.7 | 2.04 | | 0.0465 | 0.0811 | | <0.004 | <0.01 | | <0.01 | 80 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| MW-99 | | 0.7 | 29.2 | | 0.0147 | 0.103 | | <0.004 | <0.005 | | <0.005 | 111 | | <0.0002 | <0.005 | <0.005 | | 82 | 12 | <10 | <5.0 | <10 |
| MW-101 | | 0.59 | 24.4 | | 0.0145 | 0.194 | | <0.004 | <0.005 | | <0.005 | 98.5 | | <0.0002 | <0.01 | <0.01 | | 42 | 7.1 | <10 | 7.5 | <10 |
| MW-101 | | 0.81 | 7.36 | | 0.00956 | 0.0651 | | <0.002 | <0.005 | | <0.005 | 94.2 | | <0.0002 | <0.005 | <0.005 | | 220 | 110 | <10 | <5.0 | <10 |
| MW-103 | | 3.9 | 9.54 | | <0.01 | 0.494 | | <0.002 | <0.005 | | <0.005 | 6.8 | | <0.0002 | <0.005 | <0.005 | | 100 | 39 | <10 | <5.0 | <10 |
| MW-103 | | 1.6 | 5.15 | | <0.005 | 0.028 | | <0.002 | <0.005 | | <0.005 | 45.1 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| MW-104 | | 0.5 | 1.08 | | 0.00597 | 0.04 | | <0.002 | <0.005 | | <0.005 | 64.6 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| MW-106 | | 3.2 | 37.8 | | 0.0112 | 0.0341 | | <0.002 | <0.005 | | <0.005 | 257 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| MW-107 | | 2.8 | 44.3 | | 0.00555 | 1.45 | | <0.002 | <0.005 | | <0.005 | 150 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| MW-108 | | 8.2 | 2.55 | | 0.0209 | 0.148 | | <0.002 | <0.005 | | <0.005 | 150 | | <0.0002 | <0.005 | <0.005 | | 290 | 36 | <10 | 9.2 | <10 |
| NCL-32 | | 2.1 | | | <0.01 | 0.143 | | <0.002 | 0.0531 | | 0.0648 | 212 | | <0.0002 | <0.005 | <0.005 | | 320 | 89 | <10 | 9.6 | <10 |
| NCL-32 | | 0.71 | | | 0.0289 | 1.15 | | <0.004 | 0.0442 | | 0.267 | 119 | | <0.0002 | <0.01 | <0.01 | | 75 | 11 | <10 | 8.4 | <10 |
| NCL-33 | | 0.52 | | | <0.01 | 0.0229 | | <0.004 | 0.041 | | 0.267 | 166 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NCL-33 | | 0.6 | | | <0.005 | 0.024 | | <0.002 | <0.005 | | <0.01 | 157 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NCL-34 | | 0.12 | | | <0.01 | 0.008 | | <0.004 | <0.005 | | <0.005 | 157 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NCL-34 | | 0.17 | | | <0.005 | 0.317 | | <0.002 | <0.005 | | <0.01 | 92.5 | | <0.0002 | <0.01 | <0.01 | | 120 | 81 | <10 | 23 | <10 |
| NCL-44 | | 0.62 | | | 0.0436 | 0.0273 | | <0.004 | <0.005 | | <0.005 | 86.6 | | <0.0002 | <0.01 | <0.01 | | 96 | <5.0 | <10 | 13 | <10 |
| NCL-44 | | 0.66 | | | 0.0436 | 0.0276 | | <0.004 | <0.005 | | <0.01 | 108 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NCL-49 | | <0.05 | | | <0.01 | 0.0117 | | <0.004 | <0.01 | | <0.01 | 186 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NCL-49 | Dup #5 | <0.05 | | | <0.01 | 0.0115 | | <0.004 | <0.01 | | <0.01 | 193 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NCL-49 | | <0.05 | | | <0.005 | 0.0107 | | <0.002 | <0.005 | | <0.005 | 198 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-1 | | | | | | | | | | | | | | | | | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-1 | | | | | | | | | | | | | | | | | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-2 | | | | | | | | | | | | | | | | | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-2 | | | | | | | | | | | | | | | | | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-3 | | <0.05 | | | 0.01 | 0.0025 | | <0.004 | <0.01 | | <0.01 | 282 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-3 | | <0.05 | | | 0.00753 | 0.0143 | | <0.002 | <0.005 | | <0.005 | 203 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-3 | Dup #10 | <0.05 | | | 0.00743 | 0.0152 | | <0.002 | <0.005 | | <0.005 | 216 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-5 | | <0.05 | | | <0.01 | <0.01 | | <0.004 | <0.01 | | <0.01 | 572 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-5 | | <0.05 | | | <0.005 | 0.00617 | | <0.002 | <0.005 | | <0.005 | 501 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-6 | | <0.05 | | | <0.01 | 0.0101 | | <0.004 | <0.01 | | <0.01 | 393 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-6 | | <0.05 | | | 0.00684 | 0.00955 | | <0.002 | <0.005 | | <0.005 | 360 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-9 | | <0.05 | | | <0.01 | 0.0157 | | <0.004 | <0.01 | | <0.01 | 359 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| NP-9 | | <0.05 | | | <0.005 | 0.0141 | | <0.002 | <0.005 | | <0.005 | 356 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| OCD-1R | | 0.12 | <0.05 | | 0.0164 | 0.0194 | | <0.002 | <0.005 | | <0.005 | 191 | | <0.0002 | <0.005 | <0.005 | | <5.0 | <5.0 | <10 | <5.0 | <10 |
| OCD-1R | | 0.054 | 0.0552 | | <0.01 | 0.0193 | | <0.004 | <0.01 | | <0.01 | 172 | | <0.0002 | <0.01 | <0.01 | | <5.0 | <5.0 | <10 | <5.0 | <10 |

Table 1
2009 Groundwater Monitoring Program Analytical Results
Navajo Refinery, Artesia, New Mexico

[illegible]

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| Location | Dup | Date | Volatile Organic Compounds | | | | | | | | | | Semivolatile Organic Compounds | | | | | | | | | | |
|----------|--------|------------|--|---|---|--|---|---|---|--|--|----------------------------|--------------------------------|---|--|--|--|--|--------------------------|--|---|---|---------------------------------|
| | | | Benzene ug/l CGWL: 5.00E+00 EPA MCL WQCC HH | Chloroform ug/l 1.00E+02 WQCC HH | cis-1,2-Dichloro ethene ug/l 7.00E+01 EPA MCL | Cymene (4-Isopropyl toluene) ug/l | Ethyl benzene ug/l 7.00E+02 EPA MCL | Isopropyl benzene ug/l 6.79E+02 NMED TW | m,p-Xylene ug/l 1.43E+03 NMED TW | Methyl-Tert- Butyl-ether ug/l 1.25E+02 NMED TW | Naphthalene ug/l 3.00E+01 WQCC HH | N-Butyl benzene ug/l | N-Propyl benzene ug/l | o-Xylene ug/l 1.43E+03 NMED TW | Tetrachloro ethene ug/l 5.00E+00 EPA MCL | Toluene ug/l 7.50E+02 WQCC HH | Trichloro ethene ug/l 5.00E+00 EPA MCL | Xylenes ug/l 6.20E+02 WQCC HH | 1,1- Biphenyl ug/l | 2,4,6- Trichloro phenol ug/l 3.65E+03 NMED TW | 2,4- Dichloro phenol ug/l 1.10E+02 NMED TW | 2,4- Dimethyl phenol ug/l 7.30E+02 NMED TW | 2-Methyl naphthalene ug/l |
| KWB-1A | | 04/07/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-1A | | 09/29/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-1C | | 04/07/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-1C | | 09/29/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-3AR | | 04/09/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-3AR | | 09/29/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-7 | | 04/07/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 59 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-7 | | 10/05/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 42 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-9 | | 04/08/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-9 | | 09/29/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-10 | | 04/07/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 6000 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-11A | | 10/05/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 12 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-12A | | 09/29/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-13 | | 04/13/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-13 | Dup #5 | 04/13/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-13 | | 09/29/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| KWB-P2 | | 04/09/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-1R | | 04/02/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-1R | | 09/23/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-2A | | 04/01/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-2A | | 04/02/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-2A | | 09/21/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 7.1 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-3 | | 04/01/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-3 | | 09/21/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-4A | | 04/06/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-4A | | 09/23/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-5A | | 09/22/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 6.2 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-5A | Dup #3 | 09/22/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 5.9 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-6A | | 04/01/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-6A | | 09/21/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-7A | | 04/02/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-7A | | 09/22/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-8 | | 04/03/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-8 | | 10/05/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 5.6 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-9 | | 04/03/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-9 | | 10/05/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-10 | | 04/06/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 7.3 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-10 | | 09/23/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-11A | | 04/02/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-11A | | 09/22/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-15 | | 04/06/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-15 | | 09/23/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 14 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-16 | | 04/02/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-16 | Dup #3 | 04/02/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-16 | | 09/17/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-17 | | 04/09/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-17 | | 09/28/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-17 | Dup #7 | 09/29/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-18 | | 04/11/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| MW-18 | | 09/24/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| Location | Date | Dup | Volatile Organic Compounds | | | | | | | | | | Semivolatile Organic Compounds | | | | | | | | | |
|----------|------------|-----|----------------------------|-----------------|------------------------------|-----------------------------------|--------------------|------------------------|-----------------|-------------------------------|------------------|----------------------|--------------------------------|---------------|-------------------------|--------------|-----------------------|--------------|-------------------|-----------------------------|--------------------------|-------------------------------|
| | | | Benzene ug/l | Chloroform ug/l | cis-1,2-Dichloro ethene ug/l | Cymene (4-isopropyl toluene) ug/l | Ethyl benzene ug/l | Isopropyl benzene ug/l | m,p-Xylene ug/l | Methyl-Tert- Butyl ether ug/l | Naphthalene ug/l | N-Butyl benzene ug/l | N-Propyl benzene ug/l | o-Xylene ug/l | Tetrachloro ethene ug/l | Toluene ug/l | Trichloro ethene ug/l | Xylenes ug/l | 1,1-Biphenyl ug/l | 2,4,5-Trichloro phenol ug/l | 2,4-Dichloro phenol ug/l | 2,4-Dimethyl naphthalene ug/l |
| MW-18A | 04/02/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-18B | 09/22/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-20 | 04/03/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-20 | 10/05/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-21 | 04/03/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 12 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-21 | 10/05/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 8.3 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-22A | 04/06/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 5.5 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-22A | 09/23/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 7.9 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-23 | 04/14/2009 | | <5.0 | <5.0 | <5.0 | 15 | 1900 | 190 | 143E+03 | 1.25E+02 | 3.00E+01 | 5.0 | 330 | <120 | <5.0 | 600 | <5.0 | <5.0 | <15 | | | |
| MW-23 | 09/28/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 27 | 370 | 95 | 79 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-25 | 04/06/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 7 | 370 | 95 | 79 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-25 | 09/23/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-26 | 04/02/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-26 | 09/17/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-27 | 04/03/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-27 | 09/17/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-28 | 04/14/2009 | | <5.0 | <5.0 | <5.0 | 6.7 | 22 | 63 | 130 | 7400 | 11 | 98 | 80 | <5.0 | <5.0 | 88 | <5.0 | <15 | | | | |
| MW-28 | 09/25/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 47 | 7700 | 11 | 98 | 80 | <5.0 | <5.0 | 57 | <5.0 | 49 | | | | |
| MW-29 | 04/13/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-29 | 09/24/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-41 | 04/13/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 80 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-41 | 09/24/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 24 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-42 | 04/13/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 88 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-42 | 09/24/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 26 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-43 | 04/14/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 28 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-43 | 09/28/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 31 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-45 | 04/06/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 8.7 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-45 | 09/24/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-49 | 04/14/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 17 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-50 | 04/09/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 42 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-50 | 09/28/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-50 | 09/28/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-52 | 04/08/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-52 | 09/30/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-53 | 04/08/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-53 | 10/05/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-54A | 04/08/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-54A | 10/05/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-54A | 04/10/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-55 | 09/24/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-56 | 04/10/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-56 | 09/24/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-56 | 09/24/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-58 | 04/08/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 220 | 16 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-58 | 09/30/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 62 | 160 | 17 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-61 | 04/09/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-61 | 10/01/2009 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |

Table 1
2009 Groundwater Monitoring Program Analytical Results
Navajo Refinery, Artesia, New Mexico

| Units: | | | | | | | | | | Semivolatile Organic Compounds | | | | | | | | | |
|------------------|------------------|------------------------------|-----------------------------------|--------------------|------------------------|------------------|-------------------------------|------------------|----------------------|--------------------------------|------------------|-------------------------|------------------|-----------------------|------------------|-------------------|-----------------------------|--------------------------|---------------------------|
| CGWSL: | | | | | | | | | | | | | | | | | | | |
| Source: | | | | | | | | | | | | | | | | | | | |
| Date: | | | | | | | | | | | | | | | | | | | |
| Location | | | | | | | | | | Volatile Organic Compounds | | | | | | | | | |
| Dup | | | | | | | | | | | | | | | | | | | |
| Benzene ug/l | Chloroform ug/l | cis-1,2-Dichloro ethene ug/l | Cymene (4-isopropyl) toluene ug/l | Ethyl benzene ug/l | Isopropyl benzene ug/l | m,p-Xylene ug/l | Methyl-Tert-Butylalcohol ug/l | Naphthalene ug/l | N-Butyl benzene ug/l | N-Propyl benzene ug/l | o-Xylene ug/l | Tetrachloro ethane ug/l | Toluene ug/l | Trichloro ethene ug/l | Xylenes ug/l | 1,1-Biphenyl ug/l | 2,4,5-Trichloro phenol ug/l | 2,4-Dimethyl phenol ug/l | 2-Methyl naphthalene ug/l |
| 5.00E+00 EPA MCL | 1.00E+02 WQCC HH | 7.00E+01 EPA MCL | -- | 7.00E+02 EPA MCL | 6.75E+02 NMED TW | 1.43E+03 NMED TW | 1.25E+02 NMED TW | 3.00E+01 WQCC HH | -- | -- | 1.43E+03 NMED TW | 5.00E+02 EPA MCL | 7.50E+02 WQCC HH | 15.00E+00 EPA MCL | 6.20E+02 WQCC HH | -- | 3.65E+03 NMED TW | 1.10E+02 NMED TW | -- |
| MW-82 | 04/14/2009 | <5.0 | 6.3 | 44 | 180 | 320 | 17 | 65 | 17 | 220 | <5.0 | <5.0 | <5.0 | <5.0 | 320 | | | | |
| MW-82 | 10/01/2009 | <5.0 | <5.0 | 32 | 64 | 240 | 19 | 32 | <5.0 | 100 | <5.0 | <5.0 | <5.0 | <5.0 | 240 | | | | |
| MW-66 | 04/14/2009 | <5.0 | <5.0 | 60 | 69 | 20 | 5400 | 73 | 14 | 100 | <5.0 | <5.0 | <5.0 | <5.0 | 21 | | | | |
| MW-66 | 09/25/2009 | <5.0 | <5.0 | 37 | 38 | 16 | 5500 | 47 | <5.0 | 44 | <5.0 | <5.0 | <5.0 | <5.0 | 18 | | | | |
| MW-67 | 04/14/2009 | <5.0 | <5.0 | <5.0 | 32 | <10 | 150 | <5.0 | <5.0 | 11 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-67 | 10/01/2009 | <5.0 | <5.0 | <5.0 | 8.1 | <10 | 110 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 5 | <15 | | | | |
| MW-68 | 04/03/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-68 | 09/23/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-70 | 04/02/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-70 | 09/22/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-72 | 03/20/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-72 | 09/18/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-73 | 03/30/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 5.5 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-73 | 09/18/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-74 | 03/30/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-74 | 09/18/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-75 | 03/30/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 5.8 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-75 | 09/18/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-75 | 09/18/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 9.3 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-76 | 03/31/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 5.9 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-76 | 09/17/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 11 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-77 | 03/31/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 12 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-77 | 09/17/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | 10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-78 | 03/31/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-78 | 09/17/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-79 | 03/31/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-79 | 09/17/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-79 | 09/18/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-80 | 03/31/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-80 | 09/18/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-81 | 03/31/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-81 | 09/18/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-82 | 03/31/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-82 | 09/21/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-83 | 03/31/2009 | <5.0 | <5.0 | <5.0 | 6.3 | <5.0 | 6.3 | <5.0 | <5.0 | 15 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-83 | 09/21/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 44 | | | | |
| MW-84 | 03/31/2009 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <15 | | | | |
| MW-84 | 09/21/2009 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <30 | | | | |
| MW-87 | 04/06/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-87 | 09/22/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-88 | 04/06/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-88 | 09/22/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-88 | 04/06/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-88 | 09/23/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-88 | 09/23/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-88 | 09/23/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-89 | 04/02/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-89 | 09/17/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-90 | 04/15/2009 | <5.0 | <5.0 | <5.0 | 55 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-90 | 04/15/2009 | <5.0 | <5.0 | <5.0 | 32 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 04/15/2009 | <5.0 | <5.0 | <5.0 | 120 | 940 | <5.0 | <5.0 | <5.0 | 9.1 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 04/15/2009 | 1900 | <5.0 | <5.0 | 1600 | 110 | <5.0 | <5.0 | <5.0 | 11 | 120 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 1500 | 6.5 | <5.0 | <5.0 | <5.0 | 89 | 380 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | <5.0 | <15 | | | | |
| MW-91 | 10/01/2009 | 3900 | <5.0 | <5.0 | 110 | 1400 | <5.0 | <5.0 | <5.0 | 6.5 | 89 | <5.0 | <5.0 | | | | | | |

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| | | Volatile Organic Compounds | | | | | | | | | | Semivolatile Organic Compounds | | | | | | | | | | |
|----------|--------|--|---|---|--|---|---|---|--|--|----------------------------|--------------------------------|---|--|--|--|--|--------------------------|--|---|--|-------|
| Location | Dup | Benzene ug/l 5.00E+001 EPA MCL WQCC HH | Chloroform ug/l 1.00E+02 WQCC HH | cis-1,2-Dichloro ethylene ug/l 7.00E+01 EPA MCL | Cymene (4-isopropyl toluene) ug/l | Ethyl benzene ug/l 7.00E+01 EPA MCL | Isopropyl benzene ug/l 6.79E+02 NMED TW | m,p-Xylene ug/l 1.43E+03 NMED TW | Methyl-Tert- Butyl-ether ug/l 1.25E+02 NMED TW | Naphthalene ug/l 3.00E+01 WQCC HH | N-Butyl benzene ug/l | N-Propyl benzene ug/l | o-Xylene ug/l 1.43E+03 NMED TW | Tetrachloro ethylene ug/l 5.00E+00 EPA MCL | Toluene ug/l 7.50E+02 WQCC HH | Trichloro ethylene ug/l 5.00E+00 EPA MCL | Xylenes ug/l 6.20E+02 WQCC HH | 1,1- Biphenyl ug/l | 2,4,5- Trichloro phenol ug/l 3.65E+03 NMED TW | 2,4- Dichloro phenol ug/l 1.10E+02 NMED TW | 2,4- Dimethyl naphthalene ug/l 7.30E+02 NMED TW | |
| MW-92 | | <5.0 | <5.0 | 28 | <5.0 | 260 | 68 | 50 | 68 | 190 | 14 | 82 | 6.2 | 7.9 | 16 | 20 | 57 | 0.23 | <0.20 | <0.20 | 1.9 | 0.45 |
| MW-93 | | <5.0 | <5.0 | 94 | <5.0 | 260 | 94 | 35 | 260 | 110 | 69 | 51 | 5.3 | <5.0 | 16 | <5.0 | 40 | 0.31 | <0.20 | <0.20 | 12 | 0.35 |
| MW-94 | | <5.0 | <5.0 | <5.0 | 6.7 | 40 | 96 | 790 | <5.0 | 370 | 12 | 130 | <120 | <5.0 | 12 | <5.0 | 790 | 4.6 | <0.20 | <0.20 | 1.2 | 2 |
| MW-95 | | <5.0 | <5.0 | <5.0 | <5.0 | 13 | 48 | 380 | <5.0 | 64 | 63 | 63 | <120 | <5.0 | 5.3 | <5.0 | 380 | 3.6 | <0.20 | <0.20 | 0.68 | 2.9 |
| MW-96 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 16 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| MW-97 | | <5.0 | <5.0 | <5.0 | <5.0 | 6.1 | 140 | 21 | 63000 | <5.0 | 11 | 120 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| MW-98 | Dup #8 | <5.0 | <5.0 | <5.0 | <5.0 | 5.9 | 120 | 19 | 64000 | <5.0 | 11 | 130 | <5.0 | <5.0 | <5.0 | <5.0 | 24 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| MW-99 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 77 | 12 | 63000 | <5.0 | <5.0 | 67 | <5.0 | <5.0 | <5.0 | <5.0 | 22 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| MW-100 | Dup #9 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 78 | 12 | 63000 | <5.0 | <5.0 | 73 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| MW-101 | | <5.0 | <5.0 | <5.0 | <5.0 | 590 | 120 | 670 | <5.0 | 93 | 18 | 140 | <120 | <5.0 | 180 | <5.0 | 1300 | 3.6 | <0.20 | <0.20 | <0.20 | 9.1 |
| MW-102 | | <5.0 | <5.0 | <5.0 | <5.0 | 220 | 98 | 1200 | <5.0 | 97 | 17 | 110 | <250 | <5.0 | 210 | <5.0 | 700 | 1.7 | <0.20 | <0.20 | <0.20 | 7.2 |
| MW-103 | | <5.0 | <5.0 | <5.0 | <5.0 | 41 | 8.6 | 13 | 97 | 3900 | <5.0 | <5.0 | 8.6 | 13 | <5.0 | <5.0 | 26 | 0.41 | <0.20 | <0.20 | <0.20 | 0.83 |
| MW-104 | | <5.0 | <5.0 | <5.0 | <5.0 | 380 | 36 | 440 | 3900 | 27 | <5.0 | 40 | 170 | <5.0 | <5.0 | <5.0 | 610 | <0.20 | <0.20 | <0.20 | <0.20 | 0.41 |
| MW-105 | | <5.0 | <5.0 | <5.0 | <5.0 | 8.5 | <5.0 | <10 | 100 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 280 | 0.48 | <0.20 | <0.20 | <0.20 | 1.7 |
| MW-106 | | <5.0 | <5.0 | <5.0 | <5.0 | 610 | 52 | 320 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| MW-107 | | <5.0 | <5.0 | <5.0 | <5.0 | 350 | 20 | 140 | <5.0 | <5.0 | 11 | 69 | 69 | <5.0 | 120 | <5.0 | 410 | 5.1 | 0.9 | 1.8 | 7.9 | 70 |
| MW-108 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 110 | <10 | <5.0 | <5.0 | <5.0 | 25 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | 1.7 | <0.20 | <0.20 | <0.20 | <0.20 |
| NCL-32 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | 4.7 | <0.20 | <0.20 | <0.20 | <0.20 |
| NCL-33 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | 1.5 | <0.20 | <0.20 | <0.20 | <0.20 |
| NCL-34 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | 1.5 | <0.20 | <0.20 | <0.20 | <0.20 |
| NCL-44 | | <5.0 | <5.0 | <5.0 | <5.0 | 170 | 160 | 260 | <5.0 | <5.0 | 15 | 100 | <250 | <5.0 | 260 | <5.0 | 560 | 1.6 | <0.20 | <0.20 | <0.20 | 5.9 |
| NCL-49 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 84 | 570 | 400 | 160 | 17 | 97 | <250 | <5.0 | <5.0 | <5.0 | 570 | 3.9 | <0.20 | <0.20 | <0.20 | 57 |
| NP-1 | | <5.0 | <5.0 | <5.0 | <5.0 | 11 | 38 | 110 | <5.0 | 71 | 62 | 36 | <5.0 | <5.0 | <5.0 | <5.0 | 110 | 4.3 | <0.20 | <0.20 | <0.20 | 1.4 |
| NP-2 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| NP-3 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| NP-4 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| NP-5 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| NP-6 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| NP-7 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| NP-8 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| NP-9 | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| OCB-1R | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |
| OCB-1R | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <10 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <15 | | | | | |

Table 1
2009 Groundwater Monitoring Program Analytical Results
Navajo Refinery, Artesia, New Mexico

[illegible]

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| Semivolatile Organic Compounds | | | | | | | | | | | | | | | | | | |
|--------------------------------|--------|------------|-------------------------------|-------------------|-------------------|-----------------|----------------------------------|----------------|-------------------|------------------------|---------------------------|---------------------------|-------------------|---------------|------------------|-------------------|-------------|-------------|
| | | | 2-Methyl-4-Methyl phenol ug/l | Acenaphthene ug/l | Acetophenone ug/l | Anthracene ug/l | Bis(2-Ethylhexyl) phthalate ug/l | Carbazole ug/l | Dibenzofuran ug/l | Diethyl Phthalate ug/l | Di-N-Butyl Phthalate ug/l | Di-n-Octyl Phthalate ug/l | Fluoranthene ug/l | Fluorene ug/l | Naphthalene ug/l | Phenanthrene ug/l | Phenol ug/l | Pyrene ug/l |
| Units: | | | | | | | | | | | | | | | | | | |
| CGWSL | | | -- | 2.19E+03 | -- | 1.10E+04 | 6.00E+00 | -- | -- | 2.92E+04 | 3.65E+03 | -- | 1.46E+03 | 1.46E+03 | 3.00E+01 | 1.10E+03 | 5.00E+00 | 1.10E+03 |
| Source: | | | -- | NMED TW | -- | NMED TW | EPA MCL | -- | -- | NMED TW | NMED TW | -- | NMED TW | NMED TW | WQCC HH | NMED TW | WQCC Dom | NMED TW |
| Location | Dup | Date | | | | | | | | | | | | | | | | |
| KWB-1A | | 04/07/2009 | | | | | | | | | | | | | | | | |
| KWB-1A | | 09/29/2009 | | | | | | | | | | | | | | | | |
| KWB-1C | | 04/07/2009 | | | | | | | | | | | | | | | | |
| KWB-1C | | 09/29/2009 | | | | | | | | | | | | | | | | |
| KWB-3AR | | 04/09/2009 | | | | | | | | | | | | | | | | |
| KWB-3AR | | 09/29/2009 | | | | | | | | | | | | | | | | |
| KWB-7 | | 04/07/2009 | | | | | | | | | | | | | | | | |
| KWB-7 | | 10/05/2009 | | | | | | | | | | | | | | | | |
| KWB-9 | | 04/08/2009 | | | | | | | | | | | | | | | | |
| KWB-9 | | 09/29/2009 | | | | | | | | | | | | | | | | |
| KWB-10 | | 04/07/2009 | | | | | | | | | | | | | | | | |
| KWB-11A | | 04/07/2009 | | | | | | | | | | | | | | | | |
| KWB-11A | | 10/05/2009 | | | | | | | | | | | | | | | | |
| KWB-12A | | 09/29/2009 | | | | | | | | | | | | | | | | |
| KWB-13 | | 04/13/2009 | | | | | | | | | | | | | | | | |
| KWB-13 | Dup #6 | 04/13/2010 | | | | | | | | | | | | | | | | |
| KWB-13 | | 09/29/2009 | | | | | | | | | | | | | | | | |
| KWB-P2 | | 04/09/2009 | | | | | | | | | | | | | | | | |
| MW-1R | | 04/02/2009 | | | | | | | | | | | | | | | | |
| MW-1R | | 09/23/2009 | | | | | | | | | | | | | | | | |
| MW-2A | | 04/01/2009 | | | | | | | | | | | | | | | | |
| MW-2A | | 04/02/2009 | | | | | | | | | | | | | | | | |
| MW-2A | | 09/21/2009 | | | | | | | | | | | | | | | | |
| MW-3 | | 04/01/2009 | | | | | | | | | | | | | | | | |
| MW-3 | | 09/21/2009 | | | | | | | | | | | | | | | | |
| MW-4A | | 04/06/2009 | | | | | | | | | | | | | | | | |
| MW-4A | | 09/23/2009 | | | | | | | | | | | | | | | | |
| MW-5A | | 09/22/2009 | | | | | | | | | | | | | | | | |
| MW-5A | Dup #3 | 09/22/2009 | | | | | | | | | | | | | | | | |
| MW-6A | | 04/01/2009 | | | | | | | | | | | | | | | | |
| MW-6A | | 09/21/2009 | | | | | | | | | | | | | | | | |
| MW-7A | | 04/02/2009 | | | | | | | | | | | | | | | | |
| MW-7A | | 09/22/2009 | | | | | | | | | | | | | | | | |
| MW-8 | | 04/03/2009 | | | | | | | | | | | | | | | | |
| MW-8 | | 10/05/2009 | | | | | | | | | | | | | | | | |
| MW-9 | | 04/03/2009 | | | | | | | | | | | | | | | | |
| MW-9 | | 10/05/2009 | | | | | | | | | | | | | | | | |
| MW-10 | | 04/06/2009 | | | | | | | | | | | | | | | | |
| MW-10 | | 09/23/2009 | | | | | | | | | | | | | | | | |
| MW-11A | | 04/02/2009 | | | | | | | | | | | | | | | | |
| MW-11A | | 09/22/2009 | | | | | | | | | | | | | | | | |
| MW-15 | | 04/06/2009 | | | | | | | | | | | | | | | | |
| MW-15 | | 09/23/2009 | | | | | | | | | | | | | | | | |
| MW-16 | | 04/02/2009 | | | | | | | | | | | | | | | | |
| MW-16 | Dup #3 | 04/02/2009 | | | | | | | | | | | | | | | | |
| MW-16 | | 09/17/2009 | | | | | | | | | | | | | | | | |
| MW-17 | | 04/09/2009 | | | | | | | | | | | | | | | | |
| MW-17 | | 09/28/2009 | | | | | | | | | | | | | | | | |
| MW-17 | Dup #7 | 09/29/2009 | | | | | | | | | | | | | | | | |
| MW-18 | | 04/13/2009 | | | | | | | | | | | | | | | | |
| MW-18 | | 09/24/2009 | | | | | | | | | | | | | | | | |

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| Semi-volatile Organic Compounds | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-----------------|--------------|----------------|--------------|-----------------------------|-----------|--------------|-------------------|----------------------|----------------------|--------------|----------|-------------|--------------|----------|----------|--|--|--|
| 2-Methyl Phenol | 4-Methyl Phenol | Acenaphthene | Acenaphthylene | Acetophenone | Bis(2-Ethylhexyl) phthalate | Carbazole | Dibenzofuran | Diethyl Phthalate | Di-n-Butyl Phthalate | Di-n-Octyl Phthalate | Fluoranthene | Fluorene | Naphthalene | Phenanthrene | Phenol | Pyrene | | | |
| ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | | | |
| -- | -- | 2.19E+03 | -- | -- | 6.00E+00 | -- | -- | 2.92E+04 | 3.65E+03 | -- | 1.46E+03 | 1.48E+03 | 3.00E+01 | 1.10E+03 | 5.00E+00 | 1.10E+03 | | | |
| Source: | -- | NMED TW | -- | -- | EPA MCL | -- | -- | NMED TW | NMED TW | -- | NMED TW | NMED TW | WCCC HH | NMED TW | WCCC Dom | NMED TW | | | |
| Location | Dup | Date | | | | | | | | | | | | | | | | | |
| MW-18A | | 04/02/2009 | | | | | | | | | | | | | | | | | |
| MW-18A | | 09/22/2009 | | | | | | | | | | | | | | | | | |
| MW-20 | | 04/03/2009 | | | | | | | | | | | | | | | | | |
| MW-20 | | 10/05/2009 | | | | | | | | | | | | | | | | | |
| MW-21 | | 04/03/2009 | | | | | | | | | | | | | | | | | |
| MW-21 | | 10/05/2009 | | | | | | | | | | | | | | | | | |
| MW-22A | | 04/06/2009 | | | | | | | | | | | | | | | | | |
| MW-22A | | 09/23/2009 | | | | | | | | | | | | | | | | | |
| MW-23 | | 04/14/2009 | | | | | | | | | | | | | | | | | |
| MW-23 | | 09/28/2009 | | | | | | | | | | | | | | | | | |
| MW-25 | | 04/06/2009 | | | | | | | | | | | | | | | | | |
| MW-25 | | 09/23/2009 | | | | | | | | | | | | | | | | | |
| MW-28 | | 04/02/2009 | | | | | | | | | | | | | | | | | |
| MW-26 | | 09/17/2009 | | | | | | | | | | | | | | | | | |
| MW-27 | | 04/03/2009 | | | | | | | | | | | | | | | | | |
| MW-27 | | 09/17/2009 | | | | | | | | | | | | | | | | | |
| MW-28 | | 04/14/2009 | | | | | | | | | | | | | | | | | |
| MW-28 | | 09/25/2009 | | | | | | | | | | | | | | | | | |
| MW-29 | | 04/13/2009 | | | | | | | | | | | | | | | | | |
| MW-29 | | 09/24/2009 | | | | | | | | | | | | | | | | | |
| MW-41 | | 04/13/2009 | | | | | | | | | | | | | | | | | |
| MW-41 | | 09/24/2009 | | | | | | | | | | | | | | | | | |
| MW-42 | Dup #7 | 04/13/2009 | | | | | | | | | | | | | | | | | |
| MW-42 | | 09/24/2009 | | | | | | | | | | | | | | | | | |
| MW-42 | | 09/24/2009 | | | | | | | | | | | | | | | | | |
| MW-43 | | 04/14/2009 | | | | | | | | | | | | | | | | | |
| MW-43 | | 09/28/2009 | | | | | | | | | | | | | | | | | |
| MW-45 | | 04/06/2009 | | | | | | | | | | | | | | | | | |
| MW-45 | | 09/24/2009 | | | | | | | | | | | | | | | | | |
| MW-49 | | 04/14/2009 | | | | | | | | | | | | | | | | | |
| MW-50 | | 04/09/2009 | | | | | | | | | | | | | | | | | |
| MW-50 | | 09/28/2009 | | | | | | | | | | | | | | | | | |
| MW-50 | Dup #6 | 09/28/2009 | | | | | | | | | | | | | | | | | |
| MW-52 | | 04/08/2009 | | | | | | | | | | | | | | | | | |
| MW-52 | | 09/30/2009 | | | | | | | | | | | | | | | | | |
| MW-52 | Dup #8 | 09/30/2009 | | | | | | | | | | | | | | | | | |
| MW-53 | | 04/08/2009 | | | | | | | | | | | | | | | | | |
| MW-53 | | 10/05/2009 | | | | | | | | | | | | | | | | | |
| MW-54A | | 04/08/2009 | | | | | | | | | | | | | | | | | |
| MW-54A | | 10/05/2009 | | | | | | | | | | | | | | | | | |
| MW-54A | Dup #11 | 10/05/2009 | | | | | | | | | | | | | | | | | |
| MW-55 | | 04/10/2009 | | | | | | | | | | | | | | | | | |
| MW-55 | | 09/24/2009 | | | | | | | | | | | | | | | | | |
| MW-56 | | 04/10/2009 | | | | | | | | | | | | | | | | | |
| MW-56 | | 09/24/2009 | | | | | | | | | | | | | | | | | |
| MW-56 | Dup #5 | 09/24/2009 | | | | | | | | | | | | | | | | | |
| MW-58 | | 04/08/2009 | | | | | | | | | | | | | | | | | |
| MW-58 | | 09/30/2009 | | | | | | | | | | | | | | | | | |
| MW-61 | | 04/09/2009 | | | | | | | | | | | | | | | | | |
| MW-61 | | 10/01/2009 | | | | | | | | | | | | | | | | | |

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| | | Semi-volatile Organic Compounds | | | | | | | | | | | | | | | | | |
|----------|--------|---------------------------------|-------------------------------|-------------------|---------------------|-------------------|-----------------|----------------------------------|----------------|-------------------|------------------------|---------------------------|---------------------------|-------------------|---------------|------------------|-------------------|-------------|-------------|
| Location | Dup | Date | 2-Methyl-4-Methyl phenol ug/l | Acenaphthene ug/l | Acenaphthylene ug/l | Acetophenone ug/l | Anthracene ug/l | Bis(2-Ethylhexyl) phthalate ug/l | Carbazole ug/l | Dibenzofuran ug/l | Diethyl phthalate ug/l | Di-n-Butyl phthalate ug/l | Di-n-Octyl phthalate ug/l | Fluoranthene ug/l | Fluorene ug/l | Naphthalene ug/l | Phenanthrene ug/l | Phenol ug/l | Pyrene ug/l |
| MW-62 | | 04/14/2009 | -- | | | | 1.10E+04 | 6.00E+00 | -- | -- | 2.92E+04 | 3.65E+03 | -- | 1.46E+03 | 1.45E+03 | 3.00E+01 | 1.10E+03 | 5.00E+00 | 1.10E+03 |
| MW-62 | | 10/01/2009 | | | | | NMED TW | EPA MCL | -- | -- | NMED TW | NMED TW | -- | NMED TW | NMED TW | WQCC HH | NMED TW | WQCC Dom | NMED TW |
| MW-66 | | 04/14/2009 | | | | | | | | | | | | | | | | | |
| MW-66 | | 09/25/2009 | | | | | | | | | | | | | | | | | |
| MW-67 | | 04/14/2009 | | | | | | | | | | | | | | | | | |
| MW-67 | | 10/01/2009 | | | | | | | | | | | | | | | | | |
| MW-68 | | 04/03/2009 | | | | | | | | | | | | | | | | | |
| MW-68 | | 09/29/2009 | | | | | | | | | | | | | | | | | |
| MW-70 | | 04/02/2009 | | | | | | | | | | | | | | | | | |
| MW-70 | | 09/22/2009 | | | | | | | | | | | | | | | | | |
| MW-72 | | 03/30/2009 | | | | | | | | | | | | | | | | | |
| MW-72 | | 09/18/2009 | | | | | | | | | | | | | | | | | |
| MW-73 | | 03/30/2009 | | | | | | | | | | | | | | | | | |
| MW-73 | | 09/18/2009 | | | | | | | | | | | | | | | | | |
| MW-74 | | 03/30/2009 | | | | | | | | | | | | | | | | | |
| MW-74 | | 09/18/2009 | | | | | | | | | | | | | | | | | |
| MW-75 | | 03/30/2009 | | | | | | | | | | | | | | | | | |
| MW-75 | Dup #1 | 09/18/2009 | | | | | | | | | | | | | | | | | |
| MW-75 | | 09/18/2009 | | | | | | | | | | | | | | | | | |
| MW-76 | | 03/31/2009 | | | | | | | | | | | | | | | | | |
| MW-76 | | 09/17/2009 | | | | | | | | | | | | | | | | | |
| MW-77 | | 03/31/2009 | | | | | | | | | | | | | | | | | |
| MW-77 | | 09/17/2009 | | | | | | | | | | | | | | | | | |
| MW-78 | | 03/31/2009 | | | | | | | | | | | | | | | | | |
| MW-78 | | 09/17/2009 | | | | | | | | | | | | | | | | | |
| MW-79 | | 03/31/2009 | | | | | | | | | | | | | | | | | |
| MW-79 | Dup #1 | 09/16/2009 | | | | | | | | | | | | | | | | | |
| MW-80 | | 03/31/2009 | | | | | | | | | | | | | | | | | |
| MW-80 | | 09/18/2009 | | | | | | | | | | | | | | | | | |
| MW-81 | | 03/31/2009 | | | | | | | | | | | | | | | | | |
| MW-81 | | 09/18/2009 | | | | | | | | | | | | | | | | | |
| MW-82 | | 03/31/2009 | | | | | | | | | | | | | | | | | |
| MW-82 | | 09/21/2009 | | | | | | | | | | | | | | | | | |
| MW-83 | | 03/31/2009 | | | | | | | | | | | | | | | | | |
| MW-83 | | 09/21/2009 | | | | | | | | | | | | | | | | | |
| MW-84 | | 03/31/2009 | | | | | | | | | | | | | | | | | |
| MW-84 | | 09/21/2009 | | | | | | | | | | | | | | | | | |
| MW-87 | | 04/06/2009 | | | | | | | | | | | | | | | | | |
| MW-87 | | 09/22/2009 | | | | | | | | | | | | | | | | | |
| MW-88 | | 04/06/2009 | | | | | | | | | | | | | | | | | |
| MW-88 | Dup #4 | 04/06/2009 | | | | | | | | | | | | | | | | | |
| MW-88 | | 09/23/2009 | | | | | | | | | | | | | | | | | |
| MW-88 | Dup #4 | 09/23/2009 | | | | | | | | | | | | | | | | | |
| MW-89 | | 04/02/2009 | | | | | | | | | | | | | | | | | |
| MW-89 | | 09/17/2009 | | | | | | | | | | | | | | | | | |
| MW-90 | | 04/15/2009 | < 0.20 | < 0.20 | 0.38 | < 0.20 | < 0.20 | 0.5 | 0.51 | 4.4 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 0.56 | 0.66 | < 0.20 | < 0.20 | < 0.20 |
| MW-90 | | 10/01/2009 | < 0.20 | < 0.20 | 0.25 | < 0.20 | < 0.20 | 0.44 | < 0.20 | 1.7 | 0.36 | < 0.20 | < 0.20 | < 0.20 | 0.24 | 0.58 | < 0.20 | < 0.20 | < 0.20 |
| MW-91 | | 04/15/2009 | < 0.20 | < 0.20 | 0.34 | < 0.10 | < 0.20 | 2.1 | 2.1 | 2.9 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 2.2 | 18 | 1.7 | < 0.20 | < 0.20 |
| MW-91 | | 10/01/2009 | 0.47 | 5.2 | 0.36 | 8.4 | < 0.20 | 2.7 | 2.8 | 2.1 | < 0.20 | < 0.20 | 0.67 | < 0.20 | 1.7 | 22 | 1.6 | 0.71 | < 0.20 |

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| | | Semivolatile Organic Compounds | | | | | | | | | | | | | | | | | |
|----------|---------|--------------------------------|----------------------|----------------------|-------------------|---------------------|-------------------|-----------------|----------------------------------|----------------|-------------------|------------------------|---------------------------|---------------------------|-------------------|------------------|-------------------|-------------|-------------|
| Location | Dup | Date | 2-Methyl phenol ug/l | 4-Methyl phenol ug/l | Acenaphthene ug/l | Acenaphthylene ug/l | Acetophenone ug/l | Anthracene ug/l | Bis(2-Ethylhexyl) phthalate ug/l | Carbazole ug/l | Dibenzofuran ug/l | Diethyl phthalate ug/l | Di-N-Butyl phthalate ug/l | Di-n-Octyl phthalate ug/l | Fluoranthene ug/l | Naphthalene ug/l | Phenanthrene ug/l | Phenol ug/l | Pyrene ug/l |
| MW-82 | | 04/15/2009 | < 0.20 | < 0.20 | 4.7 | 0.63 | < 0.20 | 1.1 | 3.8 | 12 | 9.9 | < 0.20 | < 0.20 | < 0.20 | 0.51 | 3.00E+01 | 1.10E+03 | 5.00E+00 | 1.10E+03 |
| MW-92 | | 10/01/2009 | 2.1 | < 0.20 | 2.1 | < 0.20 | < 0.20 | 0.39 | < 0.20 | 12 | 4.5 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 5.3 | 4.4 | < 0.20 | < 0.20 |
| MW-93 | | 04/15/2009 | < 0.20 | 0.21 | 1.6 | < 0.20 | < 0.20 | 1.1 | 14.8 | 15 | 4.4 | < 0.20 | < 0.20 | < 0.20 | 0.46 | 7 | 37 | 14 | 0.93 |
| MW-93 | | 10/01/2009 | < 0.20 | < 0.20 | 1.4 | < 0.20 | < 0.20 | 0.8 | 9.8 | 10 | 3.8 | < 0.20 | < 0.20 | < 0.20 | 0.28 | 6.1 | 26 | 11 | 0.59 |
| MW-95 | | 04/15/2009 | < 0.20 | < 0.20 | 0.64 | < 0.20 | < 0.20 | < 0.20 | 0.81 | 0.25 | 3.1 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 1.5 | < 0.20 | < 0.20 | 0.25 |
| MW-95 | | 10/01/2009 | < 0.20 | < 0.20 | 0.31 | < 0.20 | < 0.20 | < 0.20 | 15 | 0.85 | 1.4 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 0.74 | < 0.20 | < 0.20 | < 0.20 |
| MW-96 | | 04/15/2009 | < 0.20 | < 0.20 | 1.4 | 0.73 | < 0.20 | < 0.20 | 0.85 | 1.7 | 2.2 | 1.1 | < 0.20 | < 0.20 | < 0.20 | 3.3 | 2.2 | < 0.20 | < 0.20 |
| MW-96 | Dup #8 | | < 0.20 | < 0.20 | 1.4 | < 0.20 | 0.7 | < 0.20 | 1.1 | 2.1 | 6.7 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 2.2 | 0.34 | < 0.20 | < 0.20 |
| MW-96 | | 10/01/2009 | < 0.20 | < 0.20 | 0.57 | < 0.20 | < 0.20 | < 0.20 | 0.53 | 1.3 | 2.5 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 3.1 | 0.52 | < 0.20 | < 0.20 |
| MW-96 | Dup #9 | | < 0.20 | < 0.20 | 0.64 | < 0.20 | < 0.20 | < 0.20 | 1.4 | 1.3 | 3 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 1.2 | 0.38 | < 0.20 | < 0.20 |
| MW-98 | | 04/15/2009 | < 0.20 | < 0.20 | 0.57 | < 0.20 | < 0.20 | < 0.20 | 0.85 | 2.1 | 3.2 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 1.5 | 0.49 | < 0.20 | < 0.20 |
| MW-98 | | 09/28/2009 | < 0.20 | 0.4 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 0.43 | 1 | 1.1 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 1.7 | 0.66 | 2.2 | < 0.20 |
| MW-99 | | 04/15/2009 | < 0.20 | < 0.20 | 0.27 | < 0.20 | < 0.20 | < 0.20 | 0.99 | 0.29 | 1 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 0.72 | 0.57 | < 0.20 | < 0.20 |
| MW-99 | | 09/28/2009 | 0.8 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 14 | 0.27 | 0.31 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 0.45 | 5 | < 0.20 | < 0.20 |
| MW-101 | | 04/15/2009 | 9.3 | 0.92 | 0.66 | < 0.20 | < 0.20 | < 0.20 | 16.7 | 0.6 | 1.8 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 0.96 | 9.4 | 0.25 | < 0.20 |
| MW-101 | | 09/28/2009 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 1.2 | 0.20 | 0.29 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 0.44 | 2.1 | 0.35 | < 0.20 |
| MW-103 | | 03/16/2009 | 4.1 | < 0.20 | 1.6 | < 0.20 | < 0.20 | 0.27 | 86 | 1.3 | 3.5 | 3 | 1.1 | < 0.20 | < 0.20 | 1.6 | 130 | 2.7 | < 0.20 |
| MW-103 | | 09/28/2009 | 1 | < 0.20 | 0.73 | < 0.20 | < 0.20 | < 0.20 | 2.9 | 0.52 | 1.2 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 0.82 | 49 | 0.83 | < 0.20 |
| MW-104 | | 03/16/2009 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.10 | < 0.20 | 2.9 | < 0.20 | 1.8 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 0.84 | < 0.20 | < 0.20 | < 0.20 |
| MW-104 | | 09/28/2009 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 0.57 | < 0.20 | 1.4 | < 0.20 | 0.66 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 0.25 | < 0.20 | 0.67 | < 0.20 |
| MW-106 | | 09/28/2009 | 1.4 | 0.99 | 0.21 | < 0.20 | 8.2 | < 0.20 | 1 | 0.8 | 0.99 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 0.61 | 57 | 0.48 | < 0.20 |
| MW-107 | | 09/28/2009 | 0.77 | 0.78 | 1.2 | < 0.20 | < 0.20 | < 0.20 | 0.36 | 2 | 2.9 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 1.9 | 7.9 | 1.5 | < 0.20 |
| MW-108 | | 10/01/2009 | 0.47 | 0.96 | 2.8 | < 0.20 | < 0.20 | 0.44 | 2.8 | < 0.20 | 5.8 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 4.8 | 29 | 4.8 | 0.53 |
| NCL-32 | | 04/10/2009 | | | | | | | | | | | | | | | | | |
| NCL-32 | | 09/24/2009 | | | | | | | | | | | | | | | | | |
| NCL-33 | | 04/10/2009 | | | | | | | | | | | | | | | | | |
| NCL-33 | | 09/24/2009 | | | | | | | | | | | | | | | | | |
| NCL-34 | | 04/10/2009 | | | | | | | | | | | | | | | | | |
| NCL-34 | | 09/24/2009 | | | | | | | | | | | | | | | | | |
| NCL-44 | | 04/10/2009 | | | | | | | | | | | | | | | | | |
| NCL-44 | | 09/24/2009 | | | | | | | | | | | | | | | | | |
| NCL-49 | | 04/08/2009 | | | | | | | | | | | | | | | | | |
| NCL-49 | Dup #5 | | | | | | | | | | | | | | | | | | |
| NCL-49 | | 10/05/2009 | | | | | | | | | | | | | | | | | |
| NF-1 | | 04/08/2009 | | | | | | | | | | | | | | | | | |
| NF-1 | | 09/30/2009 | | | | | | | | | | | | | | | | | |
| NF-2 | | 04/08/2009 | | | | | | | | | | | | | | | | | |
| NF-2 | | 09/30/2009 | | | | | | | | | | | | | | | | | |
| NF-3 | | 04/03/2009 | | | | | | | | | | | | | | | | | |
| NF-3 | | 10/05/2009 | | | | | | | | | | | | | | | | | |
| NF-3 | Dup #10 | | | | | | | | | | | | | | | | | | |
| NF-5 | | 04/08/2009 | | | | | | | | | | | | | | | | | |
| NF-5 | | 10/05/2009 | | | | | | | | | | | | | | | | | |
| NF-5 | | 04/08/2009 | | | | | | | | | | | | | | | | | |
| NF-6 | | 04/08/2009 | | | | | | | | | | | | | | | | | |
| NF-6 | | 10/05/2009 | | | | | | | | | | | | | | | | | |
| NF-9 | | 04/10/2009 | | | | | | | | | | | | | | | | | |
| NF-9 | | 09/24/2009 | | | | | | | | | | | | | | | | | |
| OC-D-1R | | 09/21/2009 | | | | | | | | | | | | | | | | | |
| OC-D-1R | | 04/01/2009 | | | | | | | | | | | | | | | | | |

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| | | Semivolatile Organic Compounds | | | | | | | | | | | | | | | | | |
|-----------|--------|--------------------------------|----------------------|-------------------|---------------------|-------------------|-----------------|----------------------------------|----------------|-------------------|------------------------|---------------------------|---------------------------|-------------------|---------------|------------------|-------------------|-------------|-------------|
| Location | Dup | Date | 2-Methyl phenol ug/l | Acenaphthene ug/l | Acenaphthylene ug/l | Acetophenone ug/l | Anthracene ug/l | Bis(2-Ethylhexyl) phthalate ug/l | Carbazole ug/l | Dibenzofuran ug/l | Diethyl phthalate ug/l | Di-n-Butyl Phthalate ug/l | Di-n-Octyl Phthalate ug/l | Fluoranthene ug/l | Fluorene ug/l | Naphthalene ug/l | Phenanthrene ug/l | Phenol ug/l | Pyrene ug/l |
| OCD-2A | | 04/01/2009 | -- | -- | -- | -- | 1.10E+04 | 6.00E+00 | -- | -- | 2.92E+04 | 3.65E+03 | -- | 1.46E+03 | 1.48E+03 | 3.00E+01 | 1.10E+03 | 5.00E+00 | 1.10E+03 |
| OCD-2A | Dup #2 | 04/01/2009 | -- | -- | -- | -- | NMED TW | EPA MCL | -- | -- | NMED TW | NMED TW | -- | NMED TW | NMED TW | WQCC PH | NMED TW | WQCC Dom | NMED TW |
| OCD-2A | | 09/22/2009 | | | | | | | | | | | | | | | | | |
| OCD-3 | | 04/01/2009 | | | | | | | | | | | | | | | | | |
| OCD-3 | | 09/22/2009 | | | | | | | | | | | | | | | | | |
| OCD-4 | | 04/01/2009 | | | | | | | | | | | | | | | | | |
| OCD-4 | | 09/22/2009 | | | | | | | | | | | | | | | | | |
| OCD-5 | | 04/01/2009 | | | | | | | | | | | | | | | | | |
| OCD-5 | | 09/22/2009 | | | | | | | | | | | | | | | | | |
| OCD-6 | | 04/01/2009 | | | | | | | | | | | | | | | | | |
| OCD-6 | | 09/21/2009 | | | | | | | | | | | | | | | | | |
| OCD-7A | | 04/01/2009 | | | | | | | | | | | | | | | | | |
| OCD-7A | | 09/21/2009 | | | | | | | | | | | | | | | | | |
| OCD-7A | Dup #2 | 09/21/2009 | | | | | | | | | | | | | | | | | |
| OCD-8A | | 04/02/2009 | | | | | | | | | | | | | | | | | |
| OCD-8A | | 09/22/2009 | | | | | | | | | | | | | | | | | |
| LarueWell | | 04/16/2009 | | | | | | | | | | | | | | | | | |
| LarueWell | | 09/30/2009 | | | | | | | | | | | | | | | | | |
| RA-313 | | 10/05/2009 | | | | | | | | | | | | | | | | | |
| RA-3156 | | 04/16/2009 | | | | | | | | | | | | | | | | | |
| RA-3156 | | 09/30/2009 | | | | | | | | | | | | | | | | | |
| RA-4186 | | 04/16/2009 | | | | | | | | | | | | | | | | | |
| RA-4186 | | 09/30/2009 | | | | | | | | | | | | | | | | | |
| RA-4788 | | 04/16/2009 | | | | | | | | | | | | | | | | | |
| RA-4788 | | 09/30/2009 | | | | | | | | | | | | | | | | | |
| RW-1 | | 04/16/2009 | | | | | | | | | | | | | | | | | |
| RW-1 | | 10/01/2009 | | | | | | | | | | | | | | | | | |
| RW-18 | | 04/07/2009 | | | | | | | | | | | | | | | | | |
| RW-18 | | 09/29/2009 | | | | | | | | | | | | | | | | | |
| TEL-1 | | 04/16/2009 | | | | | | | | | | | | | | | | | |
| TEL-1 | Dup #9 | 04/16/2009 | | | | | | | | | | | | | | | | | |
| TEL-1 | | 09/25/2009 | | | | | | | | | | | | | | | | | |
| TEL-2 | | 04/16/2009 | | | | | | | | | | | | | | | | | |
| TEL-2 | | 09/25/2009 | | | | | | | | | | | | | | | | | |
| TEL-3 | | 04/16/2009 | | | | | | | | | | | | | | | | | |
| TEL-3 | | 09/25/2009 | | | | | | | | | | | | | | | | | |
| TEL-4 | | 04/16/2009 | | | | | | | | | | | | | | | | | |
| TEL-4 | | 09/25/2009 | | | | | | | | | | | | | | | | | |
| UG-1 | | 04/09/2009 | | | | | | | | | | | | | | | | | |
| UG-1 | | 10/02/2009 | | | | | | | | | | | | | | | | | |
| UG-2 | | 04/09/2009 | | | | | | | | | | | | | | | | | |
| UG-2 | | 10/02/2009 | | | | | | | | | | | | | | | | | |
| UG-3R | | 04/09/2009 | | | | | | | | | | | | | | | | | |
| UG-3R | | 10/02/2009 | | | | | | | | | | | | | | | | | |

Units:

CGWSL:

Source:

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| Location | Dup | Date | Cations/Anions | | | | | Water Quality Parameters | | | | |
|------------------|----------|------------|-----------------|------------------|------------------|-------------------|----------------|--------------------------|-----------------------------|------------------|--------------------------------------|--|
| | | | Calcium mg/l | Chloride mg/l | Fluoride mg/l | Potassium mg/l | Sodium mg/l | Sulfate mg/l | Total Alkalinity mg/l | Nitrogen mg/l | Total Dissolved Solids mg/l | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Units: CGWSL: | 2.50E+02 | 1.60E+00 | -- | -- | -- | 6.00E+02 | -- | 1.00E+01 | 1.00E+03 | | | |
| Source: | WQCC Dom | WQCC HH | -- | -- | -- | WQCC Dom | -- | WQCC HH | WQCC Dom | | | |
| KWB-1A | | 04/07/2009 | 395 | 210 | 0.784 | 1.02 | 170 | 1890 | 365 | <0.5 | 3670 | |
| KWB-1A | | 09/29/2009 | 382 | 198 | 0.955 | 0.969 | 168 | 1850 | 409 | 0.709 | 3570 | |
| KWB-1C | | 04/07/2009 | 403 | 190 | 0.68 | 1.33 | 178 | 1850 | 346 | <0.5 | 3660 | |
| KWB-1C | | 09/29/2009 | 350 | 197 | 1.24 | 0.866 | 156 | 1820 | 400 | <0.5 | 3390 | |
| KWB-3AR | | 04/09/2009 | 601 | 176 | <0.5 | 1.05 | 329 | 2780 | 379 | 12.1 | 5270 | |
| KWB-3AR | | 09/29/2009 | 582 | 176 | <0.5 | 0.545 | 411 | 2660 | 335 | 11.9 | 5490 | |
| KWB-7 | | 04/07/2009 | 313 | 474 | <0.5 | 1.25 | 229 | 1600 | 630 | 5.74 | 2940 | |
| KWB-7 | | 10/05/2009 | 327 | 517 | 0.789 | 0.467 | 256 | 1670 | 686 | 7.15 | 3730 | |
| KWB-9 | | 04/08/2009 | 433 | 205 | <0.5 | 0.812 | 141 | 1370 | 482 | 0.964 | 2990 | |
| KWB-9 | | 09/29/2009 | 408 | 242 | <0.5 | 0.791 | 137 | 1450 | 424 | 1.17 | 3070 | |
| KWB-10 | | 04/07/2009 | | 166 | 0.764 | | | 26.8 | 644 | 0.778 | 1070 | |
| KWB-11A | | 04/07/2009 | 389 | 864 | <0.5 | 1.67 | 269 | 874 | 466 | 30.1 | 3310 | |
| KWB-11A | | 10/05/2009 | 366 | 880 | 0.84 | 0.426 | 254 | 554 | 477 | 33.7 | 3940 | |
| KWB-12A | | 09/29/2009 | 500 | 130 | <0.5 | 0.716 | 138 | 2390 | 281 | 5.47 | 4810 | |
| KWB-13 | | 04/13/2010 | 496 | 161 | <0.5 | 1.02 | 154 | 1760 | 255 | 17.9 | 3270 | |
| KWB-13 | Dup #6 | 04/13/2010 | 505 | 181 | <0.5 | 1.25 | 124 | 1760 | 282 | 13.8 | 3370 | |
| KWB-13 | | 09/29/2009 | 491 | 157 | 0.501 | 0.934 | 147 | 1710 | 286 | 14.4 | 3500 | |
| KWB-P2 | | 04/09/2009 | 621 | 994 | <0.5 | 2.02 | 337 | 1680 | 351 | 39.7 | 2040 | |
| MW-1R | | 04/02/2009 | 646 | 1630 | 0.515 | 3.62 | 1150 | 1640 | 167 | <0.5 | 3620 | |
| MW-1R | | 09/23/2009 | 538 | 1690 | 0.612 | 4.18 | 950 | 1650 | 198 | <1 | 5960 | |
| MW-2A | | 04/01/2009 | 562 | 3750 | 4.74 | 5.34 | 2550 | 2860 | 335 | 0.712 | 10400 | |
| MW-2A | | 04/02/2009 | 478 | 3230 | 2.64 | 9.23 | 2640 | 4860 | 523 | <0.5 | 12800 | |
| MW-2A | | 09/21/2009 | 394 | 2020 | 5.45 | 4.58 | 1180 | 1980 | 207 | <1 | 6900 | |
| MW-3 | | 04/01/2009 | 517 | 1090 | 2.91 | 4.26 | 730 | 2260 | 236 | <0.5 | 4960 | |
| MW-3 | | 09/21/2009 | 473 | 976 | 2.11 | 4.83 | 689 | 1870 | 236 | <1 | 4700 | |
| MW-4A | | 04/06/2009 | 352 | 1160 | 1.55 | 5.33 | 725 | 1540 | 216 | <0.5 | 4540 | |
| MW-4A | | 09/23/2009 | 380 | 1280 | 1.65 | 3.74 | 833 | 1570 | 222 | <1 | 4710 | |
| MW-5A | | 09/22/2009 | 468 | 3360 | 2.71 | 7.98 | 2800 | 5160 | 414 | <1 | 13200 | |
| MW-5A | Dup #3 | 09/22/2009 | 513 | 3320 | 2.77 | 8.28 | 3130 | 5180 | 419 | <1 | 16400 | |
| MW-6A | | 04/01/2009 | 294 | 864 | 1.35 | 1.32 | 733 | 1570 | 148 | <0.5 | 3720 | |
| MW-6A | | 09/21/2009 | 259 | 876 | 1.32 | 1.18 | 679 | 1470 | 130 | <1 | 3880 | |
| MW-7A | | 04/02/2009 | 434 | 1980 | 0.972 | 4.02 | 1820 | 2450 | 455 | <0.5 | 6880 | |
| MW-7A | | 09/22/2009 | 380 | 1960 | 1.1 | 3.9 | 1550 | 2430 | 246 | <1 | 7380 | |
| MW-8 | | 04/03/2009 | 359 | 344 | 1.69 | 1.53 | 275 | 1570 | 296 | 3.21 | 4380 | |
| MW-8 | | 10/05/2009 | 482 | 425 | 2.02 | 1.75 | 391 | 2690 | 293 | 12.2 | 5350 | |
| MW-9 | | 04/03/2009 | 584 | 476 | 2.98 | 2.21 | 500 | 3200 | 335 | 16.5 | 5570 | |
| MW-9 | | 10/05/2009 | 463 | 508 | 2.71 | 2.14 | 408 | 2690 | 283 | 18.3 | 5850 | |
| MW-10 | | 04/06/2009 | | 17370 | 0.519 | 5.69 | 928 | 1880 | 216 | <0.5 | 5260 | |
| MW-10 | | 09/23/2009 | 497 | 1680 | 0.596 | 3.29 | 945 | 1900 | 236 | <1 | 5530 | |
| MW-11A | | 04/02/2009 | 1160 | 9040 | 0.503 | 21.2 | 4930 | 2220 | 416 | <0.5 | 18000 | |
| MW-11A | | 09/22/2009 | 1010 | 9290 | 0.698 | 21.9 | 4370 | 2550 | 366 | <1 | 19100 | |
| MW-15 | | 04/06/2009 | 621 | 1260 | 3.43 | 7.25 | 806 | 2070 | 167 | <0.5 | 5290 | |
| MW-15 | | 09/23/2009 | 620 | 1500 | 1.22 | 5.85 | 775 | 1970 | 111 | <1 | 5830 | |
| MW-16 | | 04/02/2009 | 528 | 502 | 2.72 | 8.1 | 434 | 2280 | 249 | 0.577 | 4740 | |
| MW-16 | Dup #3 | 04/02/2009 | 549 | 527 | 2.15 | 8.8 | 442 | 1990 | 296 | 0.579 | 4630 | |
| MW-16 | | 09/17/2009 | 514 | 495 | 2.01 | 8.58 | 391 | 2350 | 262 | <1 | 4510 | |
| MW-17 | | 04/09/2009 | 370 | 166 | 0.655 | 2.18 | 85.1 | 1200 | 115 | 2.04 | 2270 | |
| MW-17 | | 09/28/2009 | 355 | 118 | 0.742 | 2.18 | 56 | 1030 | 101 | 2.07 | 1910 | |
| MW-17 | Dup #7 | 09/29/2009 | 340 | 121 | 0.731 | 1.96 | 60.5 | 1070 | 101 | 2.21 | 1950 | |
| MW-18 | | 04/13/2009 | 344 | 177 | 0.721 | 1.45 | 76.9 | 1240 | 399 | 13.7 | 2890 | |
| MW-18 | | 09/24/2009 | 359 | 173 | 0.713 | 1.29 | 90.3 | 1160 | 430 | 11.2 | 2680 | |

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| Cations/Anions | | | | | | | | | | Water Quality Parameters | | | | |
|----------------|---------|----------|----------|----------|-----------|--------|----------|------------------|----------|--------------------------|--|--|--|--|
| Units: | | Calcium | Chloride | Fluoride | Potassium | Sodium | Sulfate | Total Alkalinity | Nitrogen | Total Dissolved Solids | | | | |
| CGWSL: | | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | | | | |
| Source: | | WQCC Dom | WQCC Dom | WQCC HH | -- | -- | 6.00E+02 | -- | WQCC HH | WQCC Dom | | | | |
| Date | Dup | | | | | | | | | | | | | |
| MW-18A | | 649 | 5410 | 2.47 | 31.3 | 3530 | 5600 | 372 | <0.5 | 15600 | | | | |
| MW-18A | | 616 | 6130 | 2.32 | 38 | 3590 | 5180 | 308 | <1 | 16400 | | | | |
| MW-20 | | 494 | 353 | 2.32 | 0.632 | 290 | 3720 | 277 | 2.12 | 5470 | | | | |
| MW-20 | | 399 | 307 | 2.46 | 0.415 | 229 | 3000 | 273 | 1.5 | 5710 | | | | |
| MW-21 | | 556 | 482 | 1.71 | 1.92 | 479 | 3150 | 301 | 45.6 | 5800 | | | | |
| MW-21 | | 479 | 475 | 1.62 | 1.75 | 411 | 2830 | 293 | 46.8 | 5950 | | | | |
| MW-22A | | 565 | 7750 | 0.561 | 3.84 | 1320 | 1930 | 198 | <0.5 | 5780 | | | | |
| MW-22A | | 480 | 4870 | 0.517 | 3.13 | 1140 | 2040 | 217 | <1 | 6430 | | | | |
| MW-23 | | 112 | 467 | 0.592 | 1.3 | 433 | 15.9 | 1140 | <0.5 | 2040 | | | | |
| MW-23 | | 73.1 | 555 | 1.06 | 1.24 | 454 | 29.7 | 1010 | <0.5 | 2270 | | | | |
| MW-25 | | 294 | 882 | 0.878 | 5.2 | 581 | 1240 | 157 | 0.525 | 3570 | | | | |
| MW-25 | | 279 | 825 | 1.1 | 3.46 | 535 | 1230 | 159 | <1 | 3560 | | | | |
| MW-26 | | 566 | 734 | 1.74 | 4.38 | 502 | 3540 | 177 | <0.5 | 6720 | | | | |
| MW-26 | | 445 | 590 | 1.82 | 3.9 | 313 | 2860 | 179 | <1 | 6370 | | | | |
| MW-27 | | 441 | 212 | 0.979 | 9.23 | 142 | 1430 | 201 | 1.65 | 2720 | | | | |
| MW-27 | | 379 | 201 | 1.18 | 9.54 | 135 | 1350 | 198 | 2.6 | 2710 | | | | |
| MW-28 | | 251 | 179 | 0.919 | 0.484 | 99.8 | 557 | 858 | <0.5 | 2090 | | | | |
| MW-28 | | 228 | 182 | 1.1 | 0.38 | 102 | 480 | 760 | <1 | 1630 | | | | |
| MW-29 | | 440 | 398 | 1.97 | 3.18 | 415 | 1690 | 591 | <0.5 | 3900 | | | | |
| MW-29 | | 397 | 454 | 1.69 | 3.35 | 386 | 2140 | 670 | <1 | 4790 | | | | |
| MW-41 | | 316 | 995 | 0.522 | 0.87 | 680 | 1750 | 1090 | 1.08 | 4430 | | | | |
| MW-41 | | 248 | 738 | 0.546 | 0.502 | 504 | 1710 | 1040 | <1 | 4070 | | | | |
| MW-42 | Dup #7 | 210 | 641 | 0.595 | 0.743 | 410 | 1874 | 1120 | 1.07 | 3400 | | | | |
| MW-42 | | 203 | 693 | 0.502 | 0.682 | 392 | 991 | 875 | <0.5 | 3460 | | | | |
| MW-42 | | 237 | 750 | 0.605 | 0.462 | 425 | 979 | 1030 | <1 | 3860 | | | | |
| MW-43 | | 99.6 | 652 | 0.624 | 0.508 | 632 | 140 | 1120 | <0.5 | 2290 | | | | |
| MW-43 | | 133 | 626 | 0.60 | 0.561 | 584 | 128 | 972 | <0.5 | 2280 | | | | |
| MW-45 | | 383 | 264 | 1.75 | 5.69 | 207 | 1690 | 304 | <0.5 | 3200 | | | | |
| MW-45 | | 445 | 343 | 2.28 | 4.59 | 228 | 1640 | 320 | <1 | 3350 | | | | |
| MW-49 | | 216 | 541 | 0.977 | 2.12 | 298 | 358 | 703 | 1.07 | 2370 | | | | |
| MW-50 | | 374 | 170 | 0.583 | 2.11 | 116 | 1790 | 304 | <0.5 | 2760 | | | | |
| MW-50 | | 373 | 167 | 0.863 | 2.37 | 114 | 1310 | 311 | 0.585 | 2690 | | | | |
| MW-50 | Dup #6 | 408 | 167 | 0.723 | 2.47 | 121 | 1280 | 316 | <0.5 | 2730 | | | | |
| MW-52 | | 190 | 261 | 1.4 | <0.4 | 342 | 1060 | 616 | 2.24 | 2800 | | | | |
| MW-52 | | 165 | 180 | 1.42 | 0.328 | 314 | 1030 | 552 | 2.18 | 2230 | | | | |
| MW-52 | Dup #8 | 191 | 181 | 1.77 | 0.316 | 361 | 1020 | 538 | 2.11 | 2200 | | | | |
| MW-53 | | 330 | 119 | 0.840 | 1.07 | 98.1 | 1750 | 265 | 0.507 | 2370 | | | | |
| MW-53 | | 282 | 135 | 0.99 | 0.91 | 92.7 | 1790 | 223 | 2.27 | 2460 | | | | |
| MW-54A | | 384 | 286 | 0.668 | <0.4 | 48.4 | 754 | 520 | <0.5 | 1230 | | | | |
| MW-54A | | 373 | 249 | 0.768 | <0.2 | 53.8 | 779 | 408 | <0.5 | 1240 | | | | |
| MW-54A | Dup #11 | 373 | 262 | 0.797 | <0.2 | 52.1 | 758 | 504 | <0.5 | 1280 | | | | |
| MW-55 | | 447 | 278 | 0.911 | 0.897 | 218 | 2140 | 313 | 6.23 | 4190 | | | | |
| MW-55 | | 476 | 277 | 1.15 | 0.934 | 241 | 2430 | 280 | 6.58 | 4450 | | | | |
| MW-56 | | 524 | 329 | 0.75 | 2.09 | 217 | 1920 | 432 | 0.619 | 3340 | | | | |
| MW-56 | | 504 | 337 | 0.854 | 1.99 | 190 | 1650 | 380 | <1 | 4030 | | | | |
| MW-56 | Dup #5 | 496 | 338 | 0.853 | 1.94 | 185 | 1830 | 390 | <1 | 4100 | | | | |
| MW-58 | | 214 | 327 | 0.701 | <0.2 | 102 | 209 | 770 | <0.5 | 1700 | | | | |
| MW-58 | | 222 | 317 | 1.11 | 0.281 | 105 | 95.9 | 794 | <0.5 | 1560 | | | | |
| MW-61 | | 438 | 1190 | 0.703 | 0.846 | 382 | 1010 | 653 | <0.5 | 4670 | | | | |
| MW-61 | | 445 | 1050 | 0.858 | 0.684 | 487 | 924 | 658 | <0.5 | 4320 | | | | |

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| Location | Dup | Date | Cations/Anions | | | | | Water Quality Parameters | | | |
|----------|--------|------------|-----------------|------------------|------------------|-------------------|----------------|--------------------------|-----------------------------|------------------|--------------------------------------|
| | | | Calcium mg/l | Chloride mg/l | Fluoride mg/l | Potassium mg/l | Sodium mg/l | Sulfate mg/l | Total Alkalinity mg/l | Nitrogen mg/l | Total Dissolved Solids mg/l |
| MW-62 | | 04/14/2009 | 186 | 171 | 0.72 | 1.08 | 177 | 158 | 843 | <0.5 | 1,00E+03 |
| MW-62 | | 10/01/2009 | 180 | 201 | 0.888 | 0.907 | 168 | 105 | 806 | <0.5 | 1,00E+03 |
| MW-66 | | 04/14/2009 | 153 | 236 | 0.901 | 1.09 | 191 | 6.21 | 883 | <0.5 | 1,00E+03 |
| MW-66 | | 09/25/2009 | 136 | 231 | 1.05 | 0.74 | 177 | 6.96 | 750 | <0.1 | 1,00E+03 |
| MW-67 | | 04/14/2009 | 177 | 238 | <0.5 | 0.632 | 127 | 322 | 729 | <0.5 | 1,00E+03 |
| MW-67 | | 10/01/2009 | 254 | 202 | <0.5 | 0.719 | 142 | 558 | 544 | <0.5 | 1,00E+03 |
| MW-68 | | 04/03/2009 | 239 | 186 | 1.8 | 3.81 | 142 | 1,150 | 234 | 3.32 | 2,250 |
| MW-68 | | 09/29/2009 | 379 | 387 | 1.57 | 4.63 | 221 | 1,580 | 281 | 9.38 | 3,200 |
| MW-70 | | 04/02/2009 | 647 | 1,760 | <0.5 | 4.38 | 637 | 2,070 | 264 | <0.5 | 4,990 |
| MW-70 | | 09/22/2009 | 576 | 1,650 | 0.606 | 4.69 | 534 | 1,970 | 217 | <1 | 5,390 |
| MW-72 | | 03/30/2009 | 762 | 3,800 | 5.34 | 8.88 | 2,130 | 2,760 | 317 | <0.5 | 10,900 |
| MW-72 | | 09/19/2009 | 747 | 4,050 | 5.36 | 9.95 | 2,200 | 2,820 | 228 | <1 | 10,900 |
| MW-73 | | 03/30/2009 | 571 | 2,410 | 2.06 | 2.2 | 2,040 | 3,370 | 452 | <0.5 | 10,200 |
| MW-73 | | 09/18/2009 | 542 | 2,290 | 3.38 | 3.71 | 2,190 | 3,570 | 402 | 1.44 | 9,130 |
| MW-74 | | 03/30/2009 | 636 | 2,060 | 8.53 | 36.2 | 1,930 | 3,270 | 360 | 0.552 | 8,140 |
| MW-74 | | 09/18/2009 | 562 | 2,050 | 8.73 | 37.9 | 1,880 | 3,240 | 373 | 3.16 | 8,870 |
| MW-75 | | 03/30/2009 | 340 | 1,480 | 9.93 | 21.5 | 1,510 | 2,020 | 509 | <0.5 | 5,840 |
| MW-75 | Dup #1 | 09/18/2009 | 340 | 1,550 | 8.46 | 18.2 | 1,430 | 1,970 | 581 | <1 | 5,860 |
| MW-75 | | 09/18/2009 | 322 | 1,500 | 8.48 | 18.1 | 1,370 | 1,640 | 591 | <1 | 5,900 |
| MW-76 | | 03/31/2009 | 415 | 1,400 | 3.32 | 26.2 | 949 | 1,960 | 266 | 0.724 | 5,460 |
| MW-76 | | 09/17/2009 | 450 | 1,310 | 3.22 | 23.6 | 1,130 | 2,600 | 344 | <1 | 5,710 |
| MW-77 | | 03/31/2009 | 439 | 1,580 | 2.76 | 43.3 | 1,210 | 1,420 | 463 | <0.2 | 5,460 |
| MW-77 | | 09/17/2009 | 445 | 1,570 | 2.53 | 48.7 | 1,380 | 2,370 | 494 | <1 | 6,060 |
| MW-78 | | 03/31/2009 | 372 | 1,110 | 8.33 | 21.9 | 835 | 2,090 | 443 | <0.2 | 5,420 |
| MW-78 | | 09/17/2009 | 339 | 1,080 | 7.1 | 20.3 | 805 | 1,760 | 358 | <1 | 5,030 |
| MW-79 | | 03/31/2009 | 562 | 2,120 | 11.4 | 10.1 | 1,490 | 2,230 | 246 | 0.762 | 6,600 |
| MW-79 | Dup #1 | 09/18/2009 | 606 | 2,290 | 11.4 | 11.3 | 1,690 | 2,460 | 216 | 0.76 | 6,600 |
| MW-79 | | 09/18/2009 | 607 | 2,170 | 10.2 | 9.8 | 1,400 | 2,180 | 218 | <1 | 7,770 |
| MW-80 | | 03/31/2009 | 535 | 1,300 | 4.75 | 3.56 | 1,200 | 1,900 | 207 | 0.809 | 5,770 |
| MW-80 | | 09/18/2009 | 537 | 1,340 | 4.28 | 3.57 | 851 | 1,940 | 184 | <1 | 5,660 |
| MW-81 | | 03/31/2009 | 566 | 1,490 | 8.52 | 8.81 | 1,050 | 2,260 | 286 | 2.78 | 5,740 |
| MW-81 | | 09/18/2009 | 501 | 1,280 | 8.55 | 6.5 | 993 | 1,950 | 218 | 4.57 | 4,990 |
| MW-82 | | 03/31/2009 | 348 | 1,460 | 12.7 | 8.91 | 1,630 | 2,360 | 852 | <0.5 | 4,300 |
| MW-82 | | 09/21/2009 | 327 | 1,480 | 13.4 | 9.14 | 1,640 | 2,420 | 718 | <1 | 7,090 |
| MW-83 | | 03/31/2009 | 339 | 1,180 | 4.03 | 29.2 | 946 | 1,840 | 502 | <0.5 | 5,050 |
| MW-83 | | 09/21/2009 | 386 | 1,715 | 4.32 | 41.8 | 1,010 | 2,950 | 855 | <1 | 6,060 |
| MW-84 | | 03/31/2009 | 608 | 1,770 | 4.84 | 6.84 | 1,400 | 3,490 | 561 | <0.5 | 8,870 |
| MW-84 | | 09/21/2009 | 634 | 2,010 | 4.84 | 6.32 | 1,560 | 3,760 | 434 | <1 | 8,380 |
| MW-87 | | 04/06/2009 | 677 | 4,240 | 1.52 | 23.1 | 2,670 | 4,170 | 255 | <0.5 | 14,300 |
| MW-87 | | 09/22/2009 | 594 | 4,290 | 1.67 | 22.4 | 2,720 | 4,300 | 270 | <1 | 13,000 |
| MW-88 | | 04/06/2009 | 374 | 1,470 | 0.733 | 3.79 | 1,010 | 1,850 | 201 | 0.595 | 5,580 |
| MW-88 | Dup #4 | 09/23/2009 | 392 | 1,500 | 0.765 | 2.94 | 1,030 | 1,950 | 192 | <0.5 | 6,500 |
| MW-88 | | 09/23/2009 | 348 | 1,370 | 0.814 | 2.79 | 973 | 1,690 | 207 | <1 | 5,380 |
| MW-88 | Dup #4 | 09/23/2009 | 324 | 1,370 | 0.818 | 2.89 | 901 | 1,600 | 212 | <1 | 5,390 |
| MW-89 | | 04/02/2009 | 536 | 479 | 2.37 | 8.33 | 186 | 1,630 | 186 | 0.55 | 3,040 |
| MW-89 | | 09/17/2009 | 493 | 218 | 3.09 | 10.7 | 180 | 1,630 | 199 | <1 | 3,020 |
| MW-90 | | 04/16/2009 | 283 | 114 | 1.31 | 1.69 | 311 | 1,640 | 567 | <0.5 | 3,770 |
| MW-90 | | 10/01/2009 | 273 | 98.9 | 1.27 | 1.26 | 279 | 1,500 | 603 | <0.5 | 3,470 |
| MW-91 | | 04/15/2009 | 241 | 48.8 | 0.625 | 0.523 | 51.3 | 535 | 713 | <0.5 | 1,820 |
| MW-91 | | 10/01/2009 | 284 | 20.1 | 1.12 | 0.364 | 43 | 790 | 722 | 0.562 | 2,250 |

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| | | | | Cations/Anions | | | | | | Water Quality Parameters | | | | | |
|-------------------|---------|------------|---------|----------------|----------|----------|-----------|--------|---------|--------------------------|----------|------------------------|--|--|--|
| Units: CGWS/L: | | | | Calcium | Chloride | Fluoride | Potassium | Sodium | Sulfate | Total Alkalinity | Nitrogen | Total Dissolved Solids | | | |
| Location | Dup | Date | Source: | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | | | |
| MW-92 | | 04/15/2009 | | 172 | 403 | 0.549 | 0.59 | 325 | 310 | 970 | <0.5 | 2280 | | | |
| MW-92 | | 10/07/2009 | | 137 | 603 | 0.871 | 0.922 | 446 | 40 | 1100 | <0.1 | 2260 | | | |
| MW-93 | | 04/15/2009 | | 329 | 60.1 | 1.26 | 4.55 | 90.3 | 877 | 529 | <0.5 | 2000 | | | |
| MW-93 | | 10/07/2009 | | 314 | 46.7 | 1.32 | 2.6 | 77.5 | 709 | 480 | <0.5 | 1920 | | | |
| MW-95 | | 04/15/2009 | | 240 | 267 | <0.5 | 0.446 | 112 | 477 | 669 | <0.5 | 1680 | | | |
| MW-95 | | 10/07/2009 | | 216 | 235 | 0.657 | 0.339 | 112 | 488 | 643 | <0.5 | 2060 | | | |
| MW-96 | | 04/15/2009 | | 164 | 248 | 0.667 | 0.629 | 214 | 308 | 839 | <0.5 | 1880 | | | |
| MW-96 | Dup #8 | 04/15/2009 | | 166 | 242 | 0.63 | 0.76 | 214 | 337 | 854 | <0.5 | 1620 | | | |
| MW-96 | | 10/07/2009 | | 178 | 222 | 1.04 | 0.832 | 251 | 243 | 757 | 0.633 | 1790 | | | |
| MW-96 | Dup #9 | 10/07/2009 | | 160 | 220 | 0.791 | 0.824 | 253 | 242 | 601 | <0.5 | 1770 | | | |
| MW-98 | | 04/15/2009 | | 294 | 18.3 | 0.73 | <0.4 | 72.9 | 1670 | 320 | <0.5 | 2860 | | | |
| MW-98 | | 09/28/2009 | | 419 | 55.4 | 1.64 | 0.214 | 77 | 2040 | 518 | <0.5 | 3870 | | | |
| MW-99 | | 04/15/2009 | | 177 | 248 | <0.5 | 0.594 | 133 | 218 | 616 | <0.5 | 1390 | | | |
| MW-99 | | 09/28/2009 | | 190 | 249 | <0.5 | 0.57 | 206 | 205 | 774 | <0.5 | 1660 | | | |
| MW-101 | | 04/15/2009 | | 171 | 289 | <0.5 | 0.581 | 180 | 229 | 718 | <0.5 | 1680 | | | |
| MW-101 | | 09/28/2009 | | 196 | 241 | 0.847 | 0.614 | 147 | 212 | 617 | <0.5 | 1440 | | | |
| MW-103 | | 03/16/2009 | | 12.1 | 979 | 1.12 | 1.15 | 1050 | 42.5 | 1020 | <1 | 2710 | | | |
| MW-103 | | 09/28/2009 | | 13.4 | 879 | 1.17 | 0.92 | 1010 | 39.8 | 1060 | <0.5 | 2700 | | | |
| MW-104 | | 03/16/2009 | | 208 | 64.8 | 2.97 | 5.01 | 38.3 | 620 | 139 | <1 | 1780 | | | |
| MW-104 | | 09/28/2009 | | 291 | 74.1 | 2.33 | 6.69 | 61.4 | 750 | 202 | <0.5 | 1560 | | | |
| MW-106 | | 05/28/2009 | | 416 | 83.2 | 0.989 | 2.46 | 194 | 1890 | 508 | 0.507 | 1680 | | | |
| MW-107 | | 09/28/2009 | | 161 | 306 | 0.918 | 1.77 | 68.7 | 0 | 730 | <0.5 | 1570 | | | |
| MW-108 | | 10/07/2009 | | 396 | 120 | 4.93 | 6.87 | 73.9 | 978 | 593 | 0.544 | 2800 | | | |
| NCL-32 | | 04/10/2009 | | 453 | 204 | 1.49 | 5.83 | 64.8 | 1130 | 386 | <0.5 | 2560 | | | |
| NCL-32 | | 09/24/2009 | | 989 | 198 | 2.54 | 25.3 | 76.4 | 7100 | 290 | <1 | 2540 | | | |
| NCL-33 | | 04/10/2009 | | 476 | 577 | 2.22 | 4.06 | 94.4 | 937 | 483 | 1.03 | 3760 | | | |
| NCL-33 | | 09/24/2009 | | 430 | 468 | 2.4 | 4.8 | 88 | 882 | 450 | <1 | 3070 | | | |
| NCL-34 | | 04/10/2009 | | 256 | 434 | 2.22 | 1.75 | 112 | 134 | 570 | 1.03 | 1660 | | | |
| NCL-34 | | 09/24/2009 | | 230 | 279 | 1.28 | 2.04 | 121 | 128 | 550 | <1 | 1890 | | | |
| NCL-44 | | 04/10/2009 | | 288 | 171 | 1.35 | 1.95 | 54.5 | 496 | 630 | <0.5 | 1800 | | | |
| NCL-44 | | 09/24/2009 | | 249 | 185 | 1.4 | 2.15 | 59.2 | 469 | 550 | <1 | 1770 | | | |
| NCL-49 | | 04/08/2009 | | 461 | 165 | <0.5 | 0.708 | 117 | 1720 | 260 | 9.65 | 3180 | | | |
| NCL-49 | Dup #5 | 04/08/2009 | | 457 | 163 | <0.5 | 0.707 | 115 | 1720 | 202 | 9.29 | 3210 | | | |
| NCL-49 | | 10/05/2009 | | 443 | 152 | 0.561 | 0.458 | 123 | 1630 | 224 | 9.33 | 3190 | | | |
| NP-1 | | 04/08/2009 | | | | | | | | | | | | | |
| NP-1 | | 09/30/2009 | | | | | | | | | | | | | |
| NP-2 | | 04/08/2009 | | | | | | | | | | | | | |
| NP-2 | | 09/30/2009 | | | | | | | | | | | | | |
| NP-3 | | 04/03/2009 | | 459 | 327 | 1.32 | 4.32 | 199 | 2030 | 277 | <0.5 | 3460 | | | |
| NP-3 | | 10/05/2009 | | 322 | 242 | 1.74 | 2 | 143 | 1700 | 263 | 0.838 | 3330 | | | |
| NP-3 | Dup #10 | 10/05/2009 | | 340 | 243 | 1.36 | 1.96 | 152 | 1670 | 278 | 0.85 | 3400 | | | |
| NP-5 | | 04/08/2009 | | 527 | 171 | 2.62 | 0.441 | 516 | 4470 | 269 | <0.5 | 6930 | | | |
| NP-5 | | 10/05/2009 | | 418 | 164 | 2.7 | 0.212 | 413 | 3980 | 258 | 5.75 | 6690 | | | |
| NP-6 | | 04/08/2009 | | 577 | 677 | 1.93 | 3.23 | 416 | 2640 | 313 | 36.4 | 5780 | | | |
| NP-6 | | 10/05/2009 | | 500 | 409 | 2.22 | 2.71 | 373 | 2770 | 278 | 41.9 | 6660 | | | |
| NP-9 | | 04/10/2009 | | 508 | 403 | 2.7 | 1.59 | 215 | 2180 | 451 | <0.5 | 4420 | | | |
| NP-9 | | 09/24/2009 | | 522 | 420 | 2.72 | 1.36 | 207 | 2270 | 460 | <1 | 4740 | | | |
| OCD-1R | | 09/21/2009 | | 559 | 2470 | 5.46 | 5.36 | 1500 | 2340 | 222 | <1 | 6560 | | | |
| OCD-1R | | 04/01/2009 | | 569 | 2170 | 5.26 | 5.21 | 1220 | 2220 | 172 | <0.5 | 6220 | | | |


Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| Units: CGWSL: | | | Cations/Anions | | | | | | Water Quality Parameters | | | |
|------------------|--------|------------|----------------|------|----------|----------|-----------|--------|--------------------------|------------------|----------|------------------------|
| | | | Calcium | | Chloride | Fluoride | Potassium | Sodium | Sulfate | Total Alkalinity | Nitrogen | Total Dissolved Solids |
| | | | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| Location | Dup | Date | Ca | Cl | F | P | Na | S | TA | N | TDS | |
| OCD-2A | | 04/01/2009 | 590 | 2360 | 0.811 | 4.09 | 1250 | 2770 | 175 | <0.5 | 7080 | |
| OCD-2A | Dup #2 | 04/01/2009 | 566 | 2270 | 0.776 | 4.81 | 1390 | 2650 | 236 | 0.714 | 6980 | |
| OCD-2A | | 09/22/2009 | 482 | 1570 | 0.718 | 3.64 | 825 | 1770 | 169 | <1 | 5380 | |
| OCD-3 | | 04/01/2009 | 426 | 1010 | 0.783 | 12.9 | 596 | 1350 | 125 | <0.5 | 3700 | |
| OCD-3 | | 09/22/2009 | 377 | 958 | 0.949 | 11.4 | 490 | 1490 | 130 | <1 | 4720 | |
| OCD-4 | | 04/01/2009 | 777 | 4630 | 0.595 | 35.4 | 2360 | 2910 | 161 | <0.5 | 10800 | |
| OCD-4 | | 09/22/2009 | 743 | 4590 | 0.723 | 33.4 | 2460 | 2770 | 193 | <1 | 10800 | |
| OCD-5 | | 04/01/2009 | 789 | 4550 | 0.614 | 32.8 | 2820 | 2990 | 184 | <0.5 | 11600 | |
| OCD-5 | | 09/22/2009 | 764 | 4650 | 0.754 | 29.9 | 2760 | 2890 | 217 | <1 | 12600 | |
| OCD-6 | | 04/01/2009 | 599 | 3480 | 3.22 | 11.6 | 2710 | 3270 | 566 | <0.5 | 11400 | |
| OCD-6 | | 09/21/2009 | 545 | 3580 | 3.29 | 12.2 | 2590 | 3170 | 584 | <1 | 11300 | |
| OCD-7A | | 04/01/2009 | 590 | 2170 | 4.57 | 7.16 | 2000 | 3059 | 601 | 0.673 | 9210 | |
| OCD-7A | | 09/21/2009 | 588 | 2200 | 4.32 | 7.32 | 2040 | 3280 | 540 | <1 | 9330 | |
| OCD-7A | Dup #2 | 09/21/2009 | 512 | 2160 | 4.41 | 6.69 | 1840 | 3220 | 554 | <1 | 9890 | |
| OCD-8A | | 04/02/2009 | 573 | 2700 | 2.84 | 7.88 | 2220 | 3390 | 499 | <0.5 | 9550 | |
| OCD-8A | | 09/22/2009 | 645 | 2880 | 3.4 | 9.25 | 2500 | 3640 | 520 | <1 | 10100 | |
| LaneWell | | 04/16/2009 | 423 | 116 | <0.5 | 1.66 | 104 | 1440 | 245 | 7.85 | 2690 | |
| LaneWell | | 09/30/2009 | 408 | 117 | 0.382 | 1.65 | 110 | 1450 | 256 | 7.7 | 2770 | |
| RA-313 | | 10/05/2009 | 154 | 15.2 | 0.711 | 0.876 | 13 | 429 | 184 | 1.14 | 976 | |
| RA-3156 | | 04/16/2009 | 454 | 218 | <0.5 | 2.54 | 140 | 1490 | 231 | 5.28 | 2880 | |
| RA-3156 | | 09/30/2009 | 433 | 231 | <0.5 | 2.5 | 143 | 1520 | 242 | 5.74 | 3080 | |
| RA-4186 | | 04/16/2009 | 377 | 875 | <0.5 | 2.89 | 419 | 1220 | 157 | <0.15 | 3370 | |
| RA-4196 | | 09/30/2009 | 425 | 329 | <0.5 | 2.39 | 158 | 1780 | 197 | <0.5 | 2770 | |
| RA-4798 | | 04/16/2009 | 238 | 70 | <0.5 | 2.02 | 44.7 | 768 | 128 | <0.5 | 1460 | |
| RA-4798 | | 09/30/2009 | 457 | 165 | <0.5 | 2.34 | 127 | 1560 | 286 | 0.758 | 3000 | |
| RW-1 | | 04/16/2009 | 300 | 372 | 0.573 | 1.84 | 290 | 736 | 820 | <0.5 | 2870 | |
| RW-1 | | 10/01/2009 | 218 | 324 | 0.597 | 1.11 | 252 | 677 | 742 | <0.5 | 2510 | |
| RW-18 | | 04/07/2009 | 509 | 371 | 1.98 | 0.864 | 231 | 1440 | 265 | 1.07 | 5320 | |
| RW-18 | | 09/29/2009 | 522 | 309 | 1.93 | 1.19 | 214 | 2920 | 296 | 1.53 | 0 | |
| TEL-1 | | 04/16/2009 | 214 | 249 | 1.90 | 0.805 | 444 | 919 | 582 | <0.5 | 2590 | |
| TEL-1 | Dup #9 | 04/16/2009 | 205 | 251 | 1.93 | 1 | 462 | 908 | 618 | <0.5 | 2560 | |
| TEL-1 | | 09/25/2009 | 280 | 126 | 2.14 | 0.881 | 430 | 507 | 640 | <1 | 2850 | |
| TEL-2 | | 04/16/2009 | 224 | 392 | 0.562 | 1.19 | 384 | 825 | 825 | <0.5 | 3040 | |
| TEL-2 | | 09/25/2009 | 205 | 417 | 0.9 | 1.34 | 357 | 737 | 930 | <1 | 3030 | |
| TEL-3 | | 04/16/2009 | 304 | 597 | 2.09 | 3.92 | 325 | 580 | 698 | <0.5 | 2660 | |
| TEL-3 | | 09/25/2009 | 611 | 34.2 | 2.93 | 5.64 | 52.3 | 1520 | 400 | <1 | 3780 | |
| TEL-4 | | 04/16/2009 | 274 | 308 | <0.5 | 0.593 | 219 | 680 | 689 | <0.5 | 2370 | |
| TEL-4 | | 09/25/2009 | 302 | 195 | 0.615 | 0.547 | 263 | 844 | 920 | <1 | 3220 | |
| UG-1 | | 04/09/2009 | 907 | 177 | <0.5 | 7.06 | 70.5 | 1900 | 1330 | 5.54 | 3410 | |
| UG-1 | | 10/02/2009 | 487 | 166 | 0.681 | 2.07 | 65.4 | 1910 | 252 | 7.21 | 5450 | |
| UG-2 | | 04/09/2009 | 374 | 62.1 | 1.25 | 4.61 | 75.9 | 1070 | 120 | 1.7 | 1940 | |
| UG-2 | | 10/02/2009 | 284 | 53 | 1.3 | 4.04 | 67 | 991 | 247 | 2.56 | 3190 | |
| UG-3R | | 04/09/2009 | 434 | 62.9 | <0.5 | 4.06 | 83.3 | 1590 | 379 | 4.86 | 2390 | |
| UG-3R | | 10/02/2009 | 451 | 68 | 0.565 | 3.47 | 59.6 | 1430 | 208 | 5.38 | 2520 | |

Units:
 CGWSL:

Source:

Table 1
2009 Groundwater Monitoring Program Analytical Results
 Navajo Refinery, Artesia, New Mexico

| Explanation of data presentation | |
|---|--|
|  | Reported value exceeds the CGWSL |
| < 10 | Analyte not detected at Method Quantitation Limit shown. |
| | Analyte not analyzed for this sample. |

Abbreviations:

CGWSL = Critical Groundwater Screening Level
 DRO = Diesel Range Organics
 GRO = Gasoline Range Organics
 mg/L = Milligrams per liter
 TPH = Total Petroleum Hydrocarbons
 ug/L = Micrograms per liter

Groundwater Screening Level Sources:

".. " = No standard available
 MCL = Maximum Contaminant Level from the National Primary Drinking Water Standards
 NMED TPH = New Mexico Environment Department Total Petroleum Hydrocarbon Standards, October 2006
 NMED TW = New Mexico Environment Department Tap Water Standard, December 2009 (from Soil Screening Level guidance document)
 WQCC HH = Water Quality Control Commission; human health standard for groundwater from NMAC 20.6.2.3103.A
 WQCC Dom = Water Quality Control Commission; domestic water supply standard for groundwater from NMAC 20.6.2.3103.B
 WQCC Irr = Water Quality Control Commission; irrigation use standard for groundwater from NMAC 20.6.2.3103.C

Hierarchy of selecting the CGWSL is as follows:

1. Lowest of either NMED GW Standards (20.6.2.3103) or EPA MCL was selected.
2. If no NMED GW Standard or EPA MCL available, then NMED Tap Water value from SSG Table A-1, if available.
3. NMED TPH screening for "unknown oil" used for both DRO range TPH.

Table 2
Summary of Field Observations 2009
Navajo Refinery, Artesia, New Mexico

| Well ID | Date Measured | Top of Casing Elevation (ft amsl) | Screened Interval | Depth to Product (ft bto c) | Depth to Water (ft bto c) | Total Depth (ft bto c) | Product Thickness (ft) | Groundwater Elevation (ft amsl) | Date Sampled | Sampling Method | Conductivity (S/m) | Temperature (°C) | pH (SU) | DO (mg/L) | ORP (mV) |
|----------|---------------|-----------------------------------|-------------------|------------------------------|---------------------------|------------------------|------------------------|---------------------------------|--------------|-----------------|--------------------|------------------|-----------------------------|-----------|----------|
| KWB #1A | 3/25/2009 | 3351.87 | 18 to 32 | -- | 14.04 | 34.06 | 0.00 | 3337.83 | 4/7/2009 | SP | 0.436 | 17.580 | 6.980 | 2.260 | -6 |
| KWB #1A | 9/15/2009 | 3351.87 | 18 to 32 | -- | 14.20 | 33.8 | 0.00 | 3337.67 | 9/29/2009 | SP | 3.900 | 23.580 | 8.110 | 4.270 | -160 |
| KWB #1B | 3/25/2009 | 3351.06 | 18 to 32 | -- | 15.18 | 33.99 | 0.00 | | | | | | | | |
| KWB #1B | 9/15/2009 | 3351.06 | 18 to 32 | -- | 15.55 | 34 | 0.00 | | | | | | | | |
| KWB #1C | 3/25/2009 | 3351.59 | 30.5 to 49.5 | -- | 15.78 | 52.77 | 0.00 | 3335.81 | 4/7/2009 | SP | 0.432 | 17.870 | 7.000 | 1.420 | 15 |
| KWB #1C | 9/15/2009 | 3351.59 | 30.5 to 49.5 | -- | 16.15 | 52.75 | 0.00 | 3335.44 | 9/29/2009 | SP | 3.820 | 21.370 | 7.990 | 4.210 | -169 |
| KWB #2R | 3/25/2009 | 3354.31 | | 23.52 | 24.85 | 39.87 | 1.33 | 3330.62 | | | | | | | |
| KWB #2R | 9/16/2009 | 3354.31 | | 19.39 | 19.40 | 39.91 | 0.01 | 3334.92 | | | | | | | |
| KWB #3AR | 3/25/2009 | 3345.20 | | -- | 23.50 | 33.7 | 0.00 | 3321.70 | 4/9/2009 | SP | 0.570 | 17.740 | 7.140 | 8.100 | 180 |
| KWB #3AR | 9/16/2009 | 3345.20 | | -- | 18.78 | 33.66 | 0.00 | 3326.42 | 9/29/2009 | SP | 5.410 | 22.760 | 7.420 | 9.540 | -20 |
| KWB #4 | 3/27/2009 | 3368.33 | 20 to 39 | 25.21 | 29.25 | 40.74 | 4.04 | 3342.59 | | | | | | | |
| KWB #4 | 9/15/2009 | 3368.33 | 20 to 39 | 22.93 | 25.47 | 40.74 | 2.54 | 3345.07 | | | | | | | |
| KWB #5 | 3/25/2009 | 3363.02 | 24.7 to 38.7 | 24.78 | 24.92 | 37.7 | 0.14 | 3338.22 | | | | | | | |
| KWB #5 | 9/15/2009 | 3363.02 | 24.7 to 38.7 | 22.14 | 22.73 | 37.55 | 0.59 | 3340.80 | | | | | | | |
| KWB #6 | 3/25/2009 | 3358.71 | 17.5 to 36.5 | 22.72 | 25.87 | 36.41 | 3.15 | 3335.58 | | | | | | | |
| KWB #6 | 9/15/2009 | 3358.71 | 17.5 to 36.5 | 18.89 | 18.91 | 36.27 | 0.02 | 3339.82 | | | | | | | |
| KWB #7 | 3/25/2009 | 3344.14 | 18 to 32 | -- | 23.95 | 34.85 | 0.00 | 3320.19 | 4/7/2009 | SP | 0.421 | 17.810 | 6.940 | 2.910 | 100 |
| KWB #7 | 9/16/2009 | 3344.14 | 18 to 32 | -- | 17.90 | 34.84 | 0.00 | 3326.24 | 10/5/2009 | SP | 4.210 | 19.740 | 6.720 | 0.180 | 106 |
| KWB #8 | 3/25/2009 | 3348.59 | | Not Measured - Pump in Place | | | | | | | | | | | |
| KWB #8 | 9/16/2009 | 3348.59 | | Not Measured - Pump in Place | | | | | | | | | | | |
| KWB #9 | 3/25/2009 | 3352.67 | 20 to 34 | -- | 28.42 | 37.51 | 0.00 | 3324.25 | 4/8/2009 | SP | 0.373 | 17.920 | 6.880 | 2.840 | 262 |
| KWB #9 | 9/16/2009 | 3352.67 | 20 to 34 | -- | 21.68 | 37.48 | 0.00 | 3330.99 | 9/29/2009 | SP | | | Horiba meter broken | | |
| KWB #10 | 3/25/2009 | 3355.07 | 35.5 to 49.5 | -- | 18.82 | 23.58 | 0.00 | 3336.25 | 4/7/2009 | SP | 0.196 | 18.820 | 7.020 | 1.860 | -46 |
| KWB #10 | 9/16/2009 | 3355.07 | 35.5 to 49.5 | -- | 17.39 | 49 | 0.00 | 3337.68 | 9/29/2009 | SP | | | not sampled - broken casing | | |
| KWB #11A | 3/25/2009 | 3346.09 | 30 to 39.5 | -- | 24.88 | 42.25 | 0.00 | 3321.21 | 4/7/2009 | SP | 0.505 | 17.650 | 6.840 | 2.550 | 152 |
| KWB #11A | 9/16/2009 | 3346.09 | 30 to 39.5 | -- | 18.19 | 42.24 | 0.00 | 3327.90 | 10/5/2009 | SP | 5.030 | 20.490 | 6.570 | 0.980 | 108 |
| KWB #11B | 3/25/2009 | 3346.88 | 50 to 69.5 | -- | 25.57 | 72.43 | 0.00 | 3321.31 | | | | | | | |
| KWB #11B | 9/16/2009 | 3346.88 | 50 to 69.5 | -- | 18.99 | 72.4 | 0.00 | 3327.89 | | | | | | | |
| KWB #12A | 3/25/2009 | 3349.65 | 15.5 to 24.5 | -- | DRY | 25.11 | 0.00 | DRY | | | | | | | |
| KWB #12A | 9/16/2009 | 3349.65 | 15.5 to 24.5 | -- | 19.74 | 25.07 | 0.00 | 3329.91 | 9/29/2009 | SP | | | not sampled - well was dry | | |
| KWB #12B | 3/25/2009 | -- | 25.5 to 39.5 | -- | 26.95 | 39.41 | 0.00 | | | | | | | | |
| KWB #12B | 9/16/2009 | -- | 25.5 to 39.5 | -- | 19.51 | 39.43 | 0.00 | | | | | | | | |
| KWB #13 | 3/25/2009 | 3366.84 | | -- | 26.80 | 33.25 | 0.00 | 3340.04 | 4/13/2009 | SP | 0.414 | 17.420 | 7.180 | 2.430 | 89 |
| KWB #13 | 9/14/2009 | 3366.84 | | -- | 21.30 | 33.16 | 0.00 | 3345.54 | 9/29/2009 | SP | 3.540 | 21.170 | 7.630 | 10.400 | -90 |
| KWB #P2 | 3/26/2009 | 3337.28 | | -- | 29.49 | 33.65 | 0.00 | 3307.79 | 4/9/2009 | SP | 0.642 | 18.810 | 7.120 | 5.390 | 195 |
| KWB #P2 | 9/15/2009 | 3337.28 | | -- | 30.91 | 33.62 | 0.00 | 3306.37 | 9/29/2009 | | | | not sampled - well was dry | | |
| KWB #P3 | 3/26/2009 | -- | | -- | 8.83 | 29.14 | 0.00 | | | | | | | | |
| KWB #P3 | 9/15/2009 | -- | | -- | 9.40 | 29.13 | 0.00 | | | | | | | | |

Table 2
Summary of Field Observations 2009
Navajo Refinery, Artesia, New Mexico

| Well ID | Date Measured | Top of Casing Elevation (ft amsl) | Screened Interval | Depth to Product (ft bloc) | Depth to Water (ft bloc) | Total Depth (ft bloc) | Product Thickness (ft) | Groundwater Elevation (ft amsl) | Date Sampled | Sampling Method | Conductivity (S/m) | Temperature (°C) | pH (SU) | DO (mg/L) | ORP (mV) |
|-------------|---------------|-----------------------------------|-------------------|------------------------------|--|-----------------------|------------------------|---------------------------------|--------------|-----------------|---------------------------------|------------------|---------|-----------|----------|
| KWB #P4 | 3/26/2009 | -- | | -- | 6.27 | 30.95 | 0.00 | | | | not sampled - measurements only | | | | |
| KWB #P4 | 9/15/2009 | -- | | -- | 5.09 | 30.14 | 0.00 | | | | not sampled - measurements only | | | | |
| KWB #P5 | 3/26/2009 | -- | | | Not locatable (in highway right of way, covered) | | | | | | | | | | |
| KWB #P5 | | -- | | | Destroyed | | | | | | | | | | |
| La Rue Well | | | | Not measured - domestic well | | | | | | | | | | | |
| La Rue Well | | | | Not measured - domestic well | | | | | | | | | | | |
| MW #1R | 3/25/2009 | 3311.93 | | -- | 9.15 | 20.9 | 0.00 | 3302.78 | 4/16/2009 | SP | 0.324 | 16.770 | 7.920 | 11.640 | 22 |
| MW #1R | 9/15/2009 | 3311.93 | | -- | 9.47 | 20.8 | 0.00 | 3302.46 | 9/30/2009 | SP | No Measurements | | | | |
| MW #2A | 3/25/2009 | 3309.82 | | -- | 8.41 | 17.31 | 0.00 | 3301.41 | 4/2/2009 | LF | 0.872 | 18.590 | 7.470 | 3.260 | -122 |
| MW #2A | | | | | | | | | 9/23/2009 | LF | 8.370 | 22.860 | 8.350 | 5.580 | 296 |
| MW #2A | 9/14/2009 | 3309.82 | | -- | 8.86 | 17.28 | 0.00 | 3300.96 | 4/1/2009 | LF | 1.510 | 16.580 | 7.390 | 4.010 | -53 |
| MW #2A | | | | | | | | | 4/2/2009 | LF | 1.700 | 17.170 | 7.350 | 2.930 | -110 |
| MW #2B | 3/25/2009 | -- | | -- | 9.75 | 51.99 | 0.00 | | 9/21/2009 | LF | 11.300 | 25.230 | 7.210 | 1.780 | -105 |
| MW #2B | 9/14/2009 | -- | | -- | 10.38 | 24.98 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #3 | 3/25/2009 | 3308.42 | | -- | 8.28 | 20.34 | 0.00 | 3300.14 | | | not sampled - measurements only | | | | |
| MW #3 | 9/14/2009 | 3308.42 | | -- | 9.20 | 20.32 | 0.00 | 3299.22 | 4/1/2009 | LF | 0.670 | 18.260 | 7.340 | 4.840 | -33 |
| MW #4A | 3/26/2009 | 3309.69 | | -- | 10.94 | 22.38 | 0.00 | 3298.75 | 9/21/2009 | LF | 6.610 | 24.500 | 7.090 | 1.950 | -112 |
| MW #4A | 9/14/2009 | 3309.69 | | -- | 11.89 | 22.27 | 0.00 | 3297.80 | 4/6/2009 | LF | 0.100 | 18.950 | 7.740 | 6.380 | 165 |
| MW #4B | 3/26/2009 | -- | | -- | 10.19 | 72.28 | 0.00 | | 9/23/2009 | LF | 6.800 | 23.940 | 9.510 | 5.330 | 224 |
| MW #4B | 9/14/2009 | -- | | -- | 11.09 | 72.23 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #5A | 3/26/2009 | 3307.27 | | -- | 7.98 | 20.08 | 0.00 | 3299.29 | 4/2/2009 | LF | 1.700 | 17.170 | 7.350 | 2.930 | -110 |
| MW #5A | 9/14/2009 | 3307.27 | | -- | 8.80 | 20.15 | 0.00 | 3298.47 | 9/22/2009 | LF | 8.680 | 22.000 | 5.390 | 3.070 | -117 |
| MW #5B | 3/26/2009 | 3306.18 | 41.5 to 50.5 | -- | 7.73 | 53.31 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #5B | 9/14/2009 | 3306.18 | 41.5 to 50.5 | -- | 8.68 | 53.38 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #5C | 3/26/2009 | 3306.54 | 59.25 to 68.75 | -- | 7.80 | 71.51 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #5C | 9/14/2009 | 3306.54 | 59.25 to 68.75 | -- | 8.80 | 71.79 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #6A | 3/25/2009 | 3310.67 | | -- | 11.38 | 19.04 | 0.00 | 3299.29 | 4/1/2009 | LF | 0.551 | 19.210 | 7.790 | 3.000 | -126 |
| MW #6A | 9/14/2009 | 3310.67 | | -- | 12.24 | 19.1 | 0.00 | 3298.43 | 9/21/2009 | LF | 5.650 | 23.270 | 7.640 | 1.750 | -168 |
| MW #6B | 3/25/2009 | -- | | -- | 11.15 | 52.28 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #6B | 9/14/2009 | -- | | -- | 11.96 | 52.33 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #7A | 3/25/2009 | 3306.15 | | -- | 6.84 | 17.31 | 0.00 | 3299.31 | 4/2/2009 | LF | 1.180 | 18.100 | 7.550 | 2.540 | -121 |
| MW #7A | 9/15/2009 | 3306.15 | | -- | 7.55 | 17.31 | 0.00 | 3298.60 | 9/22/2009 | LF | 5.410 | 23.230 | 5.740 | 3.220 | -119 |
| MW #7B | 3/25/2009 | -- | | -- | 8.14 | 52.58 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #7B | 9/15/2009 | -- | | -- | 8.84 | 52.53 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #8 | 3/25/2009 | 3335.31 | | -- | 11.57 | 20.31 | 0.00 | 3323.74 | 4/3/2009 | LF | 0.537 | 17.830 | 7.260 | 2.980 | 109 |
| MW #8 | 9/15/2009 | 3335.31 | | -- | 11.84 | 20.33 | 0.00 | 3323.47 | 10/5/2009 | LF | 5.700 | 20.320 | 7.050 | 0.000 | 75 |
| MW #9 | 3/25/2009 | 3335.18 | | -- | 15.16 | 21.8 | 0.00 | 3320.02 | 4/3/2009 | LF | 0.631 | 18.660 | 7.080 | 2.820 | 140 |
| MW #9 | 9/15/2009 | 3335.18 | | -- | 12.60 | 20.18 | 0.00 | 3322.58 | 10/5/2009 | LF | 6.180 | 22.440 | 6.930 | 0.010 | 92 |

Table 2
Summary of Field Observations 2009
Navajo Refinery, Artesia, New Mexico

| Well ID | Date Measured | Top of Casing Elevation (ft amsl) | Screened Interval | Depth to Product (ft bloc) | Depth to Water (ft bloc) | Total Depth (ft bloc) | Product Thickness (ft) | Groundwater Elevation (ft amsl) | Date Sampled | Sampling Method | Conductivity (S/m) | Temperature (°C) | pH (S) | DO (mg/L) | ORP (mV) |
|---------|---------------|-----------------------------------|-------------------|----------------------------|--------------------------|-----------------------|------------------------|---------------------------------|--------------|-----------------|---------------------------------|------------------|--------|-----------|----------|
| MW #10 | 3/25/2009 | 3310.30 | | -- | 4.88 | 18.59 | 0.00 | 3305.42 | 4/6/2009 | LF | 0.100 | 18.990 | 7.900 | 6.580 | 161 |
| MW #10 | 9/14/2009 | 3310.30 | | -- | 6.19 | 18.79 | 0.00 | 3304.11 | 9/23/2009 | LF | 7.490 | 21.650 | 8.010 | 7.540 | 353 |
| MW #11A | 3/25/2009 | 3307.46 | | -- | 8.22 | 21.91 | 0.00 | 3299.24 | 4/2/2009 | LF | 3.210 | 17.280 | 7.240 | 2.600 | -56 |
| MW #11A | 9/14/2009 | 3307.46 | | -- | 8.81 | 21.4 | 0.00 | 3298.65 | 9/22/2009 | LF | 16.400 | 24.600 | 5.440 | 2.490 | -89 |
| MW #11B | 3/25/2009 | -- | | -- | 8.08 | 47.22 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #11B | 9/14/2009 | -- | | -- | 8.67 | 47.18 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #12 | 3/26/2009 | -- | | -- | 7.04 | 10.48 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #12 | 9/15/2009 | -- | | -- | 9.60 | 10.48 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #13 | 3/26/2009 | -- | | -- | 10.39 | 27 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #13 | 9/15/2009 | -- | | -- | 11.13 | 20.99 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #14 | 3/25/2009 | -- | | -- | 8.20 | 11.89 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #14 | 9/15/2009 | -- | | -- | 9.38 | 11.89 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #15 | 3/25/2009 | 3310.93 | | -- | 9.83 | 21.68 | 0.00 | 3301.10 | 4/6/2009 | LF | 0.100 | 18.330 | 7.670 | 6.120 | 160 |
| MW #15 | 9/14/2009 | 3310.93 | | -- | 10.42 | 21.68 | 0.00 | 3300.51 | 9/23/2009 | LF | 7.720 | 23.560 | 8.170 | 6.460 | 354 |
| MW #16 | 3/26/2009 | 3314.77 | | -- | 9.45 | 21.25 | 0.00 | 3305.32 | 4/2/2009 | LF | 0.568 | 17.340 | 7.530 | 7.950 | 90 |
| MW #16 | 9/14/2009 | 3314.77 | | -- | 8.97 | 21.22 | 0.00 | 3305.80 | 9/17/2009 | LF | 5.620 | 20.360 | 7.000 | 3.930 | 9 |
| MW #17 | 3/25/2009 | -- | | -- | 18.88 | 34.51 | 0.00 | | 4/9/2009 | SP | 0.288 | 18.990 | 7.610 | 8.110 | 171 |
| MW #17 | 9/14/2009 | -- | | -- | 20.09 | 34.45 | 0.00 | | 9/29/2009 | SP | 2.060 | 21.340 | 8.210 | 12.100 | -91 |
| MW #18 | 3/25/2009 | 3364.13 | 15 to 19 | -- | 12.00 | 22.27 | 0.00 | 3352.13 | 4/14/2009 | SP | 0.351 | 18.510 | 7.080 | 2.200 | 99 |
| MW #18 | 9/16/2009 | 3364.13 | 15 to 19 | -- | 12.37 | 22.3 | 0.00 | 3351.76 | 9/24/2009 | SP | 3.030 | 24.120 | 7.660 | 5.060 | -297 |
| MW #18A | 3/26/2009 | 3305.36 | | -- | 8.64 | 22.65 | 0.00 | 3286.72 | 4/2/2009 | LF | 2.440 | 18.240 | 7.590 | 3.950 | -160 |
| MW #18A | 9/15/2009 | 3305.36 | | -- | 9.10 | 22.52 | 0.00 | 3296.26 | 9/22/2009 | LF | 13.700 | 22.880 | 5.630 | 6.900 | -81 |
| MW #18B | 3/26/2009 | -- | | -- | 8.25 | 50.51 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #18B | 9/15/2009 | -- | | -- | 8.85 | 50.45 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #18T | 3/26/2009 | -- | | -- | 8.60 | 50.8 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #18T | 9/15/2009 | -- | | -- | 9.20 | 50.75 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #19 | 3/25/2009 | -- | | -- | 12.64 | 22.05 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #19 | 9/16/2009 | -- | | -- | 11.53 | 21.97 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #20 | 3/26/2009 | 3340.69 | 9.5 to 23.5 | -- | 10.41 | 26.85 | 0.00 | 3330.28 | 4/3/2009 | LF | 0.599 | 19.440 | 7.130 | 2.780 | 133 |
| MW #20 | 9/15/2009 | 3340.69 | 9.5 to 23.5 | -- | 13.07 | 26.88 | 0.00 | 3327.62 | 10/5/2009 | LF | 5.560 | 21.370 | 6.930 | 0.050 | 112 |
| MW #21 | 3/26/2009 | 3336.39 | 7.5 to 22 | -- | 13.08 | 25.11 | 0.00 | 3323.33 | 4/3/2009 | LF | 0.649 | 19.300 | 7.090 | 3.170 | 138 |
| MW #21 | 9/15/2009 | 3336.39 | 7.5 to 22 | -- | 13.34 | 25.1 | 0.00 | 3323.05 | 10/5/2009 | LF | 6.190 | 20.160 | 6.970 | 0.000 | 91 |
| MW #22A | 3/26/2009 | 3304.30 | | -- | 7.27 | 22.65 | 0.00 | 3297.03 | 4/6/2009 | LF | 0.100 | 17.940 | 7.920 | 6.750 | 167 |
| MW #22A | 9/14/2009 | 3304.30 | | -- | 8.43 | 22.6 | 0.00 | 3295.87 | 9/23/2009 | LF | 8.970 | 23.870 | 9.420 | 5.600 | 270 |
| MW #22B | 3/26/2009 | -- | | -- | 7.06 | 54.57 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #22B | 9/14/2009 | -- | | -- | 8.18 | 54.54 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #23 | 3/26/2009 | 3365.10 | 15 to 20 | -- | 13.76 | 19.06 | 0.00 | 3351.34 | 4/14/2009 | SP | 0.368 | 24.170 | 7.110 | 1.520 | -351 |
| MW #23 | 9/14/2009 | 3365.10 | 15 to 20 | -- | 13.24 | 19.18 | 0.00 | 3351.86 | 9/28/2009 | SP | 3.390 | 30.290 | 8.420 | 3.700 | -269 |

Table 2
Summary of Field Observations 2009
Navajo Refinery, Artesia, New Mexico

| Well ID | Date Measured | Top of Casing Elevation (ft amsl) | Screened Interval | Depth to Product (ft btoC) | Depth to Water (ft btoC) | Total Depth (ft btoC) | Product Thickness (ft) | Groundwater Elevation (ft amsl) | Date Sampled | Sampling Method | Conductivity (S/m) | Temperature (°C) | pH (SU) | DO (mg/L) | ORP (mV) |
|---------|---------------|-----------------------------------|-------------------|----------------------------|--------------------------|-----------------------|------------------------|---------------------------------|--------------|-----------------|---------------------------------|---------------------------|---------|-----------|----------|
| MW #24 | 3/25/2009 | -- | 15 to 20 | -- | 9.25 | 23.51 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #24 | 9/15/2009 | -- | 15 to 20 | -- | 9.98 | 23.41 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #25 | 3/26/2009 | 3310.32 | 15.75 to 25.25 | -- | 11.40 | 28.04 | 0.00 | 3298.92 | 4/6/2009 | LF | 0.541 | 18.050 | 7.630 | 6.190 | 111 |
| MW #25 | 9/14/2009 | 3310.32 | 15.25 to 24.25 | -- | 9.28 | 28.05 | 0.00 | 3301.04 | 9/23/2009 | LF | 4.880 | 20.980 | 8.120 | 6.490 | 352 |
| MW #26 | 3/26/2009 | 3314.30 | 15.75 to 25.25 | -- | 10.71 | 27.67 | 0.00 | 3303.59 | 4/2/2009 | LF | 0.732 | 18.180 | 7.240 | 3.600 | 70 |
| MW #26 | 9/14/2009 | 3314.30 | 15.25 to 24.25 | -- | 10.95 | 27.55 | 0.00 | 3303.35 | 9/17/2009 | LF | 6.300 | 19.990 | 7.060 | 3.360 | 241 |
| MW #27 | 3/26/2009 | 3320.13 | 18.25 to 27.75 | -- | 17.63 | 30.28 | 0.00 | 3302.50 | 4/3/2009 | LF | 0.336 | 18.050 | 6.990 | 2.820 | 145 |
| MW #27 | 9/14/2009 | 3320.13 | 18.25 to 27.75 | -- | 15.31 | 30.25 | 0.00 | 3304.82 | 9/17/2009 | LF | 3.280 | 22.200 | 6.620 | 2.350 | 337 |
| MW #28 | 3/26/2009 | 3363.73 | 25 to 30 | -- | 24.57 | 34.07 | 0.00 | 3339.16 | 4/14/2009 | SP | 0.311 | 21.000 | 7.050 | 1.250 | -346 |
| MW #28 | 9/15/2009 | 3363.73 | 25 to 30 | -- | 23.06 | 34.1 | 0.00 | 3340.67 | 9/25/2009 | SP | 2.480 | 30.980 | 7.720 | 4.670 | -446 |
| MW #29 | 3/25/2009 | 3364.55 | 9.75 to 19.25 | -- | 11.68 | 21.82 | 0.00 | 3352.87 | 4/13/2009 | SP | 0.536 | 18.970 | 7.000 | 1.420 | -280 |
| MW #29 | 9/16/2009 | 3364.55 | 9.75 to 19.25 | -- | 10.89 | 21.8 | 0.00 | 3353.66 | 9/24/2009 | SP | 5.000 | 24.180 | 8.750 | 4.870 | -460 |
| MW #30 | 3/25/2009 | -- | -- | -- | 8.54 | 21.34 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #30 | 9/16/2009 | -- | -- | -- | 8.92 | 21.35 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #39 | 3/25/2009 | 3361.07 | 14 to 24 | 9.35 | 9.38 | 25.33 | 0.03 | 3351.72 | | | not sampled - product in well | | | | |
| MW #39 | 9/15/2009 | 3361.07 | 14 to 24 | 7.10 | 7.11 | 25.34 | 0.01 | 3353.97 | | | not sampled - product in well | | | | |
| MW #40 | 3/25/2009 | -- | -- | -- | 7.58 | 24.79 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #40 | 9/16/2009 | -- | -- | -- | 5.50 | 24.81 | 0.00 | | | | not sampled - measurements only | | | | |
| MW #41 | 3/25/2009 | 3361.53 | 14 to 19 | -- | 8.52 | 22.5 | 0.00 | 3353.01 | 4/13/2009 | SP | 0.706 | 19.150 | 6.710 | 2.640 | -225 |
| MW #41 | 9/16/2009 | 3361.53 | 14 to 19 | -- | 7.20 | 22.52 | 0.00 | 3354.33 | 9/24/2009 | SP | 5.610 | 23.900 | 8.230 | 4.950 | -434 |
| MW #42 | 3/25/2009 | 3362.55 | | -- | 9.59 | 23.39 | 0.00 | 3352.96 | 4/13/2009 | SP | 0.543 | 18.590 | 6.970 | 2.130 | -348 |
| MW #42 | 9/16/2009 | 3362.55 | | -- | 8.58 | 23.4 | 0.00 | 3353.97 | 9/24/2009 | SP | 5.300 | 23.650 | 8.380 | 3.580 | -485 |
| MW #43 | 3/26/2009 | 3362.80 | 15.5 to 20.5 | -- | 11.47 | 21.26 | 0.00 | 3351.33 | 4/14/2009 | SP | 0.456 | 20.000 | 7.160 | 1.050 | -376 |
| MW #43 | 9/14/2009 | 3362.80 | 15.5 to 20.5 | -- | 10.86 | 21.23 | 0.00 | 3351.94 | 9/28/2009 | SP | 3.830 | 26.220 | 8.560 | 3.580 | -310 |
| MW #45 | 3/25/2009 | 3356.92 | 10.5 to 15.5 | -- | 6.40 | 15.8 | 0.00 | 3350.52 | 4/6/2009 | LF | 0.421 | 19.440 | 7.390 | 3.040 | -86 |
| MW #45 | 9/14/2009 | 3356.92 | 10.5 to 15.5 | -- | 6.92 | 15.82 | 0.00 | 3350.00 | 9/24/2009 | LF | 4.250 | 27.330 | 8.250 | 4.980 | -380 |
| MW #46 | 3/25/2009 | 3356.92 | 12 to 17 | -- | 6.06 | 19.81 | 0.00 | 3350.86 | 4/6/2009 | LF | | No Sample - Casing Broken | | | |
| MW #46 | 9/14/2009 | 3356.92 | 12 to 17 | -- | 8.19 | 19.83 | 0.00 | 3348.73 | | | No Sample - Casing Broken | | | | |
| MW #48 | 3/27/2009 | 3366.14 | | 20.31 | 21.04 | 32.39 | 0.73 | 3345.73 | | | not sampled - product in well | | | | |
| MW #48 | 9/15/2009 | 3366.14 | | 18.07 | 18.60 | 32.38 | 0.53 | 3348.00 | | | not sampled - product in well | | | | |
| MW #49 | 3/26/2009 | 3362.93 | | -- | 11.92 | 33.08 | 0.00 | 3351.01 | 4/14/2009 | | 0.381 | 21.460 | 6.960 | 1.620 | -373 |
| MW #49 | 9/16/2009 | 3362.93 | | -- | 10.78 | 33.03 | 0.00 | 3352.15 | | | | | | | |
| MW #52 | 3/26/2009 | 3371.67 | | -- | 21.11 | 34.72 | 0.00 | 3350.56 | 4/8/2009 | SP | 0.379 | 20.270 | 7.080 | 2.830 | 30 |
| MW #52 | 9/16/2009 | 3371.67 | | -- | 18.52 | 34.46 | 0.00 | 3353.15 | 9/30/2009 | SP | | Horiba meter broken | | | |
| MW #50 | 3/25/2009 | 3374.21 | | -- | 17.28 | 28.3 | 0.00 | 3356.93 | 4/9/2009 | SP | 0.336 | 20.770 | 7.180 | 2.600 | -173 |
| MW #50 | 9/14/2009 | 3374.21 | | -- | 17.10 | 28.28 | 0.00 | 3357.11 | 9/28/2009 | SP | 2.890 | 24.980 | 8.680 | 3.720 | -281 |
| MW #53 | 3/26/2009 | 3367.87 | | -- | 13.32 | 23.87 | 0.00 | 3354.55 | 4/8/2009 | SP | 0.302 | 20.530 | 7.210 | 2.290 | 79 |
| MW #53 | 9/16/2009 | 3367.87 | | -- | 13.91 | 23.87 | 0.00 | 3353.96 | 10/5/2009 | SP | 2.820 | 22.910 | 6.950 | 0.120 | 62 |

Table 2
Summary of Field Observations 2009
 Navajo Refinery, Artesia, New Mexico

| Well ID | Date Measured | Top of Casing Elevation (ft amsl) | Screened Interval | Depth to Product (ft btoc) | Depth to Water (ft btoc) | Total Depth (ft btoc) | Product Thickness (ft) | Groundwater Elevation (ft amsl) | Date Sampled | Sampling Method | Conductivity (S/m) | Temperature (°C) | pH (SU) | DO (mg/L) | ORP (mV) |
|---------|---|-----------------------------------|-------------------|-----------------------------|--------------------------|-----------------------|------------------------|---------------------------------|---------------------------------|-----------------|---------------------|------------------|---------|-----------|----------|
| MW #54A | 3/26/2009 | 3365.66 | | -- | 12.87 | 31.33 | 0.00 | 3352.79 | 4/8/2009 | SP | 0.310 | 19.290 | 6.740 | 2.570 | -4 |
| MW #54A | 9/16/2009 | 3365.66 | | -- | 13.38 | 31.29 | 0.00 | 3352.28 | 10/5/2009 | SP | 2.890 | 23.290 | 6.490 | 0.220 | 42 |
| MW #54B | 3/26/2009 | -- | | -- | 12.89 | 47.08 | 0.00 | | not sampled - measurements only | | | | | | |
| MW #54B | 9/16/2009 | -- | | -- | 13.36 | 47.45 | 0.00 | | not sampled - measurements only | | | | | | |
| MW #55 | 3/25/2009 | 3363.97 | | -- | 11.86 | 26.82 | 0.00 | 3352.11 | 4/10/2009 | SP | 0.492 | 19.550 | 7.200 | 2.640 | -194 |
| MW #55 | 9/16/2009 | 3363.97 | | -- | 11.79 | 26.82 | 0.00 | 3352.18 | 9/24/2009 | SP | 5.050 | 24.020 | 7.680 | 4.620 | -297 |
| MW #56 | 3/25/2009 | 3362.05 | | -- | 11.54 | 26.38 | 0.00 | 3350.51 | 4/10/2009 | SP | 0.482 | 19.880 | 7.020 | 2.700 | -77 |
| MW #56 | 9/16/2009 | 3362.05 | | -- | 11.75 | 26.1 | 0.00 | 3350.30 | 9/24/2009 | SP | 4.510 | 24.680 | 7.510 | 5.210 | -304 |
| MW #57 | 3/26/2009 | -- | | Not Measured - Pump in Well | | | | | not sampled - product in well | | | | | | |
| MW #57 | | -- | | Not Measured - Pump in Well | | | | | not sampled - product in well | | | | | | |
| MW #58 | 3/26/2009 | -- | | -- | 22.62 | 33.15 | 0.00 | | 4/8/2009 | SP | 0.280 | 20.260 | 6.710 | 1.930 | -72 |
| MW #58 | 9/16/2009 | -- | | -- | 18.49 | 33.14 | 0.00 | | 9/30/2009 | SP | Horiba meter broken | | | | |
| MW #59 | 3/25/2009 | -- | | -- | 6.44 | 29.27 | 0.00 | | not sampled - measurements only | | | | | | |
| MW #59 | 9/16/2009 | -- | | -- | 4.00 | 29.67 | 0.00 | | not sampled - measurements only | | | | | | |
| MW #60 | 3/25/2009 | -- | | -- | 6.81 | 34.17 | 0.00 | | not sampled - measurements only | | | | | | |
| MW #60 | 9/16/2009 | -- | | -- | 5.20 | 34.3 | 0.00 | | not sampled - measurements only | | | | | | |
| MW #61 | 3/27/2009 | 3362.42 | 14 to 29 | -- | 12.85 | 29.02 | 0.00 | 3349.57 | 4/9/2009 | SP | 0.633 | 23.290 | 7.010 | 2.120 | -368 |
| MW #61 | 10/1/2009 | 3362.42 | 14 to 29 | -- | 12.60 | 29.1 | 0.00 | 3349.82 | 10/1/2009 | SP | 5.140 | 26.540 | 6.430 | 0.000 | -383 |
| MW #62 | 3/26/2009 | -- | 14 to 29 | -- | 16.27 | 32.93 | 0.00 | | 4/14/2009 | SP | 0.257 | 21.600 | 7.000 | 1.770 | -373 |
| MW #62 | 9/14/2009 | -- | 14 to 29 | -- | 16.11 | 31.94 | 0.00 | | 10/1/2009 | SP | 2.320 | 27.210 | 6.380 | 0.130 | -358 |
| MW #63 | Inaccessible in March-April 2009 due to heavy equipment and temporary storage | | | | | | | | | | | | | | |
| MW #63 | Inaccessible in September 2009 due to heavy equipment and temporary storage | | | | | | | | | | | | | | |
| MW #64 | 3/26/2009 | -- | 15 to 30 | 20.91 | 22.45 | 34.19 | 1.54 | | not sampled - product in well | | | | | | |
| MW #64 | 9/15/2009 | -- | 15 to 30 | 19.54 | 21.34 | 34.16 | 1.80 | | not sampled - product in well | | | | | | |
| MW #65 | 3/26/2009 | -- | 14.5 to 29.5 | 17.34 | 20.00 | 29.37 | 2.66 | | not sampled - product in well | | | | | | |
| MW #65 | 9/15/2009 | -- | 14.5 to 29.5 | 16.33 | 16.48 | 29.35 | 0.15 | | not sampled - product in well | | | | | | |
| MW #66 | 3/26/2009 | -- | 14.6 to 29.6 | -- | 18.18 | 29.67 | 0.00 | | 4/14/2009 | SP | 0.236 | 20.490 | 7.070 | 3.520 | -223 |
| MW #66 | 9/16/2009 | -- | 14.6 to 29.6 | -- | 16.48 | 29.67 | 0.00 | | 9/25/2009 | SP | 1.910 | 25.070 | 8.020 | 4.340 | -406 |
| MW #67 | 3/25/2009 | -- | 12 to 27 | -- | 11.30 | 27.17 | 0.00 | | 4/14/2009 | SP | 0.267 | 20.570 | 7.130 | 1.620 | -283 |
| MW #67 | 9/16/2009 | -- | 12 to 27 | -- | 11.34 | 27.18 | 0.00 | | 10/1/2009 | SP | 2.500 | 24.760 | 6.520 | 0.000 | -321 |
| MW #68 | 3/25/2009 | 3334.29 | | -- | 21.67 | 26.76 | 0.00 | 3312.62 | 4/3/2009 | LF | 0.304 | 19.600 | 7.030 | 3.940 | 137 |
| MW #68 | 9/16/2009 | 3334.29 | | -- | 20.87 | 26.74 | 0.00 | 3313.42 | 9/29/2009 | LF | 3.670 | 23.120 | 7.590 | 8.930 | -95 |
| MW #69 | 3/26/2009 | 3334.29 | | -- | 7.91 | 10.9 | 0.00 | 3326.38 | not sampled - measurements only | | | | | | |
| MW #69 | 9/16/2009 | 3334.29 | | -- | 8.28 | 10.88 | 0.00 | 3326.01 | not sampled - measurements only | | | | | | |
| MW #70 | 3/26/2009 | 3303.09 | | -- | 7.30 | 22.01 | 0.00 | 3295.79 | 4/2/2009 | LF | 0.678 | 17.030 | 7.260 | 4.140 | 23 |
| MW #70 | 9/16/2009 | 3303.09 | | -- | 8.33 | 22.03 | 0.00 | 3294.76 | 9/22/2009 | LF | 3.560 | 22.470 | 5.480 | 3.250 | -69 |
| MW #71 | 3/26/2009 | 3303.09 | | -- | 12.32 | 20.21 | 0.00 | 3290.77 | not sampled - measurements only | | | | | | |
| MW #71 | 9/16/2009 | 3303.09 | | -- | 17.45 | 21.78 | 0.00 | 3285.64 | not sampled - measurements only | | | | | | |

Table 2
Summary of Field Observations 2009
Navajo Refinery, Artesia, New Mexico

| Well ID | Date Measured | Top of Casing Elevation (ft amsl) | Screened Interval | Depth to Product (ft bloc) | Depth to Water (ft bloc) | Total Depth (ft bloc) | Product Thickness (ft) | Groundwater Elevation (ft amsl) | Date Sampled | Sampling Method | Conductivity (S/m) | Temperature (°C) | pH (SU) | DO (mg/L) | ORP (mV) |
|---------|---------------|-----------------------------------|-------------------|----------------------------|--------------------------|-----------------------|------------------------|---------------------------------|-------------------------------|-----------------|--------------------|------------------|---------|-----------|----------|
| MW #72 | 3/26/2009 | 3308.04 | 2 to 12 | -- | 6.35 | 13.88 | 0.00 | 3301.69 | 3/30/2009 | LF | 1.810 | 16.260 | 7.180 | 10.900 | -121 |
| MW #72 | 9/14/2009 | 3308.04 | 2 to 12 | -- | 6.97 | 13.88 | 0.00 | 3301.07 | 9/18/2009 | LF | 18.200 | 23.130 | 6.920 | 2.000 | -137 |
| MW #73 | 3/25/2009 | 3309.65 | 2 to 17 | -- | 8.63 | 19.61 | 0.00 | 3301.02 | 3/30/2009 | LF | 1.520 | 16.690 | 7.420 | 6.940 | -110 |
| MW #73 | 9/14/2009 | 3309.65 | 2 to 17 | -- | 8.80 | 19.55 | 0.00 | 3300.85 | 9/18/2009 | LF | 14.800 | 20.070 | 7.290 | 3.920 | 138 |
| MW #74 | 3/25/2009 | 3309.44 | 2 to 17 | -- | 8.25 | 20.13 | 0.00 | 3301.19 | 3/30/2009 | LF | 1.370 | 18.200 | 7.350 | 7.680 | -2 |
| MW #74 | 9/14/2009 | 3309.44 | 2 to 17 | -- | 9.05 | 20.11 | 0.00 | 3300.39 | 9/18/2009 | LF | 13.800 | 21.970 | 7.010 | 3.140 | 26 |
| MW #75 | 3/25/2009 | 3309.63 | 3 to 18 | -- | 8.38 | 23.64 | 0.00 | 3301.25 | 3/30/2009 | LF | 0.928 | 19.120 | 7.430 | 5.890 | -95 |
| MW #75 | 9/14/2009 | 3309.63 | 3 to 18 | -- | 9.27 | 23.64 | 0.00 | 3300.36 | 9/18/2009 | LF | 10.500 | 21.420 | 7.060 | 2.430 | -177 |
| MW #76 | 3/25/2009 | 3311.13 | 3 to 18 | -- | 10.00 | 20.28 | 0.00 | 3301.13 | 3/31/2009 | LF | 0.795 | 18.490 | 7.350 | 2.420 | -82 |
| MW #76 | 9/14/2009 | 3311.13 | 3 to 18 | -- | 10.85 | 20.27 | 0.00 | 3300.28 | 9/17/2009 | LF | 8.100 | 22.750 | 7.020 | 2.710 | -199 |
| MW #77 | 3/25/2009 | 3309.36 | 3 to 18 | -- | 8.24 | 20.49 | 0.00 | 3301.12 | 3/31/2009 | LF | 0.921 | 18.240 | 7.170 | 2.560 | -90 |
| MW #77 | 9/14/2009 | 3309.36 | 3 to 18 | -- | 9.11 | 20.45 | 0.00 | 3300.25 | 9/17/2009 | LF | 9.300 | 22.440 | 6.930 | 2.540 | -169 |
| MW #78 | 3/25/2009 | 3309.41 | 2 to 17 | -- | 8.26 | 19.55 | 0.00 | 3301.15 | 3/31/2009 | LF | 0.728 | 16.670 | 7.230 | 2.240 | -75 |
| MW #78 | 9/14/2009 | 3309.41 | 2 to 17 | -- | 9.13 | 19.53 | 0.00 | 3300.28 | 9/17/2009 | LF | 7.120 | 22.560 | 7.120 | 3.180 | -160 |
| MW #79 | 3/25/2009 | 3310.99 | 2 to 17 | -- | 8.96 | 19.23 | 0.00 | 3302.03 | 3/31/2009 | LF | 1.170 | 18.150 | 7.410 | 3.180 | 41 |
| MW #79 | 9/14/2009 | 3310.99 | 2 to 17 | -- | 9.66 | 19.21 | 0.00 | 3301.33 | 9/18/2009 | LF | 12.200 | 21.020 | 7.070 | 1.960 | -55 |
| MW #80 | 3/25/2009 | 3310.37 | 2 to 17 | -- | 7.65 | 19.83 | 0.00 | 3302.72 | 3/31/2009 | LF | 7.590 | 17.030 | 7.370 | 3.360 | -26 |
| MW #80 | 9/14/2009 | 3310.37 | 2 to 17 | -- | 8.30 | 20.82 | 0.00 | 3302.07 | 9/18/2009 | LF | 7.800 | 21.410 | 7.100 | 2.010 | -104 |
| MW #81 | 3/25/2009 | 3311.92 | 2 to 17 | -- | 9.29 | 19.63 | 0.00 | 3302.63 | 3/31/2009 | LF | 0.862 | 17.750 | 7.280 | 2.930 | 71 |
| MW #81 | 9/14/2009 | 3311.92 | 2 to 17 | -- | 9.90 | 18.61 | 0.00 | 3302.02 | 9/18/2009 | LF | 8.150 | 22.190 | 7.030 | 2.210 | -11 |
| MW #82 | 3/25/2009 | 3310.30 | 2 to 17 | -- | 8.37 | 20 | 0.00 | 3301.93 | 3/31/2009 | LF | 0.962 | 18.420 | 7.350 | 2.770 | -93 |
| MW #82 | 9/14/2009 | 3310.30 | 2 to 17 | -- | 9.11 | 19.98 | 0.00 | 3301.19 | 9/21/2009 | LF | 11.400 | 23.740 | 7.140 | 1.790 | -168 |
| MW #83 | 3/25/2009 | 3309.50 | 2 to 17 | -- | 8.21 | 19.89 | 0.00 | 3301.29 | 3/31/2009 | LF | 0.763 | 17.490 | 7.270 | 2.940 | -58 |
| MW #83 | 9/14/2009 | 3309.50 | 2 to 17 | -- | 9.05 | 19.87 | 0.00 | 3300.45 | 9/21/2009 | LF | 8.160 | 24.520 | 6.930 | 2.200 | -3 |
| MW #84 | 3/25/2009 | 3311.17 | 2 to 17 | -- | 9.42 | 20.47 | 0.00 | 3301.75 | 3/31/2009 | LF | 1.210 | 18.700 | 7.370 | 3.010 | 31 |
| MW #84 | 9/14/2009 | 3311.17 | 2 to 17 | -- | 9.37 | 20.44 | 0.00 | 3301.80 | 9/21/2009 | LF | 12.600 | 23.020 | 7.060 | 2.090 | -115 |
| MW #85 | 3/25/2009 | 3310.66 | 3 to 18 | 8.63 | 8.87 | 20.25 | 0.24 | 3302.00 | not sampled - product in well | | | | | | |
| MW #85 | 9/14/2009 | 3310.66 | 3 to 18 | 9.21 | 9.91 | 20.27 | 0.70 | 3301.36 | not sampled - product in well | | | | | | |
| MW #86 | 3/25/2009 | 3310.65 | 2 to 17 | 8.17 | 8.60 | 19.15 | 0.43 | 3302.42 | not sampled - product in well | | | | | | |
| MW #86 | 9/14/2009 | 3310.65 | 2 to 17 | 8.80 | 10.65 | 19.18 | 1.85 | 3301.61 | not sampled - product in well | | | | | | |
| MW #87 | 3/25/2009 | 3310.65 | 2 to 17 | -- | 7.69 | 20.35 | 0.00 | 3302.96 | 4/6/2009 | LF | 0.100 | 18.700 | 7.590 | 6.550 | 170 |
| MW #87 | 9/15/2009 | 3310.65 | 2 to 17 | -- | 8.58 | 20.28 | 0.00 | 3302.07 | 9/22/2009 | LF | 9.550 | 23.330 | 5.790 | 10.560 | -41 |
| MW #88 | 3/25/2009 | 3308.02 | 3 to 18 | -- | 8.12 | 20.25 | 0.00 | 3299.90 | 4/6/2009 | LF | 0.200 | 17.650 | 7.910 | 6.910 | 177 |
| MW #88 | 9/15/2009 | 3308.02 | 3 to 18 | -- | 9.31 | 20.27 | 0.00 | 3298.71 | 9/23/2009 | LF | 7.510 | 22.870 | 8.000 | 6.630 | 323 |
| MW #89 | 3/25/2009 | 3317.87 | 2 to 17 | -- | 12.15 | 20.24 | 0.00 | 3305.72 | 4/2/2009 | LF | 0.366 | 17.800 | 7.140 | 3.280 | -60 |
| MW #89 | 9/15/2009 | 3317.87 | 2 to 17 | -- | 10.81 | 20.2 | 0.00 | 3307.06 | 9/17/2009 | LF | 3.790 | 20.990 | 6.750 | 5.770 | 99 |
| MW #90 | 3/25/2009 | 3368.75 | 5 to 20 | -- | 13.22 | 22.65 | 0.00 | 3355.53 | 4/15/2009 | SP | 0.454 | 19.210 | 7.130 | 2.010 | -378 |
| MW #90 | 9/14/2009 | 3368.75 | 5 to 20 | -- | 13.19 | 22.7 | 0.00 | 3355.56 | 10/1/2009 | SP | 3.800 | 22.250 | 6.820 | 0.040 | -367 |

Table 2
Summary of Field Observations 2009
 Navajo Refinery, Artesia, New Mexico

| Well ID | Date Measured | Top of Casing Elevation (ft amsl) | Screened Interval | Depth to Product (ft bto c) | Depth to Water (ft bto c) | Total Depth (ft bto c) | Product Thickness (ft) | Groundwater Elevation (ft amsl) | Date Sampled | Sampling Method | Conductivity (S/m) | Temperature (°C) | pH (SU) | DO (mg/L) | ORP (mV) |
|---------|---------------|-----------------------------------|-------------------|-----------------------------|---------------------------|------------------------|------------------------|---------------------------------|---------------------------------|----------------------------------|--------------------|------------------|---------|-----------|----------|
| MW#91 | 3/25/2009 | 3367.10 | 7 to 22 | -- | 12.26 | 25.25 | 0.00 | 3354.84 | 4/15/2009 | SP | 0.270 | 20.510 | 6.910 | 1.490 | -425 |
| MW#91 | 9/14/2009 | 3367.10 | 7 to 22 | -- | 12.19 | 25.26 | 0.00 | 3354.91 | 10/1/2009 | SP | 2.570 | 23.860 | 6.440 | 0.000 | -381 |
| MW#92 | 3/25/2009 | 3368.00 | 5 to 20 | -- | 13.11 | 22.57 | 0.00 | 3354.89 | 4/15/2009 | SP | 0.381 | 19.600 | 6.940 | 1.850 | -342 |
| MW#92 | 9/14/2009 | 3368.00 | 5 to 20 | -- | 13.28 | 22.58 | 0.00 | 3354.72 | 10/1/2009 | SP | 3.830 | 23.090 | 6.510 | 0.000 | -331 |
| MW#93 | 3/26/2009 | 3363.18 | 5 to 20 | -- | 8.36 | 20.09 | 0.00 | 3354.82 | 4/15/2009 | SP | 0.273 | 17.790 | 7.230 | 3.050 | -388 |
| MW#93 | 9/14/2009 | 3363.18 | 5 to 20 | -- | 8.84 | 20.1 | 0.00 | 3354.34 | 10/1/2009 | SP | 2.210 | 24.790 | 6.510 | 2.170 | -344 |
| MW#94 | 3/25/2009 | 3367.25 | 5 to 20 | 13.25 | 16.95 | 23.27 | 3.70 | 3353.51 | not sampled - product in well | | | | | | |
| MW#94 | 9/15/2009 | 3367.25 | 5 to 20 | 13.22 | 16.99 | 23.8 | 3.77 | 3353.54 | not sampled - product in well | | | | | | |
| MW#95 | 3/25/2009 | 3368.05 | 7 to 22 | -- | 14.04 | 25.31 | 0.00 | 3354.01 | 4/15/2009 | SP | 0.292 | 20.480 | 7.030 | 1.700 | -319 |
| MW#95 | 9/14/2009 | 3368.05 | 7 to 22 | -- | 14.12 | 25.31 | 0.00 | 3353.93 | 10/1/2009 | SP | 2.570 | 24.310 | 6.700 | 0.000 | -317 |
| MW#96 | 3/25/2009 | 3368.30 | 7 to 22 | -- | 13.27 | 25.46 | 0.00 | 3355.03 | 4/15/2009 | SP | 0.290 | 19.720 | 7.120 | 1.670 | -383 |
| MW#96 | 9/14/2009 | 3368.30 | 7 to 22 | -- | 13.14 | 25.42 | 0.00 | 3355.16 | 10/1/2009 | SP | 2.540 | 23.260 | 6.680 | 0.000 | -373 |
| MW#97 | 3/26/2009 | 3365.31 | 8 to 23 | 10.68 | 12.74 | 21.97 | 2.06 | 3354.36 | not sampled - product in well | | | | | | |
| MW#97 | 9/15/2009 | 3365.31 | 8 to 23 | 10.54 | 13.81 | 21.94 | 3.27 | 3354.34 | not sampled - product in well | | | | | | |
| MW#98 | 3/26/2009 | 3365.08 | 13 to 23 | -- | 8.74 | 26.69 | 0.00 | 3356.34 | 4/15/2009 | SP | 0.353 | 20.960 | 7.190 | 1.210 | -392 |
| MW#98 | 9/14/2009 | 3365.08 | 13 to 23 | -- | 9.22 | 26.66 | 0.00 | 3355.86 | 9/28/2009 | SP | 3.880 | 26.020 | 9.220 | 8.990 | -361 |
| MW#99 | 3/26/2009 | 3363.30 | 12 to 27 | -- | 19.00 | 28.25 | 0.00 | 3344.30 | 4/15/2009 | SP | 0.244 | 20.590 | 6.910 | 2.220 | -311 |
| MW#99 | 9/14/2009 | 3363.30 | 12 to 27 | -- | 17.02 | 28.26 | 0.00 | 3346.28 | 9/28/2009 | SP | 2.310 | 23.930 | 8.920 | 3.660 | -315 |
| MW#100 | 3/26/2009 | 3363.68 | 9 to 24 | 18.77 | 18.79 | 30.5 | 0.02 | 3344.91 | not sampled - product in well | | | | | | |
| MW#100 | 9/15/2009 | 3363.68 | 9 to 24 | 17.32 | 17.37 | 30.48 | 0.05 | 3346.35 | not sampled - product in well | | | | | | |
| MW#101 | 3/26/2009 | 3367.98 | 8 to 23 | -- | 16.20 | 26.68 | 0.00 | 3351.78 | 4/15/2009 | SP | 0.285 | 20.920 | 6.940 | 1.650 | -374 |
| MW#101 | 9/14/2009 | 3367.98 | 8 to 23 | -- | 15.21 | 26.66 | 0.00 | 3352.77 | 9/28/2009 | SP | 2.110 | 24.870 | 7.950 | 5.460 | -238 |
| MW#102 | 3/26/2009 | 3371.37 | 12 to 27 | 16.55 | 19.98 | 26.4 | 3.43 | 3354.37 | not sampled - product in well | | | | | | |
| MW#102 | 9/15/2009 | 3371.37 | 12 to 27 | 16.34 | 17.35 | 26.44 | 1.01 | 3354.90 | not sampled - product in well | | | | | | |
| MW#103 | 3/26/2009 | -- | 7 to 22 | -- | 18.55 | 25.09 | 0.00 | -- | 3/16/2009 | field measurements not collected | | | | | |
| MW#103 | 9/14/2009 | -- | 7 to 22 | -- | 17.92 | 25.1 | 0.00 | -- | 9/28/2009 | SP | 4.960 | 27.210 | 9.430 | 3.370 | -277 |
| MW#104 | 3/26/2009 | -- | 3 to 18 | -- | 13.12 | 21.83 | 0.00 | -- | 3/16/2009 | field measurements not collected | | | | | |
| MW#104 | 9/14/2009 | -- | 3 to 18 | -- | 12.17 | 21.82 | 0.00 | -- | 9/28/2009 | SP | 1.670 | 23.630 | 9.110 | 4.320 | -270 |
| MW#105 | 3/25/2009 | -- | 8 to 18 | 11.83 | 12.33 | 17.15 | 0.50 | -- | not sampled - measurements only | | | | | | |
| MW#105 | 9/15/2009 | -- | 8 to 18 | 11.89 | 12.08 | 17.14 | 0.19 | -- | not sampled - measurements only | | | | | | |
| MW#106 | 3/25/2009 | -- | 0 to 11 | -- | 9.18 | 22.69 | 0.00 | -- | not sampled - measurements only | | | | | | |
| MW#106 | 9/14/2009 | -- | 0 to 11 | -- | 8.31 | 22.7 | 0.00 | -- | 9/28/2009 | SP | 3.730 | 26.360 | 8.460 | 3.640 | -336 |
| MW#107 | 3/25/2009 | -- | 12 to 22 | -- | 13.60 | 18.96 | 0.00 | -- | not sampled - measurements only | | | | | | |
| MW#107 | 9/14/2009 | -- | 12 to 22 | -- | 12.26 | 18.97 | 0.00 | -- | 9/28/2009 | SP | 1.920 | 24.980 | 8.170 | 4.190 | -242 |
| MW#108 | 9/14/2009 | -- | 9 to 24 | -- | 14.01 | 27.35 | 0.00 | -- | 10/12/2009 | SP | 2.870 | 22.890 | 6.710 | 0.010 | -304 |
| NCL #31 | 3/25/2009 | -- | 13 to 18 | -- | 12.29 | 20.09 | 0.00 | -- | not sampled - measurements only | | | | | | |
| NCL #31 | 9/16/2009 | -- | 13 to 18 | -- | 11.42 | 20.1 | 0.00 | -- | not sampled - measurements only | | | | | | |
| NCL #32 | 3/25/2009 | 3363.72 | 17 to 22 | -- | 10.39 | 18.08 | 0.00 | 3353.33 | 4/10/2009 | SP | 0.313 | 19.250 | 7.040 | 2.410 | -85 |
| NCL #32 | 9/16/2009 | 3363.72 | 17 to 22 | -- | 2.01 | 17.8 | 0.00 | 3361.71 | 9/24/2009 | SP | 1.500 | 22.540 | 9.880 | 3.930 | -121 |

Table 2
Summary of Field Observations 2009
Navajo Refinery, Artesia, New Mexico

| Well ID | Date Measured | Top of Casing Elevation (ft amsl) | Screened Interval | Depth to Product (ft btoe) | Depth to Water (ft btoe) | Total Depth (ft btoe) | Product Thickness (ft) | Groundwater Elevation (ft amsl) | Date Sampled | Sampling Method | Conductivity (S/m) | Temperature (°C) | pH (SU) | DO (mg/L) | ORP (mV) |
|---------|---------------|---|----------------------|----------------------------------|--------------------------------|-----------------------------|------------------------------|---------------------------------------|-----------------|--------------------|--|---------------------|------------|--------------|----------|
| NCL #33 | 3/25/2009 | 3364.74 | 13 to 18 | -- | 11.21 | 20.48 | 0.00 | 3353.53 | 4/10/2009 | SP | 0.389 | 19.640 | 7.440 | 2.950 | -246 |
| NCL #33 | 9/16/2009 | 3364.74 | 13 to 18 | -- | 11.39 | 20.49 | 0.00 | 3353.35 | 9/24/2009 | SP | 3.360 | 23.400 | 8.540 | 3.720 | 35 |
| NCL #34 | 3/25/2009 | 3364.74 | 16 to 21 | -- | 11.98 | 19.26 | 0.00 | 3352.76 | 4/10/2009 | SP | 0.296 | 21.040 | 6.910 | 2.020 | -385 |
| NCL #34 | 9/16/2009 | 3364.74 | 16 to 21 | -- | 11.87 | 19.24 | 0.00 | 3352.87 | 9/24/2009 | SP | 2.450 | 24.300 | 9.160 | 3.610 | -144 |
| NCL #44 | 3/25/2009 | 3363.23 | -- | -- | 10.58 | 21.58 | 0.00 | 3352.65 | 4/10/2009 | SP | 0.247 | 19.530 | 6.790 | 2.520 | -128 |
| NCL #44 | 9/16/2009 | 3363.23 | -- | -- | 10.74 | 21.58 | 0.00 | 3352.49 | 9/24/2009 | SP | 2.070 | 22.550 | 9.810 | 5.400 | -410 |
| NCL #49 | 3/25/2009 | 3369.87 | -- | -- | 17.23 | 32.23 | 0.00 | 3352.64 | 4/8/2009 | SP | 0.383 | 20.050 | 7.170 | 4.110 | 106 |
| NCL #49 | 9/16/2009 | 3369.87 | -- | -- | 17.70 | 32.18 | 0.00 | 3352.17 | 10/5/2009 | SP | 3.510 | 22.200 | 6.920 | 0.700 | 64 |
| NP #1 | 3/25/2009 | 3341.64 | -- | -- | 15.02 | 21.87 | 0.00 | 3326.62 | 4/8/2009 | SP | 0.613 | 16.540 | 7.160 | 4.570 | 508 |
| NP #1 | 9/15/2009 | 3341.64 | -- | -- | 15.94 | 21.83 | 0.00 | 3325.70 | 9/30/2009 | SP | Horiba meter broken | | | | |
| NP #2 | 3/26/2009 | 3342.09 | 9.5 to 18.5 | -- | 12.14 | 21.47 | 0.00 | 3329.95 | 4/8/2009 | SP | 0.604 | 17.220 | 7.180 | 5.430 | 176 |
| NP #2 | 9/15/2009 | 3342.09 | 9.5 to 18.5 | -- | 14.62 | 21.47 | 0.00 | 3327.47 | 9/30/2009 | SP | Horiba meter broken | | | | |
| NP #3 | 3/26/2009 | 3342.24 | 9.5 to 18.5 | -- | 12.62 | 21.9 | 0.00 | 3329.62 | 4/3/2009 | LF | 0.480 | 17.180 | 7.190 | 3.360 | 103 |
| NP #3 | 9/15/2009 | 3342.24 | 9.5 to 18.5 | -- | 15.46 | 21.88 | 0.00 | 3326.78 | 10/5/2009 | LF | 3.730 | 19.970 | 6.860 | 0.850 | 123 |
| NP #4 | 3/26/2009 | 3345.01 | 24.5 to 33.5 | -- | 20.41 | 37 | 0.00 | | | | not sampled - measurements only | | | | |
| NP #4 | 9/15/2009 | 3345.01 | 24.5 to 33.5 | -- | 24.90 | 36.97 | 0.00 | | | | not sampled - measurements only | | | | |
| NP #5 | 3/25/2009 | 3353.41 | -- | -- | 11.50 | 25.11 | 0.00 | 3341.91 | 4/8/2009 | SP | 0.733 | 17.080 | 7.390 | 3.480 | 116 |
| NP #5 | 9/16/2009 | 3353.41 | -- | -- | 12.23 | 25.12 | 0.00 | 3341.18 | 10/5/2009 | SP | 6.570 | 19.560 | 7.110 | 0.030 | -72 |
| NP #6 | 3/25/2009 | 3336.96 | -- | -- | 13.05 | 20.3 | 0.00 | 3323.91 | 4/8/2009 | SP | 0.692 | 16.700 | 7.110 | 4.510 | 341 |
| NP #6 | 9/15/2009 | 3336.96 | -- | -- | 12.75 | 20.28 | 0.00 | 3324.21 | 10/5/2009 | SP | 6.800 | 19.310 | 6.860 | 1.560 | 113 |
| NP #7 | 3/26/2009 | | | | | | | | | | Well has been destroyed by landowner - cannot sample | | | | |
| NP #7 | | | | | | | | | | | Well has been destroyed by landowner - cannot sample | | | | |
| NP #8 | 3/25/2009 | -- | -- | -- | 11.09 | 15.14 | 0.00 | | | | not sampled - measurements only | | | | |
| NP #8 | 9/14/2009 | -- | -- | -- | | 4.1 | 0.00 | | | | not sampled - measurements only | | | | |
| NP #9 | 3/26/2009 | 3359.49 | -- | -- | 10.47 | 25.89 | 0.00 | 3349.02 | 4/10/2009 | SP | 0.546 | 16.840 | 7.330 | 3.130 | -211 |
| NP #9 | 9/16/2009 | 3359.49 | -- | -- | 10.72 | 25.85 | 0.00 | 3348.77 | 9/24/2009 | SP | 5.020 | 20.700 | 8.380 | 6.260 | -288 |
| OGD #1R | 3/26/2009 | 3311.11 | -- | -- | 10.27 | 23.85 | 0.00 | 3300.84 | 4/1/2009 | LF | 1.070 | 18.350 | 7.370 | 3.250 | -68 |
| OGD #1R | 9/14/2009 | 3311.11 | -- | -- | 10.64 | 23.83 | 0.00 | 3300.47 | 9/21/2009 | LF | 6.350 | | 7.160 | 0.880 | -100 |
| OGD #2A | 3/26/2009 | 3310.99 | -- | -- | 10.02 | 27.51 | 0.00 | 3300.97 | 4/1/2009 | LF | 1.190 | 18.860 | 7.420 | 3.630 | -29 |
| OGD #2A | 9/14/2009 | 3310.99 | -- | -- | 10.65 | 27.5 | 0.00 | 3300.34 | 9/22/2009 | LF | 4.450 | 21.100 | 5.650 | 4.270 | -72 |
| OGD #2B | 3/26/2009 | -- | -- | -- | 10.33 | 50.38 | 0.00 | | | | not sampled - measurements only | | | | |
| OGD #2B | 9/14/2009 | -- | -- | -- | 11.11 | 50.3 | 0.00 | | | | not sampled - measurements only | | | | |
| OGD #3 | 3/26/2009 | 3311.19 | -- | -- | 10.40 | 25.4 | 0.00 | 3300.79 | 4/1/2009 | LF | 0.540 | 19.410 | 7.530 | 3.090 | -26 |
| OGD #3 | 9/14/2009 | 3311.19 | -- | -- | 10.96 | 25.42 | 0.00 | 3300.23 | 9/22/2009 | LF | 2.880 | 26.110 | 5.790 | 2.630 | -66 |
| OGD #4 | 3/26/2009 | 3312.23 | -- | -- | 9.71 | 25.38 | 0.00 | 3302.52 | 4/1/2009 | LF | 1.860 | 19.910 | 7.430 | 2.900 | -42 |
| OGD #4 | 9/14/2009 | 3312.23 | -- | -- | 10.23 | 25.38 | 0.00 | 3302.00 | 9/22/2009 | LF | 8.490 | 24.920 | 5.740 | 2.590 | -101 |
| OGD #5 | 3/26/2009 | 3307.82 | -- | -- | 7.94 | 25.42 | 0.00 | 3299.88 | 4/1/2009 | LF | 2.000 | 18.710 | 7.460 | 2.900 | -59 |
| OGD #5 | 9/14/2009 | 3307.82 | -- | -- | 8.49 | 25.37 | 0.00 | 3299.33 | 9/22/2009 | LF | 9.030 | 23.710 | 5.640 | 2.580 | -95 |
| OGD #6 | 3/26/2009 | 3309.93 | -- | -- | 7.95 | 26.75 | 0.00 | 3301.98 | 4/1/2009 | LF | 1.810 | 17.480 | 7.500 | 3.150 | -119 |
| OGD #6 | 9/14/2009 | 3309.93 | -- | -- | 8.63 | 26.73 | 0.00 | 3301.30 | 9/21/2009 | LF | 18.500 | 22.960 | 7.170 | 1.780 | -125 |
| OGD #7A | 3/26/2009 | 3307.05 | 5.5 to 19.5 | -- | 6.62 | 21.27 | 0.00 | 3300.43 | 4/1/2009 | LF | 1.370 | 17.580 | 7.330 | 3.410 | -93 |
| OGD #7A | 9/14/2009 | 3307.05 | 5.5 to 19.5 | -- | 7.14 | 21.22 | 0.00 | 3299.91 | 9/21/2009 | LF | 14.300 | 24.880 | 7.140 | 3.440 | -116 |

Table 2
Summary of Field Observations 2009
 Navajo Refinery, Artesia, New Mexico

| Well ID | Date Measured | Top of Casing Elevation (ft amsl) | Screened Interval | Depth to Product (ft bloc) | Depth to Water (ft bloc) | Total Depth (ft bloc) | Product Thickness (ft) | Groundwater Elevation (ft amsl) | Date Sampled | Sampling Method | Conductivity (S/m) | Temperature (°C) | pH (SU) | DO (mg/L) | ORP (mV) |
|----------|---------------|-----------------------------------|-------------------|--------------------------------|--------------------------|-----------------------|------------------------|---------------------------------|--------------|-----------------|---|------------------|---------|-----------|----------|
| OCD #7B | 3/26/2009 | 3306.92 | 43.5 to 52.5 | -- | 7.46 | 56.8 | 0.00 | | | | not sampled - measurements only | | | | |
| OCD #7B | 9/14/2009 | 3306.92 | 43.5 to 52.5 | -- | 8.35 | 56.73 | 0.00 | | | | not sampled - measurements only | | | | |
| OCD #7C | 3/26/2009 | 3306.92 | 60.25 to 69.75 | -- | 7.91 | 71.95 | 0.00 | | | | not sampled - measurements only | | | | |
| OCD #7C | 9/14/2009 | 3306.92 | 60.25 to 69.75 | -- | 8.70 | 79.97 | 0.00 | | | | not sampled - measurements only | | | | |
| OCD #8A | 3/26/2009 | 3306.68 | | -- | 9.35 | 21.68 | 0.00 | 3297.33 | 4/2/2009 | LF | 1.580 | 16.500 | 7.420 | 2.480 | -112 |
| OCD #8A | 9/14/2009 | 3306.68 | | -- | 10.11 | 21.68 | 0.00 | 3296.57 | 9/22/2009 | LF | 7.560 | 25.570 | 5.480 | 2.640 | -119 |
| OCD #8B | 3/26/2009 | -- | | -- | 7.80 | 56.5 | 0.00 | | | | not sampled - measurements only | | | | |
| OCD #8B | 9/14/2009 | -- | | -- | 8.65 | 56.45 | 0.00 | | | | not sampled - measurements only | | | | |
| RA #313 | 3/26/2009 | | | | | | | | | | Well rig onsite, pump removed - no measurement or sample possible | | | | |
| RA #313 | | -- | | -- | -- | -- | -- | -- | 10/5/2009 | SP | | | | | |
| RA #314 | 3/26/2009 | | | Not Measured - Irrigation Well | | | | | | | Well inoperable, electrical box removed (no sample possible) | | | | |
| RA #314 | 9/30/2009 | | | Not Measured - Irrigation Well | | | | | | | Well inoperable, electrical box removed (no sample possible) | | | | |
| RA #315 | | | | Not Measured - Irrigation Well | | | | | 4/16/2009 | SP | 0.368 | 15.700 | 7.830 | 10.970 | 18 |
| RA #315 | 9/30/2009 | | | Not Measured - Irrigation Well | | | | | 9/30/2009 | SP | | | | | |
| RA #3353 | | | | Not Measured - Irrigation Well | | | | | | | No Measurements | | | | |
| RA #3353 | | | | Not Measured - Irrigation Well | | | | | | | Well inoperable, no electricity, wires cut (no sample) | | | | |
| RA #3723 | | | | Not Measured - Irrigation Well | | | | | | | Well inoperable, no electricity, wires cut (no sample) | | | | |
| RA #3723 | | | | | | | | | | | Well destroyed, no sample or measurement possible | | | | |
| RA #4196 | | | | Not Measured - Irrigation Well | | | | | | | Well destroyed, no sample or measurement possible | | | | |
| RA #4196 | 9/30/2009 | | | Not Measured - Irrigation Well | | | | | 4/16/2009 | SP | 0.517 | 22.570 | 7.840 | 6.920 | -173 |
| RA #4196 | | | | Not Measured - Irrigation Well | | | | | 9/30/2009 | SP | | | | | |
| RA #4798 | | | | Not Measured - Irrigation Well | | | | | 4/16/2009 | SP | 0.203 | 18.960 | 7.950 | 7.920 | -114 |
| RA #4798 | 9/30/2009 | | | Not Measured - Irrigation Well | | | | | 9/30/2009 | SP | | | | | |
| RW #1 | 3/25/2009 | -- | | -- | 11.54 | 18.56 | 0.00 | | 4/16/2009 | SP | 0.389 | 22.790 | 7.060 | 4.380 | -354 |
| RW #1 | 9/15/2009 | -- | | 17.65 | 17.66 | 18.55 | 0.01 | | 10/11/2009 | SP | 3.170 | 24.280 | 6.920 | 2.250 | -359 |
| RW #2 | 3/25/2009 | -- | | 17.83 | 17.88 | 18.52 | 0.05 | | | | not sampled - measurements only | | | | |
| RW #2 | 9/15/2009 | -- | | 17.88 | 17.92 | 19.25 | 0.04 | | | | not sampled - measurements only | | | | |
| RW #3 | 3/26/2009 | | | | | | | | | | Backfilled - Inaccessible | | | | |
| RW #3 | 9/14/2009 | | | | | | | | | | Backfilled - Inaccessible | | | | |
| RW #4 | 3/26/2009 | -- | | -- | 16.71 | 20.96 | 0.00 | | | | not sampled - measurements only | | | | |
| RW #4 | 9/15/2009 | -- | | -- | 16.13 | 21.02 | 0.00 | | | | not sampled - measurements only | | | | |
| RW #5 | 3/26/2009 | -- | | 17.17 | 17.48 | 17.48 | 0.31 | | | | not sampled - measurements only | | | | |
| RW #5 | 9/15/2009 | -- | | 15.97 | 16.16 | 17.2 | 0.19 | | | | not sampled - measurements only | | | | |
| RW #6 | 3/26/2009 | -- | | -- | 16.79 | 16.86 | 0.00 | | | | not sampled - measurements only | | | | |
| RW #6 | 9/14/2009 | -- | | 16.78 | 16.85 | 16.87 | 0.07 | | | | not sampled - measurements only | | | | |
| RW #7 | 3/25/2009 | -- | | -- | 12.63 | 20.79 | 0.00 | | | | not sampled - measurements only | | | | |
| RW #7 | 9/14/2009 | -- | | -- | 12.10 | 20.77 | 0.00 | | | | not sampled - measurements only | | | | |
| RW #8 | 3/25/2009 | -- | | 14.37 | 14.38 | 18.43 | 0.01 | | | | not sampled - measurements only | | | | |
| RW #8 | 9/14/2009 | -- | | 15.38 | 15.39 | 16.35 | 0.01 | | | | not sampled - measurements only | | | | |
| RW #9 | 3/25/2009 | -- | | -- | 10.48 | 21.87 | 0.00 | | | | not sampled - measurements only | | | | |
| RW #9 | 9/14/2009 | -- | | -- | 9.22 | 21.79 | 0.00 | | | | not sampled - measurements only | | | | |
| RW #10 | 3/25/2009 | -- | | -- | 11.29 | 24.02 | 0.00 | | | | not sampled - measurements only | | | | |
| RW #10 | 9/14/2009 | -- | | -- | 8.79 | 23.86 | 0.00 | | | | not sampled - measurements only | | | | |

Table 2
Summary of Field Observations 2009
Navajo Refinery, Artesia, New Mexico

| Well ID | Date Measured | Top of Casing Elevation (ft amsl) | Screened Interval | Depth to Product (ft bloc) | Depth to Water (ft bloc) | Total Depth (ft bloc) | Product Thickness (ft) | Groundwater Elevation (ft amsl) | Date Sampled | Sampling Method | Conductivity (S/m) | Temperature (°C) | pH (SU) | DO (mg/L) | ORP (mV) |
|---------|---------------|-----------------------------------|-------------------|----------------------------|--------------------------|-----------------------|------------------------|---------------------------------|--------------|---------------------------------|--------------------|------------------|---------|-----------|----------|
| RW #11 | 3/27/2009 | -- | -- | -- | DRY | NM | 0.00 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #11 | 9/16/2009 | -- | -- | -- | 21.16 | 23.02 | 0.00 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #12 | 3/27/2009 | -- | -- | -- | DRY | 22.89 | 0.00 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #12 | 9/15/2009 | -- | -- | 19.00 | 19.02 | 22.89 | 0.02 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #13 | 3/27/2009 | -- | -- | 22.90 | 23.00 | 25.12 | 0.10 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #13 | 9/15/2009 | -- | -- | 18.60 | 19.54 | 25.12 | 0.94 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #14 | 3/27/2009 | -- | -- | 19.85 | 19.95 | 23.87 | 0.10 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #14 | 9/15/2009 | -- | -- | 16.37 | 18.89 | 23.6 | 0.52 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #15 | 3/27/2009 | -- | -- | 18.07 | 18.13 | 22.24 | 0.06 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #15 | 9/15/2009 | -- | -- | 15.90 | 17.77 | 22.04 | 1.87 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #16 | 3/25/2009 | -- | -- | -- | 12.67 | 17.56 | 0.00 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #16 | 9/14/2009 | -- | -- | -- | 12.42 | 17.6 | 0.00 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #17 | 3/25/2009 | -- | -- | -- | 11.55 | 16.03 | 0.00 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #17 | 9/14/2009 | -- | -- | -- | 11.47 | 16.28 | 0.00 | -- | -- | not sampled - measurements only | -- | -- | -- | -- | -- |
| RW #18 | 3/26/2009 | -- | -- | -- | 10.75 | 18.75 | 0.00 | -- | 4/7/2009 | SP | 0.618 | 16.720 | 7.200 | 2.070 | 72 |
| RW #18 | 9/15/2009 | -- | -- | -- | 12.49 | 18.82 | 0.00 | -- | 9/29/2009 | SP | 5.340 | 21.800 | 7.750 | 4.160 | -172 |
| TEL #1 | 3/26/2009 | 3361.34 | 13 to 23 | -- | 8.76 | 26.9 | 0.00 | 3352.58 | 4/16/2009 | SP | 0.372 | 29.370 | 7.290 | 2.330 | -232 |
| TEL #1 | 9/15/2009 | 3361.34 | 13 to 23 | -- | 6.64 | 26.9 | 0.00 | 3354.70 | 9/23/2009 | SP | 3.370 | 23.000 | 8.150 | 4.190 | -410 |
| TEL #2 | 3/26/2009 | 3362.23 | 13 to 23 | -- | 9.58 | 27.08 | 0.00 | 3352.65 | 4/16/2009 | SP | 0.422 | 19.270 | 6.980 | 2.200 | -360 |
| TEL #2 | 9/15/2009 | 3362.23 | 13 to 23 | -- | 7.57 | 27.08 | 0.00 | 3354.66 | 9/25/2009 | SP | 3.790 | 23.300 | 8.450 | 3.940 | -486 |
| TEL #3 | 3/26/2009 | 3361.45 | 13 to 23 | -- | 8.86 | 27.17 | 0.00 | 3352.59 | 4/16/2009 | SP | 0.423 | 18.760 | 6.840 | 1.970 | -338 |
| TEL #3 | 9/15/2009 | 3361.45 | 13 to 23 | -- | 6.90 | 27.18 | 0.00 | 3354.55 | 9/25/2009 | SP | 3.040 | 23.480 | 8.600 | 4.220 | -469 |
| TEL #4 | 3/26/2009 | 3363.31 | 13 to 23 | -- | 9.35 | 26.17 | 0.00 | 3353.96 | 4/16/2009 | SP | 0.377 | 19.600 | 6.860 | 2.630 | -286 |
| TEL #4 | 9/15/2009 | 3363.31 | 13 to 23 | -- | 8.97 | 27.17 | 0.00 | 3354.34 | 9/25/2009 | SP | 4.360 | 23.290 | 13.900 | 3.390 | -471 |
| UG #1 | 3/26/2009 | 3361.71 | 8 to 23 | -- | 15.69 | 24.2 | 0.00 | 3346.02 | 4/9/2009 | SP | 0.401 | 21.450 | 7.590 | 6.730 | 135 |
| UG #1 | 9/16/2009 | 3361.71 | 8 to 23 | -- | 16.01 | 24.17 | 0.00 | 3345.70 | 10/2/2009 | SP | 3.620 | 22.680 | 7.000 | 0.120 | 15 |
| UG #2 | 3/26/2009 | 3369.07 | 15 to 30 | -- | 20.55 | 29.25 | 0.00 | 3348.42 | 4/9/2009 | SP | 0.252 | 21.540 | 7.670 | 5.850 | 278 |
| UG #2 | 9/16/2009 | 3369.07 | 15 to 30 | -- | 19.68 | 29.23 | 0.00 | 3349.19 | 10/2/2009 | SP | 2.190 | 20.740 | 7.100 | 0.460 | -5 |
| UG #3R | 3/27/2009 | 3372.84 | 17 to 37 | -- | 27.51 | 38.58 | 0.00 | 3345.33 | 4/9/2009 | SP | 0.309 | 20.510 | 7.200 | 2.870 | 157 |
| UG #3R | 9/14/2009 | 3372.84 | 17 to 37 | -- | 29.14 | 38.54 | 0.00 | 3343.70 | 10/2/2009 | SP | 2.810 | 20.560 | 6.930 | 1.100 | 38 |

-- = Product not detected
DO = Dissolved oxygen
ft = feet
ft amsl = Feet above mean sea level
ft bloc = Feet below top of casing
LF = low flow sampling methodology
NM = Not measured
NR = Not recorded
NS = Not surveyed
ORP = Oxidation-reduction potential
P = Not Sampled; Well Contained Product
Sim = Seimens per meter
SP = well sampled using a submersible pump

Table 3
RO System Reject Water Analytical Data
Navajo Refinery, Artesia, New Mexico

| | Date | Metals (mg/L) | | | | | | | | | | | | | | | | | | | Zinc WQCC 10 | | |
|------------------------------|------------|-----------------------|------------------------|---------------------|---------------------------|-----------------------|-------------------------|---------|--------------------------|------------------------|---------------------|-------------------|----------------------|--------------------------|--------------------------|-------------------------|-----------------------|-----------|--------------------------|------------------------|--------------------|---------|-------------------------|
| | | Aluminum WQCC 5 | Arsenic MCL 0.01 | Barium WQCC 1 | Beryllium MCL 0.004 | Boron WQCC 0.75 | Cadmium MCL 0.005 | Calcium | Chromium WQCC 0.05 | Cobalt WQCC 0.05 | Copper WQCC 1 | Iron WQCC 1 | Lead WQCC 0.05 | Magnesium WQCC 0.2 | Manganese WQCC 0.2 | Molybdenum WQCC 1 | Nickel WQCC 0.2 | Potassium | Selenium WQCC 0.05 | Silver WQCC 0.05 | | Sodium | Vanadium EPA 0.18 |
| Reverse Osmosis Reject Water | 12/27/2004 | <0.01 | 0.00725 | 0.0669 | <0.002 | 0.071 | <0.002 | 628 | <0.005 | <0.005 | 0.00586 | <0.2 | <0.005 | 198 | <0.005 | 0.00793 | <0.005 | 4.11 | 0.01 | <0.005 | 131 | 0.0104 | 0.0259 |
| | 1/16/2007 | <0.01 | <0.005 | 0.0638 | <0.002 | 0.0568 | <0.002 | 694 | <0.005 | <0.005 | <0.005 | <0.2 | <0.005 | 233 | <0.005 | 0.00744 | <0.005 | 4.48 | 0.0095 | <0.005 | 234 | 0.00991 | 0.00839 |
| | 2/22/2007 | <0.01 | 0.00941 | 0.0681 | <0.002 | 0.0643 | <0.002 | 735 | <0.005 | <0.005 | <0.005 | <0.2 | <0.005 | 246 | <0.005 | 0.00813 | <0.005 | 4.49 | 0.00761 | <0.005 | 320 | 0.0102 | 0.00734 |
| | 7/5/2007 | 0.0168 | <0.005 | 0.0553 | <0.002 | 0.0644 | <0.002 | 600 | <0.005 | <0.005 | <0.005 | <0.2 | <0.005 | 176 | <0.005 | 0.00882 | <0.005 | 3.47 | 0.00763 | <0.005 | 167 | 0.00974 | 0.00749 |
| | 12/14/2007 | <0.01 | <0.005 | 0.0704 | <0.002 | 0.0752 | <0.002 | 594 | <0.005 | <0.005 | <0.005 | <0.2 | <0.005 | 208 | <0.005 | 0.00952 | <0.005 | 4.32 | 0.00793 | <0.005 | 218 | 0.0104 | 0.00677 |
| | 2/7/2008 | <0.01 | <0.005 | 0.0564 | <0.002 | 0.0773 | <0.002 | 548 | <0.005 | <0.005 | <0.005 | <0.2 | <0.005 | 179 | <0.005 | 0.00639 | <0.005 | 3.34 | 0.0058 | <0.005 | 206 | 0.00771 | <0.005 |
| | 5/22/2008 | <0.01 | <0.005 | 0.0602 | <0.002 | 0.0819 | <0.002 | 562 | <0.005 | <0.005 | <0.005 | <0.2 | <0.005 | 180 | <0.005 | 0.00773 | <0.005 | 3.72 | 0.00877 | <0.005 | 167 | 0.0116 | 0.00694 |
| | 8/29/2008 | <0.01 | <0.005 | 0.0783 | <0.002 | 0.0896 | <0.002 | 786 | <0.005 | <0.005 | <0.005 | <0.2 | <0.005 | 247 | <0.005 | 0.0108 | <0.005 | 4.68 | 0.00658 | <0.005 | 152 | 0.0106 | 0.00657 |
| | 12/14/2008 | NA | <0.005 | 0.0759 | NA | NA | <0.002 | NA | <0.005 | NA | NA | NA | <0.005 | NA | NA | NA | NA | NA | 0.00942 | <0.005 | NA | NA | NA |
| 2/23/2009 | <0.01 | <0.005 | 0.0611 | <0.002 | 0.0786 | <0.002 | 698 | <0.005 | <0.005 | <0.005 | <0.2 | <0.005 | 215 | <0.005 | 0.00976 | <0.005 | 4.14 | 0.00893 | <0.005 | 192 | 0.0107 | <0.005 | |
| 5/7/2009 | <0.05 | <0.025 | 0.074 | <0.01 | <0.1 | <0.01 | 596 | <0.025 | <0.025 | <0.025 | <1 | <0.025 | 198 | <0.025 | <0.025 | <0.025 | <0.025 | 4 | <0.025 | <0.025 | 224 | <0.025 | <0.025 |
| 8/25/2009 | NA | <0.005 | 0.0751 | NA | NA | <0.002 | NA | <0.005 | NA | NA | NA | <0.005 | NA | NA | NA | NA | NA | NA | 0.0082 | <0.005 | NA | NA | NA |
| 11/9/2009 | NA | <0.005 | 0.0816 | <0.002 | <0.005 | <0.002 | NA | <0.005 | NA | NA | NA | <0.005 | NA | NA | NA | NA | NA | NA | 0.00702 | <0.005 | NA | NA | NA |

| | Date | Volatiles (µg/L) | | | | Semi Volatiles (µg/L) | Anions (mg/L) | | | | Total Alkalinity |
|------------------------------|------------|---------------------|-----------------------------|--------------------------------|------------------------|-----------------------|-------------------------|-------------------------|---|------------------------|------------------|
| | | Benzene MCL 5 | Ethyl benzene MCL 700 | Tetrachloro ethene MCL 5 | Xylenes WQCC 620 | | Chloride WQCC 250 | Fluoride WQCC 1.6 | Nitrate/Nitrite as Nitrogen* WQCC 1 | Sulfate WQCC 600 | |
| Reverse Osmosis Reject Water | 12/27/2004 | <5 | <5 | <5 | <10 | <10 | 233 | 3.16 | 1.78 | 1660 | 622 |
| | 1/16/2007 | NA | NA | NA | NA | NA | 515 | 3.98 | NA | 2160 | 669 |
| | 2/22/2007 | <5 | <5 | <5 | <15 | <5 | 583 | 3.38 | 1.56 | 1920 | 638 |
| | 7/5/2007 | <5 | <5 | <5 | <15 | <5 | 328 | 2.91 | 1.86 | 1560 | 520 |
| | 12/14/2007 | <5 | <5 | <5 | <15 | <5 | 464 | 3.46 | 0.58 | 1910 | 982 |
| | 2/7/2008 | <5 | <5 | <5 | <15 | <5 | 417 | 2.55 | 0.928 | 1540 | 575 |
| | 5/22/2008 | <5 | <5 | <5 | <15 | <5 | 293 | 2.82 | NA | 1530 | 296 |
| | 8/29/2008 | <5 | <5 | <5 | <15 | <5 | 241 | 3.98 | NA | 1980 | 869 |
| | 12/14/2008 | <5 | <5 | <5 | <15 | <5 | 307 | 3.76 | NA | 1810 | 819 |
| | 2/23/2009 | NA | NA | NA | NA | NA | 325 | 3.17 | NA | 1740 | 691 |
| | 5/7/2009 | NA | NA | NA | NA | NA | 392 | 2.83 | NA | 1740 | 664 |
| | 8/25/2009 | NA | NA | NA | NA | NA | 461 | 3.62 | NA | 1870 | 729 |
| | 11/9/2009 | NA | NA | NA | NA | NA | 525 | 3.92 | NA | 2040 | 767 |

Table 1 Footnotes and Definitions

3.16 Concentration shown exceeds the groundwater standard

Abbreviations:

mg/L = Milligrams per liter

µg/L = Micrograms per liter

NA = Not analyzed

Laboratory Qualifiers:

J = Analyte detected below quantization limits

H = Analyzed outside of hold time

*,** = Laboratory reported Nitrate/Nitrite (as N); the lower of the two MCLs of 1 µg/L used given Nitrite (as N) MCL of 1 µg/L and Nitrate (as N) MCL of 10 µg/L

Groundwater Standards

*,** = No standard available

MCL = Maximum Contaminant Level from the National Primary Drinking Water Standards

NMED SSL = New Mexico Environment Department Soil Screening Level Tap Water Standard

NMED TPH = New Mexico Environment Department Total Petroleum Hydrocarbon Standards, October 2006

WQCC = Water Quality Control Commission; standard for groundwater from NMMA 20.6.2.3103

• **First Sampling Event (March to April 2009)**

- o Wells not sampled due to the presence of PSH included MW-39, MW-48, MW-64, MW-65, MW-85, MW-86, MW-94, MW-97, MW-100, MW-102, MW-105, KWB-2R, KWB-4, KWB-5, KWB-6, KWB-8.
- o MW-2A was sampled twice during this event. The data has been included for both sampling events.
- o Well MW-46 was not sampled because it had been damaged: and
- o NP-7 was not sampled because the well has been destroyed.
- o MW-63 was not sampled because the area was inaccessible due to the temporary storage of heavy equipment.
- o KWB-12A was not sampled because the well was dry.
- o Irrigation wells RA 313, RA 314, RA 3353 and RA 3723 were not sampled because the irrigation pumps had been removed or disconnected.
- o Due to laboratory sample login error, samples from the following wells were not analyzed for mercury by EPA method SW 7470: MW-4A, MW-10, MW-15, MW-22A, MW-25, MW-52, MW-53, MW-54A, MW-58, MW-88, KWB-1A, KWB-1C, KWB-7, KWB-9, KWB-11A, NP-5, NP-6, NCL-49, and RW-18.
- o Samples collected from MW-67 and MW-89 were not analyzed for GRO.
- o The laboratory did not report calcium for the sample collected from MW-10.
- o MW-71, MW-106, and MW-107 were not sampled because the field staff believed that these wells were only supposed to be gauged during this sampling event.
- o Field measurements were not collected for MW-103 and MW-104.

• **Second Sampling Event (September to October 2009)**

- o Wells not sampled due to the presence of PSH included MW-39, MW-48, MW-64, MW-65, MW-85, MW-86, MW-94, MW-97, MW-100, MW-102, MW-105, KWB-2R, KWB-4, KWB-5, KWB-6 and KWB-8.
- o Well MW-46 was not sampled because it had been damaged: and

- o NP-7 was not sampled because it had been destroyed.
- o MW-49 was not sampled due to a miscommunication between the field staff and the project managers because the field staff believed that MW-49 was only supposed to be sampled during the first sampling event.
- o MW-71 was not sampled because the field staff believed that it was only supposed to be gauged.
- o MW-63 was not sampled because the area was inaccessible due to the temporary storage of heavy equipment.
- o KWB-P2 was not sampled because the well was dry.
- o The three upgradient wells (UG-1, UG-2, and UG-3R) were not sampled for the RCRA 8 metals.
- o Irrigation wells RA 314, RA 3353 and RA 3723 were not sampled because the irrigation pumps had been removed or disconnected.
- o The sample from OCD-1R was inadvertently labeled as OCD-1. The identification was corrected for tables and figures included in this report.
- o Groundwater Quality Parameters were not collected for the following wells because the water quality multiparameter meter was broken: MW-52, MW-58, KWB-9, KWB-10, KWB-12A, NP-1, and NP-2.

Corrective measures have been implemented with the laboratory to ensure that samples are properly logged in for all requested analyses and that all requested analyses are reported.

The following conclusions are based on the information obtained in 2009:

In general, the 2009 groundwater monitoring program was completed according to the provisions of the Workplan. Minor exceptions to the planned monitoring occurred, but do not significantly alter the effectiveness of the monitoring program. A map of monitor well locations is included in Figure 2. The following conclusions are based upon the information obtained in 2009:

Groundwater flow direction and gradient remains consistent with that measured in past years. (Figures 3 and 4)

Table 4
Summary of Recovery Trench Production
 Navajo Refinery, Artesia, New Mexico

| | Volume of Hydrocarbons Recovered (gallons) | | | | | Volume of Water Recovered (gallons) | | | | |
|--------------------|---|----------------|--------------|---------------|----------------|--|------------------|---------------|----------------|------------------|
| | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total 2009 | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total 2009 |
| RW-1 | 43,506 | 119,115 | 3,060 | 12,807 | 178,488 | 391,554 | 1,072,035 | 27,540 | 115,263 | 1,606,392 |
| RW-2 | 7,395 | 8,727 | 3,075 | 5,733 | 24,930 | 66,555 | 78,543 | 27,675 | 51,597 | 224,370 |
| RW-3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RW-4* | 0 | 0 | 33 | 3 | 36 | 0 | 0 | 297 | 27 | 324 |
| RW-5* | 4,453 | 19,472 | 291 | 3,849 | 28,065 | 40,080 | 175,250 | 2,621 | 34,637 | 252,587 |
| RW-6* | 640 | 0 | 0 | 832 | 1,472 | 71 | 0 | 0 | 92 | 164 |
| RW-7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RW-8 | 4,987 | 113 | 363 | 17,400 | 22,863 | 44,886 | 1,018 | 3,263 | 156,596 | 205,763 |
| 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 | 567 | 20 | 40 | 1,940 | 2,567 | 63 | 2 | 4 | 216 | 285 |
| RW-12 | 13,024 | 0 | 0 | 0 | 13,024 | 0 | 0 | 1 | 344 | 1,120 |
| RW-13 | 4,806 | 2,169 | 9 | 3,095 | 10,079 | 534 | 241 | 0 | 0 | 0 |
| RW-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RW-15 ¹ | 651 | 3,717 | 3 | 204 | 4,575 | 72 | 413 | 0 | 23 | 508 |
| 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 ² | 0 | 521 | 0 | 25 | 546 | 0 | 58 | 0 | 3 | 61 |
| KWB-8 | 0 | 27 | 2 | 0 | 29 | 0 | 3 | 0 | 0 | 3 |
| TOTAL | 80,029 | 153,882 | 6,875 | 45,888 | 286,674 | 543,815 | 1,327,563 | 61,402 | 358,797 | 2,291,577 |

¹ Formerly noted as "Toolpushers"

² Dewatering sump located at Chase's pecan farm east of Bolton Road operated as needed.

Qtr = Quarter

* Single pump well, total fluids pumped to tank for oil/water separation.

PSH was encountered in MW-1 05, which is one of the four wells installed in 2009. The extent of PSH in other areas was consistent with the extent of PSH reported in 2008. (Figures 5 and 6)

Concentrations of organic constituents have generally declined.

Operation of the recovery trench system has been improved (Table 4). Methods for improving the recovery system operation continue to be explored and implemented.

As a result of the above conclusions, Navajo will continue to operate the existing recovery trench system. Bi-weekly gauging and pumping of observed product in the recovery trench wells and monthly inspections and bailing of monitor wells known to contain product is believed to be sufficient to control the movement of PSH until a more comprehensive plan for mitigation is developed and approved by NMED.

Navajo submitted an updated Groundwater Monitoring Plan for 2010 (January 2010) that will be implemented for monitoring activities in 2010. This plan served to revise and update the 2006 Groundwater Monitoring Plan to include the monitor wells that have been installed since 2006, revises the sampling schedule for selected wells, and clarifies the analytical suite for all wells included in the monitoring program.

A summary of the 2009 **Groundwater Monitoring Program Analytical Results** is included in Table 1. Also included in Table 2, is the **Summary of Field Observations 2009**. Table 3 contains RO System Reject Water Analytical Data, Table 4 contains a Summary of Recovery Trench Production, and finally, Table 5 contains a Summary of Recovery Wells Product Recovery.

For a more detailed review of the sampling and monitoring events, please see the *2009 Annual Groundwater Report* that was sent to OCD on February 26, 2010.

SUMMARY OF SUMP AND UNDERGROUND WATER LINES TESTED

As part of Navajo's Discharge Permit, we are required to test all sumps and underground process/wastewater lines. It is Navajo's policy to fill the sump or line with water, mark a level, and then wait 4 hours and note any drop in water level.

Enclosed, are two spread sheets, titled **Table 6 NAVAJO REFINING COMPANY SEWER TESTING** and **Table 7 NAVAJO REFINING COMPANY LISTING OF ALL SUMPS** respectively. These spreadsheets detail test date, test method, pass/fail, tested by, and any repairs that were needed or made to the applicable sump or sewer. These spreadsheets are just the summary of the testing we do. The actual test pages, sign off sheets, etc. are kept in a file at the refinery for inspection by OCD as our permit requires.

| NAVAJO REFINING COMPANY ARTESIA REFINERY LISTING OF ALL SUMPS | | | | | | | | | |
|---|-----------|--|---------------------------|-----------------------------|----------------|------------------|------|-------------|--|
| TABLE 5 | | | | | | | | | |
| NO. OF SUMPS | SUMP ID # | LOCATION | DESCRIPTION | APPROX DIMENSIONS | LAST TEST DATE | TEST DUE | TEST | TESTED BY | TEST METHOD |
| 1 | 02SUMP01 | UNDER H-20 | CONCRETE BOX | 2'-0" x 2'-0" x 3'-0" D | 8/18/2009 | 8/18/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 2 | 02SUMP02 | UNDER H-19 | CONCRETE BOX | 2'-6" x 2'-6" x 1'-5" D | 8/1/2005 | 6/1/2010 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 3 | 08SUMP01 | UNLOADING RACK SOUTH OF 400 TANK | CONCRETE BOX | 7'-8" L x 4'-6" W x 3'-0" D | 8/29/2008 | 8/29/2013 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 4 | 08SUMP02 | SPILL COLLECTION BOX AT CBO RR RACK (NORTH) | STEEL BOX | 2' x 2' x 2' | 8/18/2009 | 8/18/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 5 | 08SUMP03 | SPILL COLLECTION BOX AT CBO RR RACK (SOUTH) | STEEL BOX | 2' x 2' x 2' | 8/18/2009 | 8/18/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 6 | 08SUMP04 | CBO BETWEEN TRUCK RACK & RAIL ROAD (NORTH) | CONCRETE BOX | 8' x 6' x 8' | 8/18/2009 | 8/18/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 7 | 08SUMP05 | CBO BETWEEN TRUCK RACK & RAIL ROAD (SOUTH) | CONCRETE BOX | 8' x 6' x 8' | 8/18/2009 | 8/18/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 8 | 08SUMP06 | P-139 EAST OF CBO RACK | CONCRETE BOX | 3' x 3' x 3' | 8/18/2009 | 8/18/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 9 | 08SUMP07 | WATER DRAIN NORTH SIDE OF 834 TANK | 55 GALLON STEEL DRUM | N/A | 8/21/2009 | 8/21/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 10 | 08SUMP08 | SOUTHWEST CORNER OF 834 TANK | UIC STEEL TANK | 16' x 6' x 2' | 2/14/2005 | 2/14/2010 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 11 | 08SUMP09 | 834 TANK WATER DRAIN PIT | CONCRETE BOX | 6' x 6' x 2' | N/A | N/A | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 12 | 08SUMP10 | WATER DRAIN PIT EAST SIDE OF 835 TANK | CONCRETE BOX | 6'-8" x 5'-8" x 2'-6" | 8/21/2009 | 8/21/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 13 | 08SUMP11 | SURRY SLINGER SUDGE PIT | STEEL BOX | 6' x 7' x 5' | N/A | N/A | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 14 | 08SUMP12 | SURRY SLINGER SUDGE PIT | STEEL BOX | 6' x 7' x 5' | N/A | N/A | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 15 | 08SUMP13 | WATER DRAIN PIT AT EAST SIDE OF 815 TANK | STEEL BOX | 9' x 7' x 5' | N/A | N/A | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 16 | 08SUMP14 | BLENDER PUMP PIT | CONCRETE BOX | 8'-0" x 4'-0" x 3'-0" D | 1/22/2006 | 1/22/2011 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 17 | 08SUMP15 | SEWER BOX LIFTING STATION SW CORNER OF DIKE @ 401 TK | CONCRETE BOX | 4' x 4' x 4' | 8/27/2009 | 8/27/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 18 | 08SUMP16 | WEST SIDE OF 460 TANK | CONCRETE BOX | 6' x 8' x 6' | 8/27/2009 | 8/27/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 19 | 08SUMP17 | WEST SIDE OF 415 TANK | CONCRETE BOX | 3' x 3' x 4' | 8/27/2009 | 8/27/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 20 | 08SUMP18 | SE CORNER #2 YARD AT NAPHTHA TRANSFER PUMPS | CONCRETE BOX | 8' x 6' x 6' DEEP | 8/21/2008 | 8/21/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 21 | 08SUMP19 | WEST OF #3 BLENDER | CONCRETE BOX | 3' x 3' x 3' | 8/27/2008 | 8/27/2013 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 22 | 08SUMP20 | ASPHALT RACK SOUTH OF 433 TANK | CONCRETE BOX | 4' x 4' x 4' | 9/20/2004 | 9/20/2009 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 23 | 08SUMP21 | WATER DRAIN PIT AT 437 TANK | CONCRETE BOX | 20' x 40' x 3' | N/A | N/A | PASS | GILES, INC. | OUT OF SERVICE, REMOVED BY ENG. PROJECTS JAN. 2008 |
| 24 | 08SUMP22 | WATER DRAIN PIT AT 430 TANK | CONCRETE BOX | 20' x 40' x 3' | N/A | N/A | PASS | GILES, INC. | OUT OF SERVICE |
| 25 | 08SUMP23 | SOUTH OF 436 TANK | UIC STEEL TANK | N/A | 8/27/2009 | 8/27/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 26 | 08SUMP24 | WEST OF 400 TANK | UIC STEEL TANK | N/A | 8/17/2009 | 8/17/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 27 | 08SUMP25 | SPILL RETENTION SUMPS @ GASOLINE LOADING RACK | CONCRETE BOX | 2' x 2'-6" x 2' | 9/21/2008 | 9/21/2013 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 28 | 08SUMP26 | SPILL RETENTION SUMPS @ GASOLINE LOADING RACK | CONCRETE BOX | 2' x 2'-6" x 2' | 9/21/2008 | 9/21/2013 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 29 | 08SUMP27 | NORTH SIDE OF 110 TANK | UIC STEEL TANK | N/A | 8/27/2009 | 8/27/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 30 | 08SUMP28 | LIFT STATION @ FILTER MANTLE D.S. OF LPG LOADING RACK | UIC STEEL TANK | 6' DIAMETER x 4' DEEP | 8/27/2009 | 8/27/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 31 | 08SUMP29 | SUMP BETWEEN 431 TANK AND 432 TANK | CONCRETE BOX | 6' x 8' x 7'-6" | 8/31/2009 | 8/31/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 32 | 08SUMP30 | SOUTH ASPHALT LOADING RACK | CONCRETE BOX | 5' x 8'-0" x 6' | 8/31/2009 | 8/31/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 33 | 08SUMP31 | EAST OF 115 TANK BY HEP PUMPS | METAL BOX | 5' x 3' x 3' | 12/8/2008 | 12/8/2013 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 34 | 08SUMP32 | EAST OF 115 TANK BY HEP PUMPS | METAL BOX | 5' x 3' x 3' | 12/8/2008 | 12/8/2013 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 35 | 08SUMP33 | EAST OF 115 TANK BY HEP PUMPS | METAL BOX | 5' x 3' x 3' | 12/8/2008 | 12/8/2013 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 36 | 08SUMP34 | EL PASO PUMP STATION | METAL BOX | 6' x 4' x 6' | 12/5/2008 | 12/5/2013 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 37 | 08SUMP35 | EL PASO PUMP STATION | METAL BOX | 6' x 4' x 6' | 12/5/2008 | 12/5/2013 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 38 | 08SUMP36 | EL PASO PUMP STATION | METAL BOX | 6' x 4' x 6' | 12/5/2008 | 12/5/2013 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 39 | 08SUMP37 | FOUR CORNERS STATION -HEP- | METAL BOX | 6' x 4' x 6' | 12/5/2008 | 12/5/2013 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 40 | 08SUMP38 | FOUR CORNERS STATION -HEP- | METAL BOX | 6' x 4' x 6' | 12/5/2008 | 12/5/2013 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 41 | 08SUMP39 | SW OF 1228 TANK | CONCRETE BOX | 7' x 11' x 8' D | 10/29/2007 | 6/1/2014 | FAIL | GILES, INC. | HYDROL/EVEL CHECK |
| 42 | 08SUMP40 | FLUORIDE PRECIPITATOR | CONCRETE BOX | 4'-0" x 4'-0" x 3'-0" | 10/27/2007 | 10/26/2012 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 43 | 08SUMP41 | FLUORIDE PRECIPITATOR | CONCRETE BOX | 4'-0" x 4'-0" x 3'-0" | 10/27/2007 | 10/26/2012 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 44 | 08SUMP42 | SURRY BARREL @ NORTH PLANT SOUTH OF X-245 | 1/2 -55 GALLON STEEL DRUM | N/A | N/A | Replace as req'd | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 45 | 08SUMP43 | SURRY BARREL @ NORTH PLANT SOUTH OF X-245 | 1/2 -55 GALLON STEEL DRUM | N/A | N/A | Replace as req'd | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 46 | 08SUMP44 | FLUE GAS SCRUBBER - FCCU | CONCRETE BOX | 4'-0" x 4'-0" x 3'-0" | 10/29/2007 | 10/29/2012 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 47 | 08SUMP45 | FLUE GAS SCRUBBER - FCCU | CONCRETE BOX | 4'-0" x 4'-0" x 3'-0" | 11/19/2007 | 11/19/2012 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 48 | 08SUMP46 | FLUE GAS SCRUBBER - FCCU | CONCRETE BOX | 4'-0" x 4'-0" x 3'-0" | 10/29/2007 | 10/29/2012 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 49 | 08SUMP47 | UNDER D-202 (VACUUM UNIT) | CONCRETE BOX | 2'-6" x 2'-6" x 2'-6" D | 10/29/2007 | 10/29/2012 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 50 | 08SUMP48 | EAST OF X-407 ON BRADLEY BLVD | CONCRETE BOX | 1'-6" x 1'-6" x 1'-5" D | N/A | N/A | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 51 | 08SUMP49 | WEST END OF S.P. ALLEY C.T. 1/2 (NORTH) | CONCRETE BOX | 6'-0" x 1'-0" x 6'-0" D | N/A | N/A | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 52 | 08SUMP50 | WEST END OF S.P. ALLEY C.T. 1/2 (SOUTH) | CONCRETE BOX | 10'-0" x 8'-0" x 6'-0" D | N/A | N/A | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 53 | 08SUMP51 | H-21 PUMP OUT SUMP IN NW CORNER OF CURBED AREA AT H-21 | CONCRETE BOX | 2'-8" x 2'-8" x 2'-0" D | 10/29/2007 | 10/28/2012 | PASS | GILES, INC. | HYDROL/EVEL CHECK |
| 54 | 08SUMP52 | NORTH TOOL ROOM | CONCRETE BOX | 7' x 2' x 2' | 9/14/2009 | 9/14/2014 | PASS | GILES, INC. | HYDROL/EVEL CHECK |

APRIL 9, 2010

| No. Of Sumps | SUMP ID # | LOCATION | DESCRIPTION | APPROX DIMENSIONS | LAST TEST DATE | NEXT TEST DUE | TEST PASS / FAIL | TESTED BY | TEST METHOD | REPAIR METHOD | COMMENT |
|--------------|-----------|---|------------------------|-------------------------|----------------|---------------|------------------|--------------|-------------------|---------------|--|
| 44 | 46SJUMP02 | SE CORNER OF TRUCKING YARD | CONCRETE BOX | 3 x 3' X 2'-6" | 9/4/2009 | 9/4/2014 | PASS | GILES INC. | HYDROL EVEL CHECK | | |
| 45 | 46SJUMP03 | DIESEL STORAGE TANK AT MILL COOK WELL GENERATOR | FIBERGLASS | 10 x 8' X 1'-9" | 9/3/2009 | | FAIL | GILES INC. | HYDROL EVEL CHECK | | |
| 45 | 46SJUMP03 | DIESEL STORAGE TANK AT MILL COOK WELL GENERATOR | FIBERGLASS | 10 x 8' X 1'-9" | 9/7/2009 | 9/7/2014 | PASS | GILES INC. | HYDROL EVEL CHECK | | |
| 46 | 46SJUMP04 | NW BUNKER SLAB CATCH BASIN | CONCRETE BOX W/ BAFFLE | 50' X 3' X 3'-6" | 7/14/2009 | | PASS | GILES INC. | | | NOT A SUMP - BOX TIED TO SEWER LINE (SEE SEWER DWGS) |
| 46 | 46SJUMP05 | DIESEL STORAGE TANK SOUTH OF #2 WAREHOUSE | FIBERGLASS | 16 x 8' X 1'-9" | 8/28/2008 | 8/28/2013 | PASS | GILES INC. | HYDROL EVEL CHECK | | |
| 47 | 46SJUMP06 | HYDRAULIC FLUID CONTAINMENT SOUTH OF #2 WAREHOUSE | FIBERGLASS | 7'-6" x 6'-0" x 1'-5" | 8/28/2008 | 8/28/2013 | PASS | GILES INC. | HYDROL EVEL CHECK | | |
| 48 | 46SJUMP07 | UNF FENCED GASOLINE STORAGE TX SOUTH OF WEI DINO SHOP | FIBERGLASS | 12 x 8' X 2' | 8/28/2008 | | PASS | GILES INC. | HYDROL EVEL CHECK | | |
| | 46SJUMP08 | SP BUNKER SLAB CATCH BASIN | CONCRETE BOX W/ BAFFLE | 60' X 3' X 3'-6" | 7/13/2004 | 7/13/2009 | PASS | GILES INC. | | | NOT A SUMP - BOX TIED TO SEWER LINE (SEE SEWER DWGS) |
| 49 | 46SJUMP09 | CHEMICAL PAD WEST END OF #2 YARD | CONCRETE BOX | 3 x 3' X 3' | 9/16/2009 | 9/16/2014 | PASS | GILES INC. | HYDROL EVEL CHECK | | |
| 50 | 46SJUMP10 | EAST OF MECHANIC SHOP | CONCRETE BOX | 4' X 2'-9" X 3' | 9/4/2008 | 9/4/2013 | PASS | GILES INC. | HYDROL EVEL CHECK | | |
| 51 | 46SJUMP11 | EAST OF MECHANIC SHOP | CONCRETE BOX | 3' X 3' X 3' | 9/16/2009 | 9/16/2014 | PASS | GILES INC. | HYDROL EVEL CHECK | | |
| 52 | 46SJUMP12 | NW CORNER OF ELECTRICAL SHOP | LUG STEEL TANK | N/A | 9/6/2008 | 9/6/2013 | PASS | GILES INC. | HYDROL EVEL CHECK | | |
| 53 | 46SJUMP13 | NORTH OF INSTRUMENT SHOP | CONCRETE BOX | 5' X 5' X 5' | 9/4/2008 | 9/4/2013 | PASS | GILES INC. | HYDROL EVEL CHECK | | |
| 54 | 46SJUMP15 | SAMPLE SUPP NORTH OF LAB | CONCRETE BOX | 4' X 4' X 4' (approx) | | 2010 | | | | | |
| 55 | 46SJUMP16 | CHEMICAL STORAGE AREA, NORTH OF WAREHOUSE "EAST" | CONCRETE BOX | | NEW 10/07 | 2012 | | | | | NEW ADDITION- REQUIRES ADDED TO DRAWING |
| 56 | 46SJUMP17 | CHEMICAL STORAGE AREA, NORTH OF WAREHOUSE "WEST" | CONCRETE BOX | | NEW 10/07 | 2012 | | | | | NEW ADDITION- REQUIRES ADDED TO DRAWING |
| 57 | 63SJUMP01 | NORTHSIDE OF HYDROGEN UNIT | CONCRETE BOX | 3'-0" X 3'-0" X 4'-3" D | 6/1/2005 | 6/1/2010 | | | | | THIS SUMP WILL BECOME PSB WHEN NEW H2 UNIT IS BUILT |
| | | | | | | | | Tesl In 2010 | | | |

SUMMARY OF SPILLS, RELEASES and FIRES

Reportable spills, releases and fires numbered twenty-one (21) during 2009. Hydrocarbon spills, of which there were four (4) accounted for a total of 515 barrels of hydrocarbons spilled with 260 of those barrels recovered by vacuum truck. All documents associated with Spills, releases and Fires are found in Appendix 1. They are as follows:

- 1) On March 25, 2009, A Relief Valve (RV) malfunctioned and released an estimated 30 barrels of crude oil under pressure into the atmosphere as vapor. The wind was blowing towards the south and there was a very slight film of hydrocarbon on cars parked across from the refinery. These cars were cleaned up at refinery expense. There was no other visible contamination in the area. The value of 30 barrels lost was based on a calculation using pressure and estimated time the valve malfunctioned and, based on the observed impacts, is probably exceedingly high. There were no bottom hole samples because there was no visible contamination. The C-141 for this release is included in Appendix 1.
- 2) On May 8, 2009, the belly valve on a railcar holding fuel oil released due to mechanical failure and dumped 434 barrels of fuel oil in the area of the PG Rack. 217 barrels were recovered by vacuum truck and 37 loads of contaminated soil were picked up and disposed at CRI. Getting between the rails on the railroad proved impossible and a report titled "Delineation Report/Workplan Navajo Refining Company PG Loading Rack" was submitted to OCD and NMED on June 24, 2009. Since waste was left in place, the PG Loading Rack was added to the SWMU list of Navajo's Post Closure Permit and corrective action will be addressed under 40 CFR 264.101 in accordance with that permit. The C-141, waste manifests and the report mentioned above are included in Appendix 1.
- 3) On December 17, 2009, a diesel release was discovered near the Tank 834 sump. The spill remained within the dike of Tk 834. An estimated 45 barrels was spilled and 40 barrels were vacuumed up using Navajo's vacuum truck. The spill was dug up and disposed at CRI. The associated waste manifests and C-141 are included in Appendix 1.
- 4) On December 23, 2009 a mist/spray diesel release was discovered coming from a flange on a pig trap at the 12" Four Corners pipeline in the refinery. The pipeline was shut down and the gasket replaced. It was raining at the time and an estimated 5-7 barrels of diesel were released. Navajo's vacuum truck was called and picked up 5 barrels of a mixture of diesel and rain water. The C-141 is included in Appendix 1.

In 2009, Navajo also had seven (8) other spills. They are as follows:

- 1) On February 1, 2009, during turn-around a section of sewer was bypassed for work related projects. This section was “pumped around” using a diaphragm pump. The pump failed and allowed water to back up and overflow. 50 barrels of water was released and 35 barrels were recovered by the vacuum truck. Contaminated soil was removed and disposed at CRI. The C-141 is included in Appendix 1.
- 2) On May 5, 2009, while cleaning TK-63 (Slurry Tank) Navajo’s vacuum truck rolled back into a FRAC tank that held the listed waste K170. When the truck hit the manifold on the FRAC tank, it broke the valve on the tank and spilled the contents of the FRAC tank. 290 barrels of material was lost inside a diked area. The vacuum truck picked up 230 barrels of material. Contaminated soil was removed and shipped as hazardous waste and those manifests are included in Appendix 1. There are no bottom hole samples because this spill is in an area of the plant that has had historical spills and as we dug down to clean THIS spill it was obvious that we weren’t going to be able to get to clean soil. The C-141 and associated documents are included in Appendix 1.
- 3) On May 11, 2009, while still cleaning TK-63 (Slurry Tank) a manhole on the north side of the tank was opened and spilled 45 barrels of sludge. 38 barrels were picked up by vacuum truck. In addition, contaminated soil was removed and disposed as hazardous waste. As with the spill above in the same area of the plant, while digging up the obvious soil from THIS spill, it was clear that we were digging in historical spills and we wouldn’t be able to get clean bottom hole samples. The C-141 and associated documents for this spill are included in Appendix 1.
- 4) On June 18, 2009, as a result of a sewer back-up, 15 barrels of process wastewater was released in the North Plant around D-80. The spill collected near the sewer inlet and some ran down into the diversion ditch that Navajo installed to keep anything from the plant out of Eagle Draw. A vacuum truck recovered 10 barrels of oily water and put it back into the sewer system. Contaminated soil was dug up and disposed. The C-141 and associated documents are included in Appendix 1.
- 5) On October 8, 2009, as a result of a sewer back up at the South Bundle Pad, the sewers ran over and spilled 50 barrels of oily wastewater that ran down Chisum Street. The vacuum truck recovered 40 barrels and put the oily wastewater back into the sewer downstream. Contaminated soil was dug up and disposed. The C-141 and associated documents are included in Appendix 1.

- 6) On October 13, 2009, as a result of sewers running slow, 10 barrels of process wastewater were released near the North Plant Flare Drum. A vacuum truck recovered 8 barrels and reinserted it into the sewers downstream. A C-141 and associated documents are included in Appendix 1.
- 7) On October 25, 2009, a flex line connected to Tk-437 split open and spilled wastewater that was being pumped into the tank to provide capacity during a fall-off test for one of Navajo's injection wells. 120 barrels were spilled and 100 barrels were recovered using a vacuum truck. The spill was contained within the diked area of Tk 437. A C-141 and associated documents are included in Appendix 1.
- 8) On November 11, 2009, an historical mercury spill was discovered during construction activities in the South Plant. Navajo hired Safety and Environmental Solutions to clean up the mercury. The contaminated dirt was drummed up and disposed and bottom samples collected. The C-141 and associated documents are included in Appendix 1.

In 2009, Navajo had ten (10) fires that were reported to OCD. All C-141's for these incidents are included in Appendix 1. They were as follows:

- 1) On January 26, 2009, the North Plant Flare "burped" hydrocarbon and started a small grass fire that was put out immediately by Navajo personnel. There were no injuries and no clean up actions needed.
- 2) On February 25, 2009, during start up after turn around, two unions on a gas line to the Crude Charge Heater had not been tightened. The leaking gas ignited. The fire was put out immediately and no one was injured.
- 3) On April 21, 2009, while cutting a manway into TK 409 a fire started inside the tank and ignited causing an explosion that blew a hole in the roof of the tank. The fire was extinguished by Navajo's Fire Department and there were no injuries. Navajo's SOP will be to cut future manways using water. The tank has not been replaced or torn down.
- 4) On May 21, 2009, a seal failure in the AGO pump in the South Crude Unit caused a fire that was extinguished immediately. Some nearby scaffolding caught fire also but there were no injuries. The seal on the pump was fixed on May 21, 2009. No clean up needed.
- 5) On July 22, 2009, a fire in the FCC Unit caused by a gasket leak in an exchanger. The fire was put out immediately and there were no injuries. Some insulation was burned and had to be replaced. No cleanup needed.

- 6) On August 18, 2009, a fire from a leaking gasket on an exchanger in the Hydrogen Unit. The gasket was replaced and there were no injuries and no damage except to insulation. No cleanup needed.
- 7) On November 5, 2009, a fire in the CCR Unit at Heater 363. A braided hose caught fire and was extinguished immediately. The braided hose was replaced. There were no injuries from this fire. No clean up was needed.
- 8) On December 20, 2009, a pump seal failed on a pump near TK-433 and gas oil caught fire. The leaked gas oil stayed within the secondary containment of the pump. The fire was extinguished immediately and no one was injured in the fire. No clean up was needed.
- 9) On December 22, 2009, a fire on the inlet reactor flange in the CCR Unit. A contractor was installing a clamp on the reactor flange trying to stop a hydrogen leak. The hydrogen temperature was about 900 degree F and the hydrogen auto ignited. The fire was extinguished using hand held fire extinguishers. There were no injuries and no clean-up was needed.
- 10) On December 31, 2009, a hydrogen fire in the CCR Unit. Contractors were replacing piping on a hydrogen line. While they were grinding, a spark ignited a hydrogen leak from a blind flange that was not completely tight. The fire was extinguished using hand-held extinguishers. The flange was tightened and the leak stopped. There were no damages and no injuries. No clean up was required.

SUMMARY OF NEW GROUNDWATER CONTAMINATION

In 2009, Navajo found no new groundwater contamination and, in fact, the areas where we have plumes, the plumes have decreased in size and thickness. In the North Colony Landfarm area, no measurable phase separated hydrocarbons (PSH) are found anymore. The PSH in the Tetra Ethyl Lead (TEL) area have been reduced to a sheen. In the southeastern part of the refinery, plume thickness has been decreased significantly.

In November 2008, Navajo hired an employee whose sole job is to maintain recovery wells, bail wells that have PSH, and keep records of those activities. This more aggressive approach to removing PSH should show up in future reports as reduced PSH overall. For the year of 2009, we recovered a total of 162 gallons of product from wells with PSH (Table 5). We are looking into more efficient methods of removing this product.

In Table 4, are the summaries of the production of hydrocarbons from our Recovery Trenches and the results of our bailing of monitor wells with PSH are summarized in Table 5.

Table 5
Summary of Recovery Wells Product Recovery
Navajo Refinery, Artesia, New Mexico

| | Volume of Hydrocarbons Recovered (gallons) | | | | |
|--------------------|---|-----------|-----------|-----------|------------|
| | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total 2009 |
| KWB-2R | 0 | 0 | 0 | 0 | 0 |
| KWB-4 | 25 | 12 | 11 | 4 | 51 |
| KWB-6 | 7 | 6 | 3 | 1 | 16 |
| MW-64 | 0 | 1 | 2 | 2 | 5 |
| MW-65 | 1 | 5 | 1 | 0 | 7 |
| MW-85 | 1 | 2 | 1 | 3 | 7 |
| MW-86 | 2 | 2 | 1 | 4 | 8 |
| MW-94 | 10 | 11 | 5 | 5 | 31 |
| MW-97 | 6 | 3 | 6 | 0 | 15 |
| MW-100 | 0 | 0 | 0 | 0 | 0 |
| MW-102 | 9 | 6 | 7 | 0 | 22 |
| Chase ¹ | 0 | 0 | 0 | 3 | 3 |
| TOTAL | 59 | 47 | 36 | 20 | 162 |

¹ Dewatering sump located at Chase's pecan farm east of Bolton Road operated as needed.
Qtr = Quarter

SUMMARY OF EPA/NMED RCRA ACTIVITY

As OCD is aware, Navajo is in the process of investigating numerous areas of the refinery and outlying areas as part of our post-closure permit with NMED. During 2009, we performed several investigations and submitted several reports as follows:

Revised Three-Mile Ditch Additional Corrective Action Investigation Report

This report, required by NMED and submitted on January 30, 2009, asked Navajo to conduct additional field investigations of Three Mile Ditch (TMD) to better define soil and groundwater impacts that were documented during the TMD Corrective Action Investigation and remove impacted soils that could potentially be leaching organic and inorganic constituents to groundwater.

About 13,500 cubic yards of soil was excavated and disposed at CRI. Sampling results and manifests are included with this report.

Evaporation Ponds Additional Corrective Action Investigation Report

This report, required by NMED, summarizes the activities completed according to the approved *Evaporation Ponds Corrective Action Work Plan* that was approved by NMED on October 2006. The focus of this report was to better define soil and groundwater impacts documented during the 2005 Corrective Action Investigation. The following conclusions were made based on the data obtained:

Total Petroleum Hydrocarbons, Diesel Range Organics, arsenic, chromium, mercury and selenium impacts are present in the shallow soils beneath the Evaporation Ponds at concentrations exceeding regulatory screening standards.

Depth to groundwater ranges from six feet to ten feet and the gradient is to the east-northeast.

The general water chemistry parameter total dissolved solids (TDS) is elevated in all wells, but may be naturally occurring.

No phase separated hydrocarbons (PSH) were encountered in groundwater beneath the ponds during the investigation but subsequent monitoring events have shown the presence of PSH in MW-85 and MW-86.

Dissolved phase groundwater impacts include TPH DRO, benzene, arsenic and selenium.

The inactive ponds are, in some areas, impacting groundwater above a level of concern and thus corrective action will be required.

A closure plan will need to be submitted in the near future.

Area of Concern (AOC) Group 2 Corrective Action Investigation Report

This report, required by NMED was submitted in April 2009. As required by the Permit and NMED, the *AOC Group 2 Corrective Action Investigation Work Plan* (Workplan) was submitted in May 2007. The approved Workplan provided a detailed description of activities to be conducted at the each of the four areas included in Group 2:

- Old API Separator (Group 2 AOC1, Permit SWMU 16): this area is located immediately south of the southwestern end of the Southeast Tank Farm Area and formerly contained an API separation unit. The separator is no longer present and Tank 136 has been placed in the area.
- South API Separator (Group 2 AOC2, Permit SWMU 19): this area is located in the central portion of the Refinery and also within the boundaries of the Southeast Tank Farm. The API separator that was located in this area has been removed from service.
- Southwest Tank Farm (Group 2 AOC3, Permit AOC 4): this area is located in the southwest corner of the refinery and contains nine active storage tanks of varying capacities.
- Crude Tank Farm (Group 2 AOC4, Permit AOC 5): this tank farm formerly contained two crude storage tanks (437 and 439) inside a bermed area located in the center of the refinery. The eastern tank was removed from service and the berms removed from the area to allow for construction of a new hydrocracker unit and a new Rose unit in 2008. The western tank remains in service.

An Amendment to the Workplan was submitted in February 2009 requesting a change from active soil gas sample collection procedures using a geoprobe rig to passive soil gas sample collection.

The scope of services actually performed included the following:

- Old API Separator:
 - Four passive soil vapor sample modules were placed at the four corners of the area. However, only 3 sample modules were retrieved and thus 3 soil vapor samples were collected in this area.
 - Two soil samples were collected from soil boring AOC1-SB1, which was installed near the center of the area.
 - Phase-separated hydrocarbon (PSH) was encountered during the drilling of AOC1-SB1 and the planned temporary well was not installed. A

sample of the PSH was collected from AOC1-SB1 and submitted for laboratory analysis to determine the general nature of the PSH.

- Groundwater was not sampled from within this area.
- South API Separator:
 - Four soil vapor samples were collected from the corners of this area.
 - Three soil samples were collected from soil boring AOC2-SB1, which was installed near the center of the area.
 - A temporary well was installed in AOC2-SB1. PSH was encountered during development of and sample collection from AOC2-SB1. A sample of the PSH was collected from AOC2-SB1 and submitted for laboratory analysis to determine the general nature of the PSH.
 - No groundwater sample was collected from this area.
- Southwest Tank Farm:
 - A total of 21 passive soil vapor sample modules were placed in the Southwest Tank Farm area. During retrieval the sample module placed at location AOC3-SG11 could not be recovered due to collapsing soil. Therefore, only 20 of the 21 modules installed in AOC3 were analyzed by the laboratory.
 - Soil samples were collected from 5 soil borings at the locations.
 - Temporary wells were installed in each of the 5 soil borings. Groundwater samples were collected from three of the four temporary wells. PSH was encountered during development of and sample collection from AOC3-SB5. A sample of the PSH was collected from AOC3-SB5 and submitted for laboratory analysis to determine the general nature of the PSH.
 - Monitor wells MW-103 and MW-104 were installed on the south side of the Southwest Tank Farm. Soil samples were collected during the installation of these two wells and groundwater samples were collected from MW-103 and MW-104 during the subsequent semiannual groundwater monitoring event and again in March 2009.
- Crude Tank Farm:
 - Passive soil vapor sample modules were placed in 12 locations throughout the Crude Tank Farm. Construction activities continue in the area of AOC4. During retrieval, it was discovered that one of the construction

crews had buried the sample module at location AOC4-SG7. An attempt was made to dig through the dirt and through the underlying caliche to recover the module but it was unsuccessful. Thus, only 11 soil vapor samples were obtained.

- Soil samples were collected from 4 soil borings throughout the Crude Tank Farm.
 - Temporary wells were installed in 3 of the 4 soil borings. The geoprobe hit refusal at 18 feet below ground surface (ft bgs) in AOC4-SB4 and the boring was terminated prior to reaching groundwater. Thus, a temporary well was not installed in AOC4-SB4.
 - Groundwater samples were collected from each of the 3 temporary wells. No PSH was encountered in these temporary wells.
 - Monitor wells MW-105, MW-106 and MW-107 were installed in the vicinity of the Crude Tank Farm. Soil samples were collected during the installation of these 3 wells in a manner similar to the soil borings.
 - PSH was encountered in MW-105 during development. A PSH sample was collected from MW-105 and submitted for fingerprint analysis.
 - Groundwater samples were collected from MW-49, MW-106 and MW-107 as per the approved Workplan.
- Soil Vapor Study Area:
 - Six pairs soil gas sample locations were selected in a north-south line extending northward from near KWB-5, located southeast of the refinery. Passive soil gas samples were collected from the western location of each pair and were designated as SVS-1A through SVS-6A. Active soil gas samples were collected from the eastern location of each pair and were designated as SVS-1B through SVS-6B.

Soil Reuse Issue

As a result of all the recent construction at the refinery, Navajo had large piles of dirt that we wanted to use for berms for new tanks we were building. Through a series of letters and sampling campaigns, NMED and OCD allowed Navajo to use portions of the piles that passed State regulated limits as berm material in the refinery. The rest of the dirt was hauled to CRI as non hazardous waste.

North Colony Landfarm Revised Permit Modification Request

Submitted on November 13, 2009, this Permit Modification Request (PMR) addresses modifications made by the Permittee to the North Colony Landfarm (NCL). The NCL is an approximately 4.25-acre land treatment unit located near the northwestern corner of the refinery property, north of two aboveground diesel storage tanks (Tank 834 and Tank 838). The NCL received hazardous wastes (K049, K050, K051 and K052) between 1980 and 1990, where they were spread and tilled for treatment.

Modifications made by the Permittee at the NCL consist of installation of Tank 815 for storage of ultra low sulfur diesel (ULSD) fuel and installation of secondary containment berms and ancillary tank equipment.

SUMMARY

2009 was a busy year at Navajo Refining. The more aggressive approach to removing hydrocarbons (by hiring our new employee) gives us a more consistent approach to removing hydrocarbons in wells that have PSH. We expect much better results as this approach is put into use over the years.

With the startup of the new units in 2009, our capacity is now 100,000 bbls a day. These new units will also give us better flexibility in the type of crude we can run.

We found no new groundwater contamination in 2009 and, in fact, have seen areas where there had previously been PSH now showing nothing or only a sheen. This is some positive proof that our recovery trenches are doing the job they were intended for.

We continue to make progress on delineating and defining any contamination associated with our Solid Waste Management Units (SWMU's) and executing plans to remediate and close those units. In the first part of this year (2010) we have closed the North Colony Landfarm and hope to be able to do the same thing to the Evaporation Ponds in the near future.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

| | | | |
|-----------------|------------------------|---------------|--------------------|
| Name of Company | Navajo Refining Co | Contact | Darrell Moore |
| Address | 501 E Main Artesia, NM | Telephone No. | 575-746-5281 |
| Facility Name | Artesia Plant | Facility Type | Petroleum Refinery |
| Surface Owner | Mineral Owner | Lease No. | |

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | | | | |
|-----------------------------|---|---|-----------------|----------------------------|-----------------|
| Type of Release | Crude Oil | Volume of Release | approx 30 bbls | Volume Recovered | none |
| Source of Release | Relief Valve | Date and Hour of Occurrence | 3/25/09 6:45 am | Date and Hour of Discovery | 3/25/09 6:45 am |
| Was Immediate Notice Given? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? | | | |
| By Whom? | | Date and Hour | | | |
| Was a Watercourse Reached? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | | | |

If a Watercourse was Impacted, Describe Fully.*

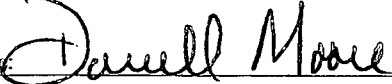
Describe Cause of Problem and Remedial Action Taken.*

At ~06:50 on 03/25/2009, the South Plant Control Room called to report that the W-16 Relief Valve (RV) had opened to the atmosphere. The release occurred about 06:45 and lasted for ~1 minute. The operator explained that they received some wet steam and the water entering the crude tower increased the pressure above the RV set point.

Describe Area Affected and Cleanup Action Taken.*

The wind was from the north and some minor hydrocarbon carried off property across Highway 82. There was a minor sheen on the highway but it evaporated in very short order.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|--|----------------------------------|------------------|-----------------------------------|
| Signature:  | OIL CONSERVATION DIVISION | | |
| Printed Name: Darrell Moore | Approved by District Supervisor: | | |
| Title: Environmental Manager for Water and Waste | Approval Date: | Expiration Date: | |
| E-mail Address: Darrell.moore@hollycorp.com | Conditions of Approval: | | Attached <input type="checkbox"/> |
| Date: April 1, 2009 746-5281 | Phone: 575- | | |

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
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State of New Mexico
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1220 South St. Francis Dr.
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Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report


| | | |
|---|-----------------------------------|-----------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange | |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 | |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery | |
| Surface Owner | Mineral Owner | Lease No. |

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

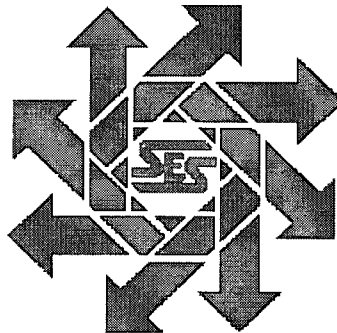
| | | | |
|--|---|---|------------------|
| Type of Release: Fuel Oil Spill | Volume of Release: ~ 434 barrels | Volume Recovered: ~ 217 barrels | |
| Source of Release: Rail Car valve failure | Date and Hour of Occurrence: 5/8/09 ~ 11:30 | Date and Hour of Discovery: 5/8/09 ~ 11:30 | |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? OCD Brad Jones, & NMED Hope Monzeqlio, | | |
| By Whom? Aaron Strange | Date and Hour: 5/8/09 OCD-12:49, & NMED-13:06 | | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | | |
| If a Watercourse was Impacted, Describe Fully.* NA | | | |
| Describe Cause of Problem and Remedial Action Taken.* On 5/8/09 fuel oil spilled onto the ground from a rail car due to equipment failure. The valve on the rail car that operates the belly drain failed and released the product to the ground. The spill was contained with soil berms and vacuum trucks removed the standing liquids. | | | |
| Describe Area Affected and Cleanup Action Taken.* The spill occurred at the PG loading rack located at the south west corner of the Artesia Plant. The spill ran north between the train rails. Some of the spill spread just outside the Navajo Refinery fence line (next to the train tracks). Vacuum trucks removed the standing liquids and the contaminated soil is being dug up and placed into roll-off bins for disposal. A disposal facility will be chosen, based on the analytical test results. | | | |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. | | | |
| Signature:  | | OIL CONSERVATION DIVISION | |
| Printed Name: Aaron Strange | | Approved by District Supervisor: | |
| Title: Sr. Environmental Technician | | Approval Date: | Expiration Date: |
| E-mail Address: aaron.strange@hollycorp.com | | Conditions of Approval: | |
| Date: 5/8/09 Phone: 575-746-5451 | | Attached <input type="checkbox"/> | |

* Attach Additional Sheets If Necessary

**Navajo Refining Company
PG Loading Rack at the Artesia Refinery
Section 8, Township 17S, Range 26E
Eddy County, New Mexico**

Delineation Report/Work Plan

June 24, 2009



Prepared for:

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

By:

**Safety & Environmental Solutions, Inc.
703 East Clinton
Hobbs, New Mexico 88240
(575) 397-0510**

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I. Company Contacts

| NAME | Company | Telephone | E-mail |
|---------------|-----------------|--------------|--|
| Darrell Moore | Navajo Refining | 575-748-3311 | darrell.moore@navajo-refining.com |
| Bob Allen | SESI | 505-397-0510 | ballen@sesi-nm.com |

II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by Navajo Refining Company to perform delineation services at the Artesia Refinery. Approximately 300 barrels of fuel oil spilled onto the PG loading rack due to a faulty valve on the bottom of a rail tanker car. The top six (6) to eight (8) inches of contaminated soil was excavated and disposed of at a New Mexico Oil Conservation Division (NMOCD) approved facility. Clean sand was then placed in between tracks.

III. Surface and Ground Water

According to Safety and Environmental Inc. Semi-Annual Groundwater Monitoring Water Level and Sampling Records prepared for Navajo Refining Company Artesia, New Mexico in March-April 2009, the closest groundwater of record is fifteen (15) feet at monitor well #50.

IV. Soils

The surface soils in the area are predominantly sand and sandy loam.

V. Work Performed

On June 1-2, 2009, SESI installed a total of forty two (42) hand auger holes to determine the vertical extent of contamination.

Samples were retrieved at thirty (30) inches from all forty two (42) hand auger holes. Twenty (20) auger holes were installed on the track between the ties and twenty-two (22) auger holes were installed between and beside the tracks themselves. (See Figure 3) All samples were properly preserved and transported under Chain of Custody to ALS Laboratory Group of Houston, Texas for analysis. The samples were analyzed for Total Petroleum Hydrocarbons (EPA Method SW-8015M) and Low Level Polycyclic Aromatic Hydrocarbons (PAHs) (EPA Method SW-8270). The results of the analysis are located in Appendix A.

All borings were backfilled from total depth to surface with bentonite and hydrated.

The results of all samples are below the New Mexico Environmental Department (NMED) Soil Screening Guidance, Industrial/Occupational Soil Levels with the exception of sample AH #24. The New Mexico soil screening level for Benzo (a) pyrene is 2.34 mg/kg and the sample result is 2.7 mg/kg. This level is only 0.36 mg/kg above the soil screening level. Given the location from which sample AH #24 was taken, (See Figure 3) in the middle of the loading tracks, it is felt that the sample result does not present an unacceptable risk to people, groundwater, or any other element of the natural environment.

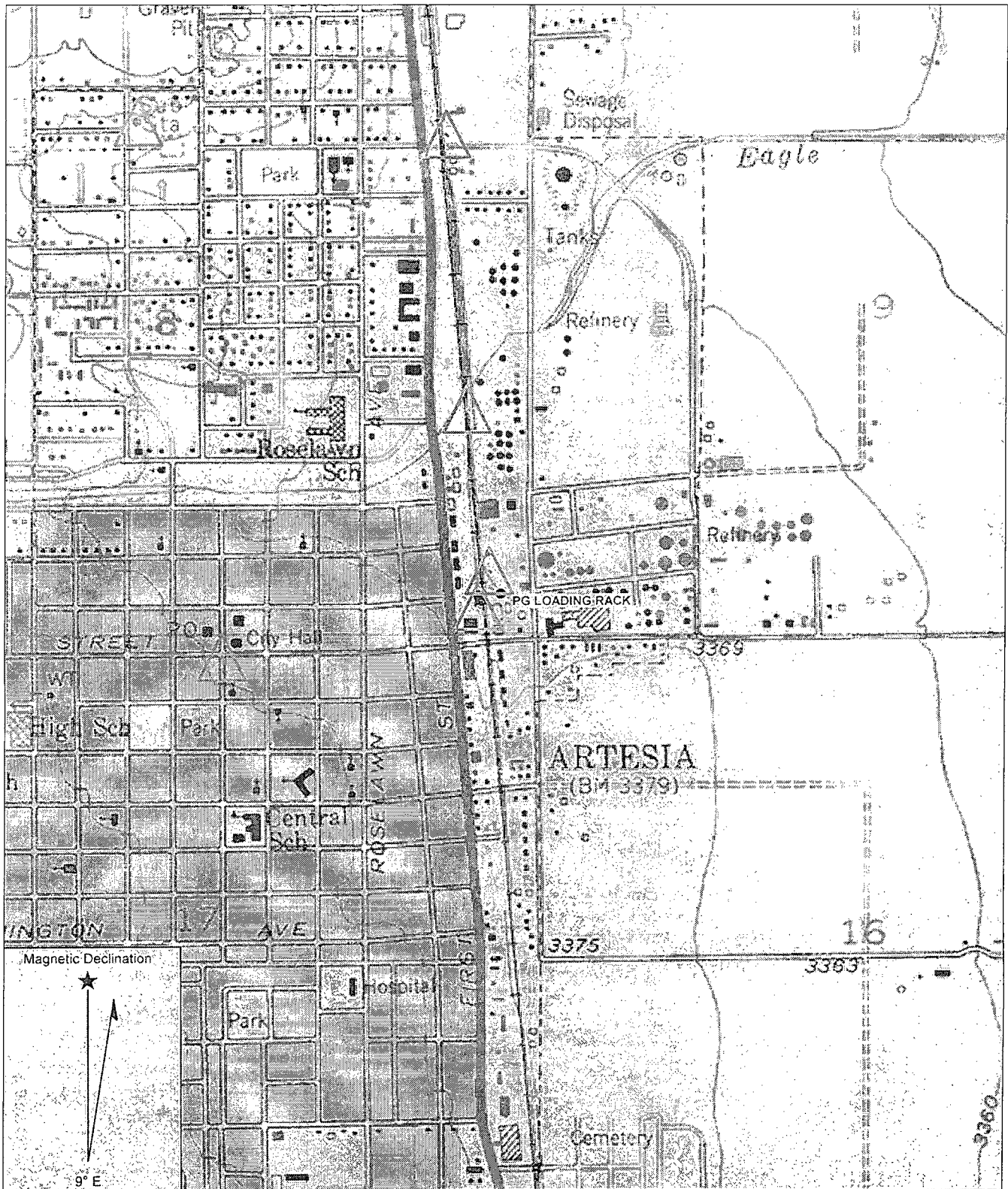
VI. Action Plan

The fuel oil has not migrated to the depth of thirty (30) inches. As a result, the area between the tracks will be covered with new ballast. In addition, two (2) monitor wells will be installed down gradient of the spill area to insure there is no migration to the groundwater in the future. These monitor well will be sampled and analyzed for the constituents of concern semi-annually.

VII. Figures & Appendices

Figure 1 – Vicinity Map
Figure 2 – Site Plan
Figure 3 – Auger Hole Locations
Appendix A – Analytical Results
Appendix B –Site Photos
Appendix C—C-141

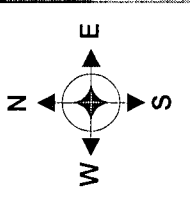
Figure 1
Vicinity Map



Name: ARTESIA
Date: 7/15/2009
Scale: 1 inch equals 1000 feet

Location: 032° 50' 37.19" N 104° 23' 47.05" W NAD83

Figure 2
Site Plan



Google

© 2009

Eye alt 4429 ft

N Freeman Ave

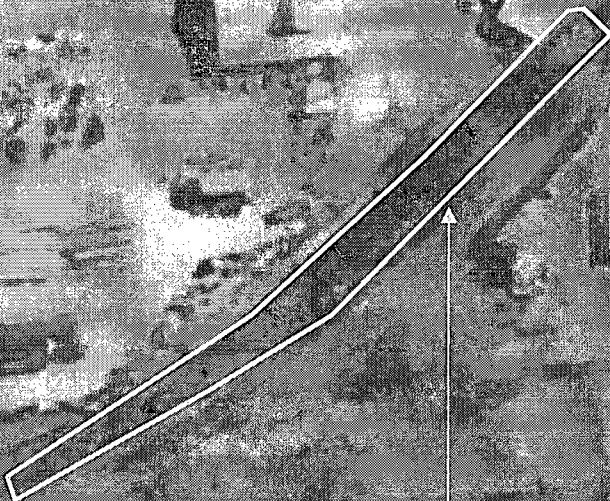
Tieras Ave

E Chisum Ave

Image © 2009 DigitalGlobe

© 2009 Tele Atlas

32°50'38.25" N 104°23'46.75" W elev 3370 ft



PG LOADING RACK
Approximately 794'

285

305 ft

Imagery Date: Jan 29, 2004

Figure 3
Auger Hole Locations

Appendix A

Analytical Results

Appendix B

Site Photos

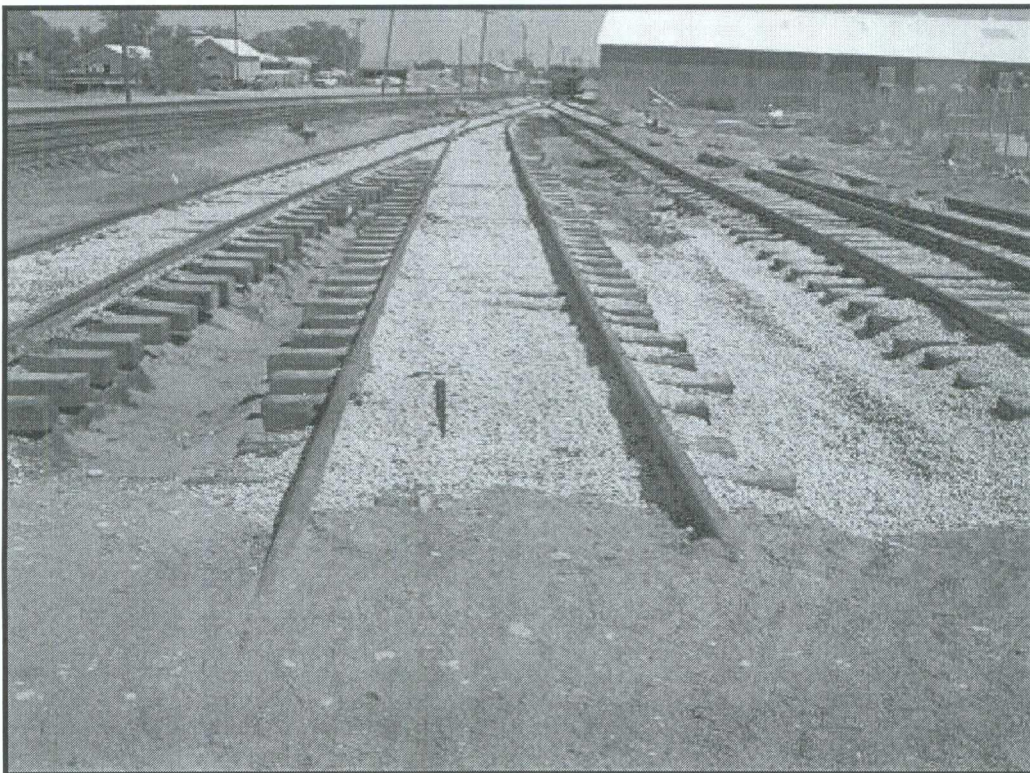
June 1, 2009



Site Photo #1 - East of release area AH locations facing south



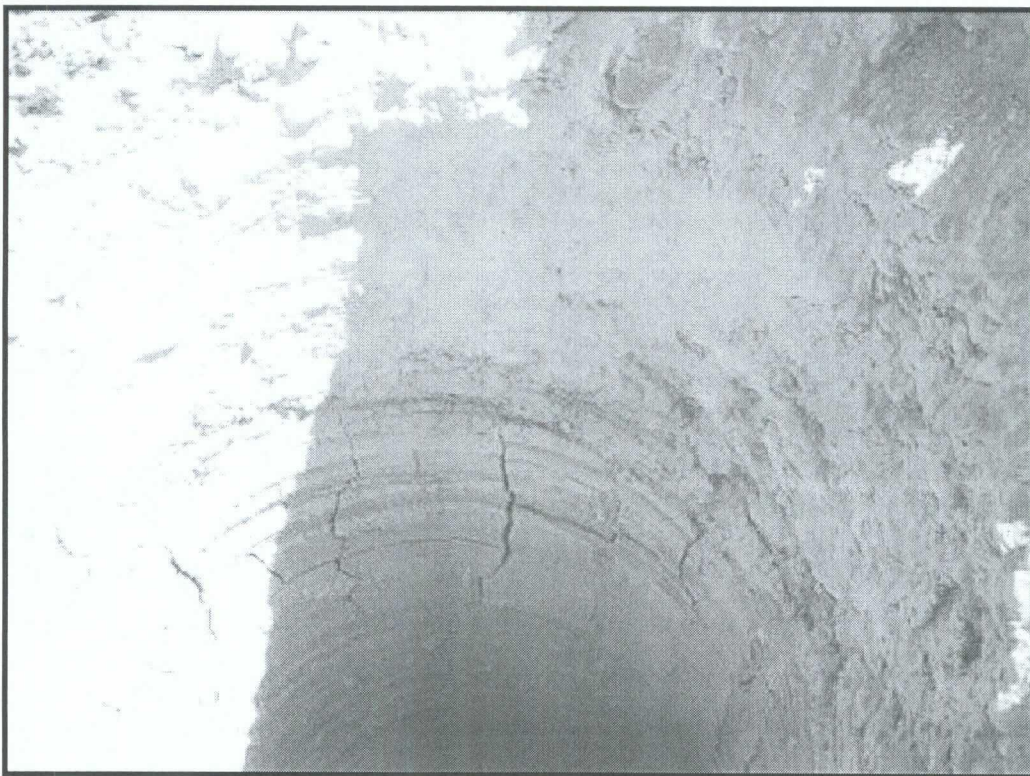
Site Photo #2 - North of release area facing north



Site Photo #3 - North of release area facing north



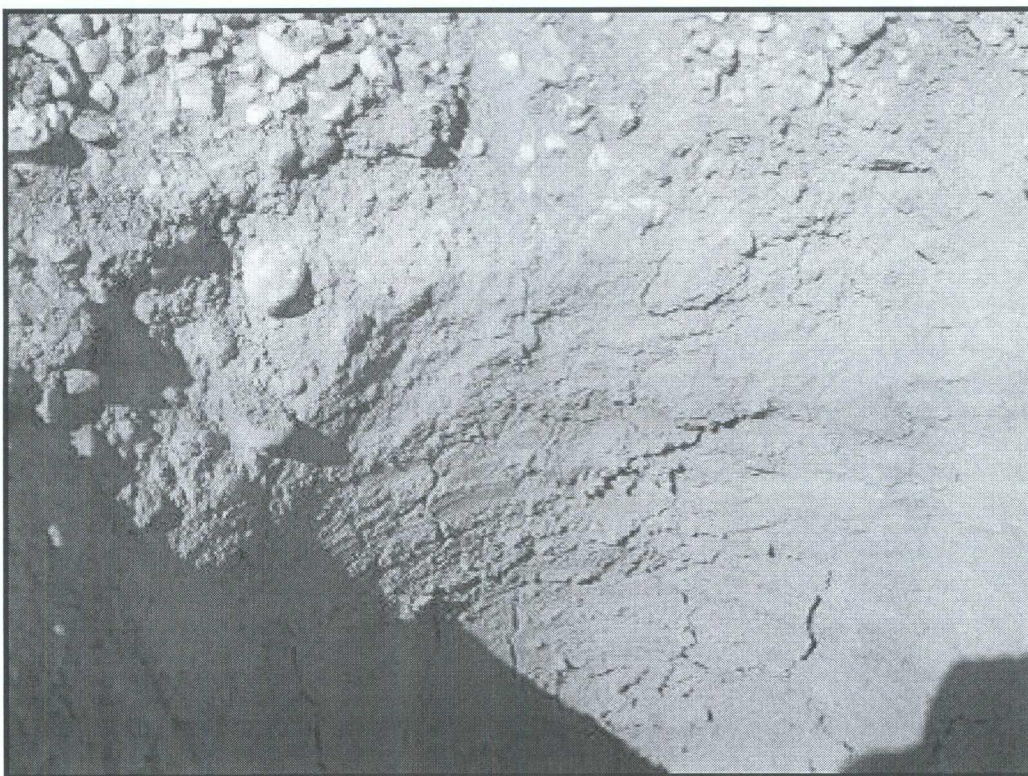
Site Photo #4 - Northeast of release area facing north



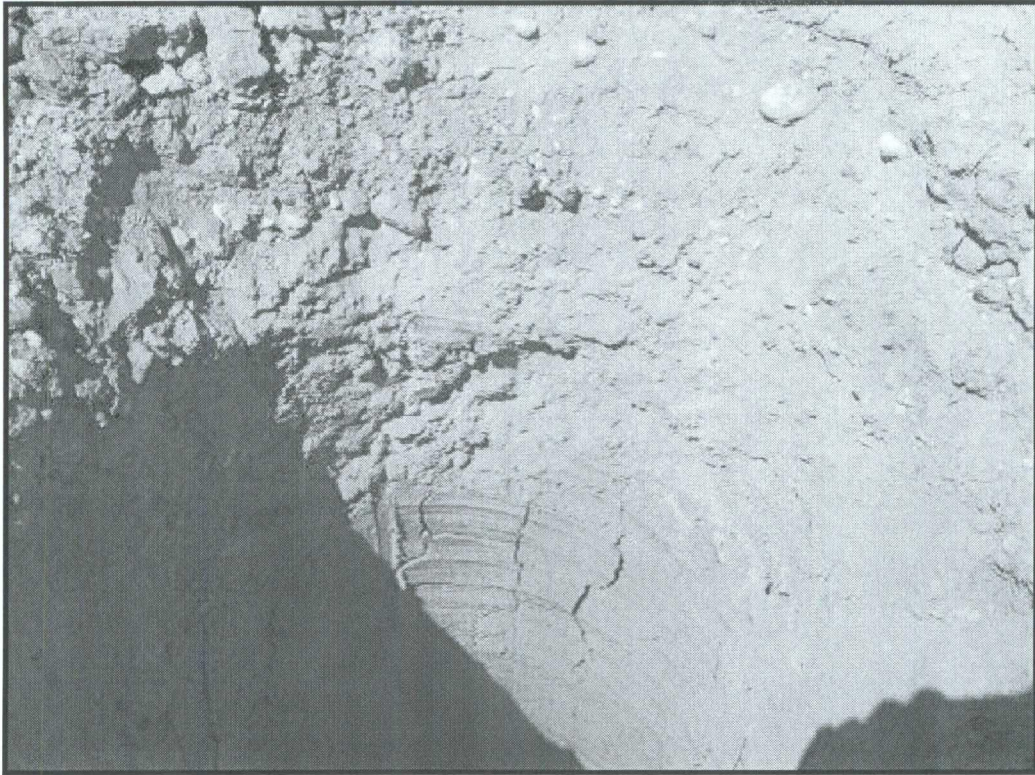
Site Photo #5 - Auger hole east of release area no staining #1



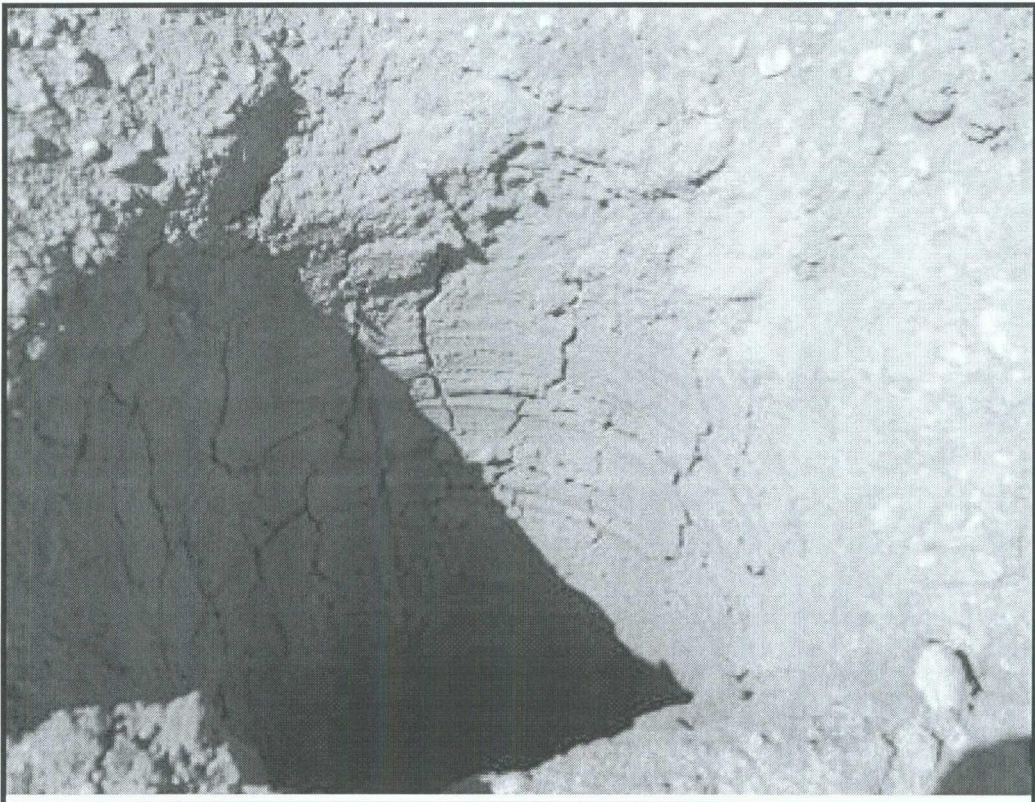
Site Photo #6 - Auger hole east of release area no staining #2



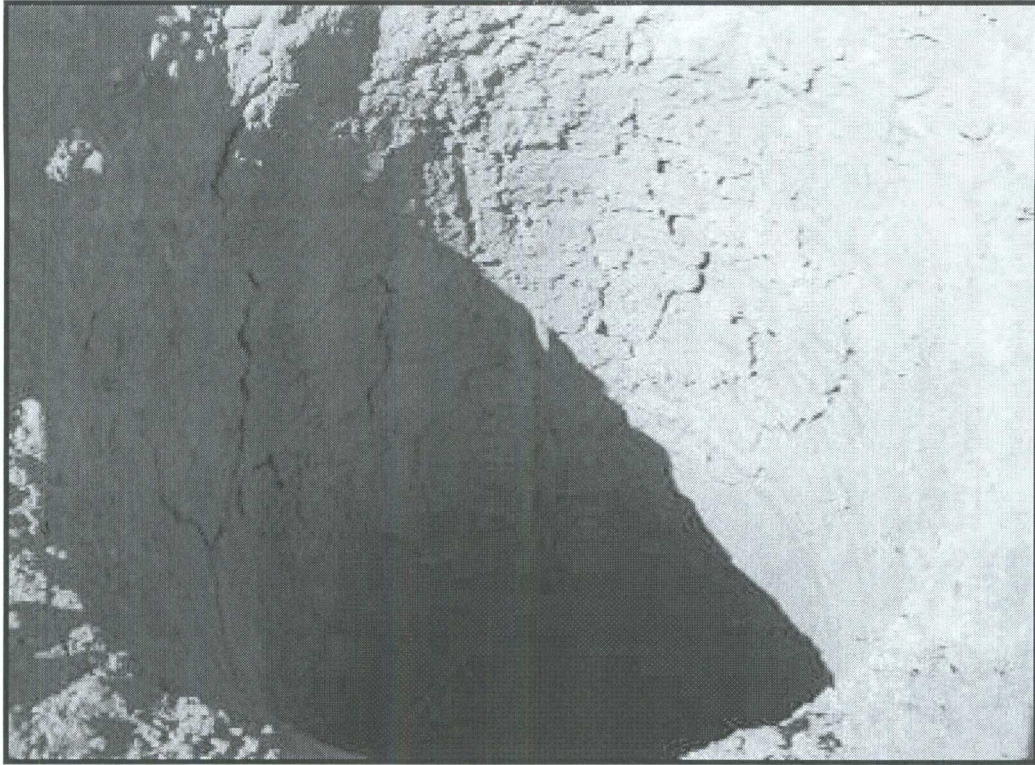
Site Photo #7 - Auger hole east of release area no staining #3



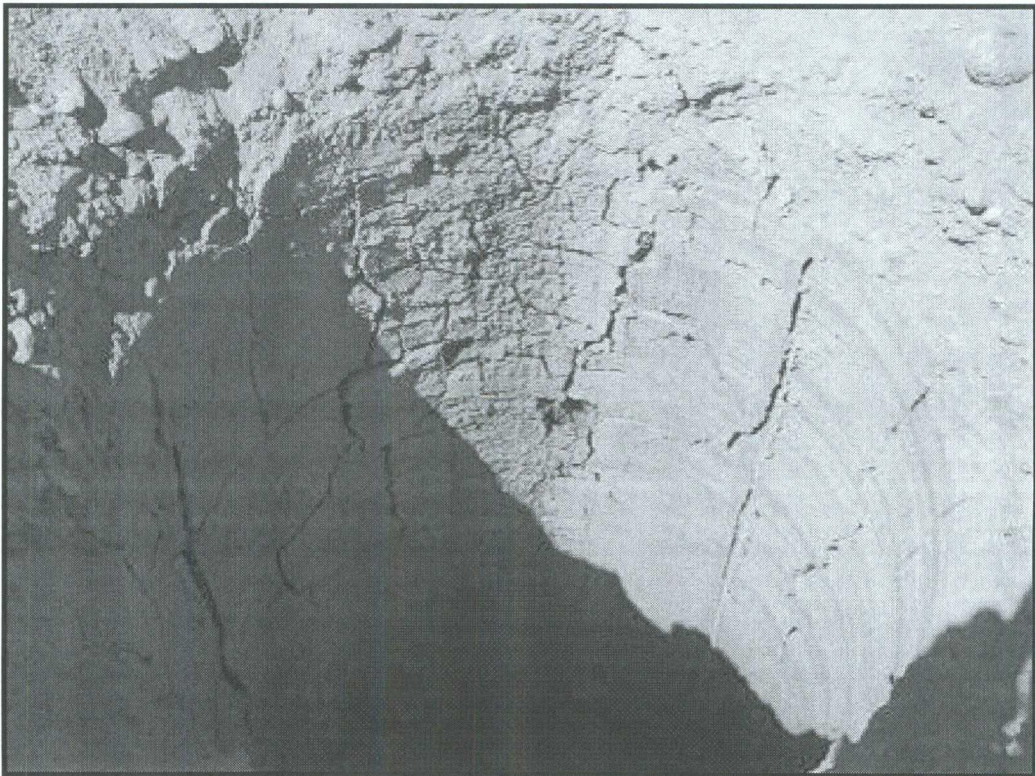
Site Photo #8 - Auger hole east of release area no staining #4



Site Photo #9 - Auger hole east of release area no staining #5



Site Photo #10 - Auger hole east of release area no staining #6



Site Photo #11 - Auger hole east of release area no staining #7



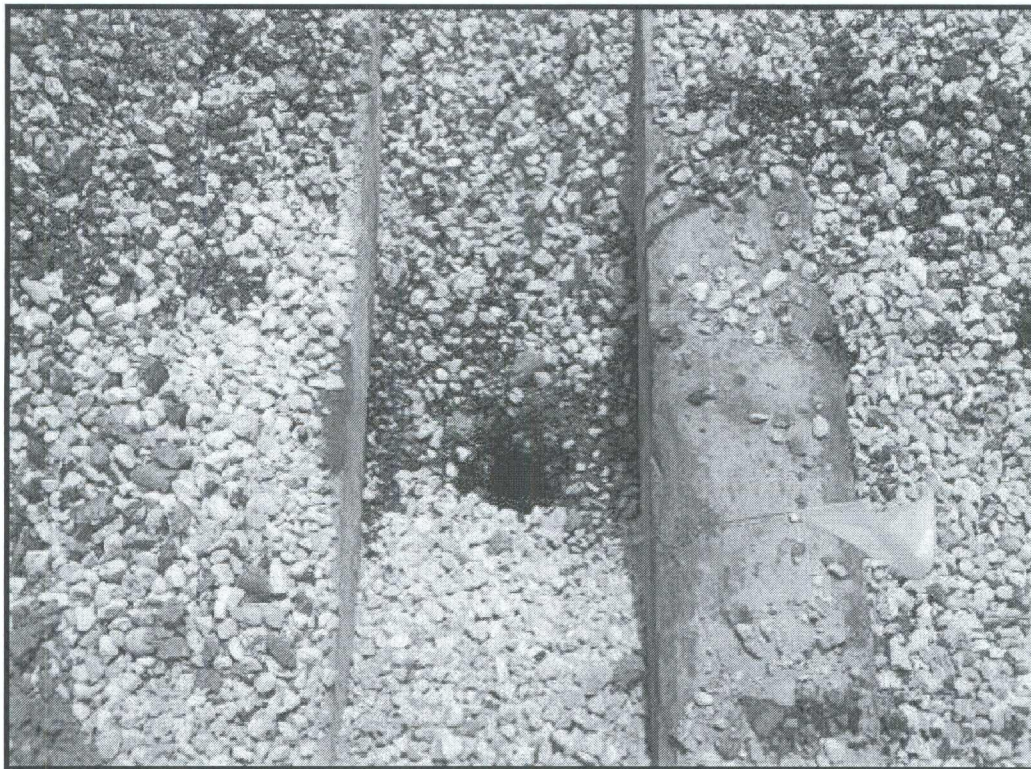
Site Photo #12 - Auger hole east of release area no staining #8



Site Photo #13 - Auger hole east of release area no staining #9



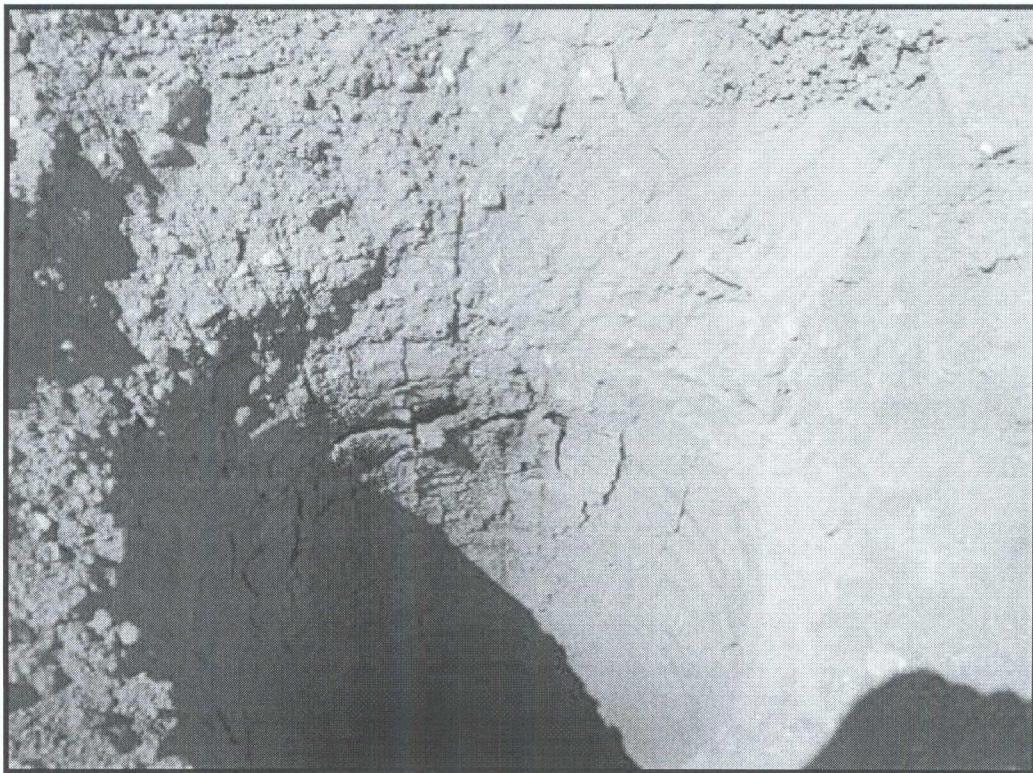
Site Photo #14 - Auger hole east of release area no staining #10



Site Photo #15 - AH #10



Site Photo #16 - Auger hole east of release area no staining #11



Site Photo #17 - Auger hole east of release area no staining #12



Site Photo #18 - AH #12



Site Photo #19 - AH #14



Site Photo #20 - North of release area at AH #19

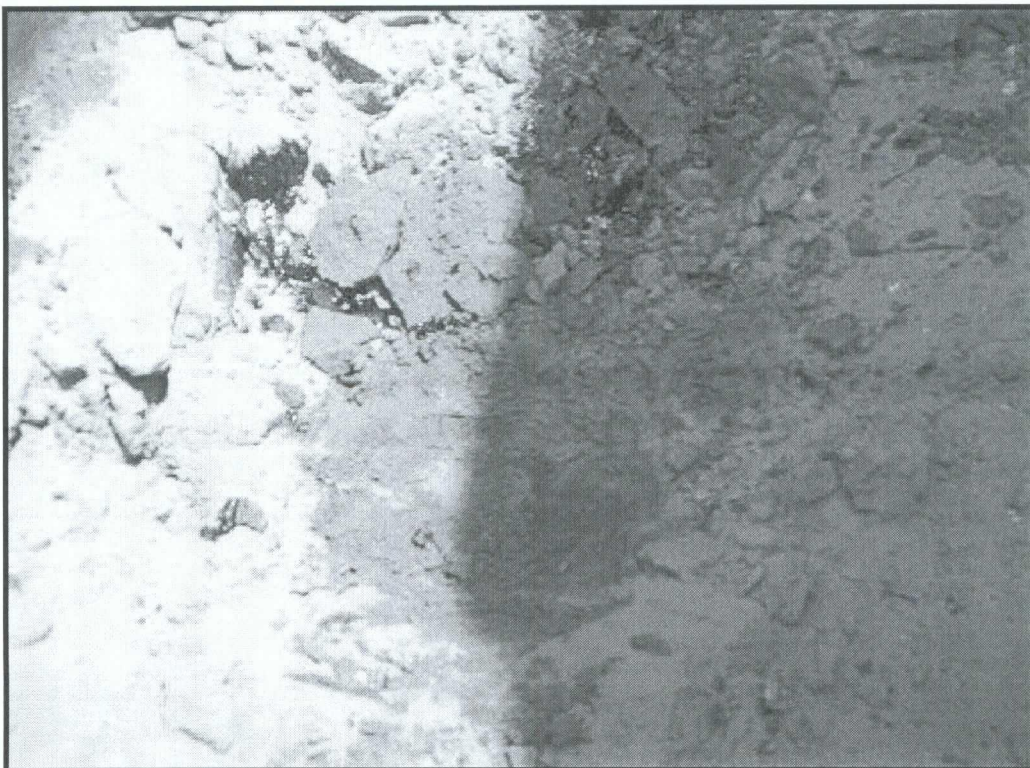


Site Photo #21 - North of AH # 19 15' facing west

June 2, 2009



Site Photo #22 - East side of release area in sand



Site Photo #23 - East side of release area excavated to 2"



Site Photo #24 - Eastside of release area excavated 2"



Site Photo #25 - North of AH #19 100' facing west



Site Photo #26 - West side of AH #23 6' facing west



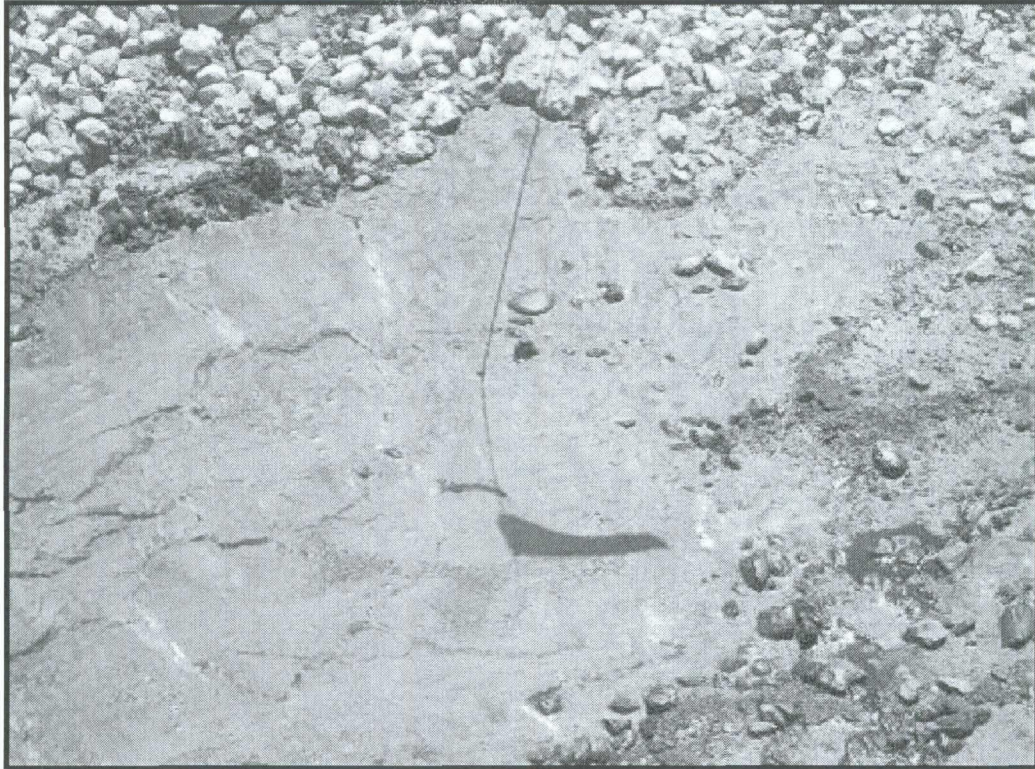
Site Photo #27 - West of AH #29 facing west



Site Photo #28 - AH #40



Site Photo #29 - AH #41



Site Photo #30 - AH #42

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Novajo Ref.
 Address _____
 City/State Artesia NM

()
 Telephone No. _____

ORIGINATION OF WASTE:

Operations Center _____

Permit No. _____

Property Name _____
 (Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | | | | |
|---|-------|-----------------|-------|---------------|-------|
| Drilling Fluids | _____ | Tank Bottoms | _____ | Exempt Fluids | _____ |
| Completion Fluids | _____ | Gas Plant Waste | _____ | C117 No. | _____ |
| Contaminated Soil | _____ | Other Materials | _____ | Pit No. | _____ |
| DESCRIPTION / NOTES | | | | | |
| <u>PG Ashpail 12 Yds</u> | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

CERTIFICATION: The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

 Signature of Generator's Authorized Agent

 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S. Brothers
 Address 512 Texas
 City/State Artesia NM

 Telephone No.

4
 Truck No.

CERTIFICATION: I certify that the waste in quantity above was received by me for shipment to the destination below.

Greg Sullivan
 Signature of Transporter's Agent

6-10-09
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079
 Telephone No.

www.crihobbs.com
 E-mail

CERTIFICATION: I certify that the waste described in Part I was received by me via the transporter described in Part II.

EW E
 Signature of Facility Agent

6-10-09
 Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refin
 Address _____
 City/State Artesia NM

()
 Telephone No.

ORIGINATION OF WASTE:

Operations Center _____

Permit No. _____

Property Name _____
 (Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | |
|---|-----------------------|---------------------|
| Drilling Fluids _____ | Tank Bottoms _____ | Exempt Fluids _____ |
| Completion Fluids _____ | Gas Plant Waste _____ | C117 No. _____ |
| Contaminated Soil _____ | Other Materials _____ | Pit No. _____ |
| DESCRIPTION / NOTES | | |
| <u>PG Asphalt 12 Yds.</u> | | |
| <u>Durc</u> | | |
| | | |
| | | |

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

 Signature of Generator's Authorized Agent

 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S. Brothers
 Address 512 Texas
 City/State Artesia NM

 Telephone No.

41
 Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

Greg Shuman
 Signature of Transporter's Agent

6-10-09
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

Greg Shuman
 Signature of Facility Agent

6-10-09
 Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

27451

PART I: Generator Navajo Refining Co. LLC
Address PO Box 159 (575) 748-3311
City/State Artesia, NM 88211-0159 Telephone No.

ORIGINATION OF WASTE:

Operations Center Artesia Permit No. NMD048918817

Property Name _____
(Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | |
|---|-----------------------|---------------------|
| Drilling Fluids _____ | Tank Bottoms _____ | Exempt Fluids _____ |
| Completion Fluids _____ | Gas Plant Waste _____ | C117 No. _____ |
| Contaminated Soil _____ | Other Materials _____ | Pit No. _____ |
| DESCRIPTION / NOTES | | |
| Concrete Drilling 32 yds | | |
| ASPHALT 10 yds | | |
| P.G. Rock | | |

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Carmel Hernandez
Signature of Generator's Authorized Agent

5-29-09
Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S. Brothers Telephone No. _____
Address _____
City/State _____ Truck No. _____

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

[Signature]
Signature of Transporter's Agent

5-29-09
Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc. (575) 393-1079
Address P.O. Box 388 Telephone No.
City/State Hobbs, N.M. 88241-0388 www.crihobbs.com
E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
Signature of Facility Agent

5-29-09
Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

33701

PART I: Generator Navajo Ref.
Address _____
City/State Artesia NM

()
Telephone No.

ORIGINATION OF WASTE:

Operations Center _____

Permit No. _____

Property Name _____
(Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | | |
|---|-------|-----------------|-------|
| Drilling Fluids | _____ | Tank Bottoms | _____ |
| Completion Fluids | _____ | Gas Plant Waste | _____ |
| Contaminated Soil | _____ | Other Materials | _____ |
| Exempt Fluids _____ | | | |
| C117 No. _____ | | | |
| Pit No. _____ | | | |
| DESCRIPTION / NOTES | | | |
| <u>PG-Asphalt 12 yds</u> | | | |
| <u>PG R. 74 Base Sand</u> | | | |

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of Generator's Authorized Agent

Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S. Botherns
Address _____
City/State Artesia NM

Telephone No.

4
Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

Grey Shuman
Signature of Transporter's Agent

5/29/09
Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
Address P.O. Box 388
City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
Signature of Facility Agent

5-29-09
Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

33705

PART I: Generator Nawajo
Address _____
City/State Artesia NM

()
Telephone No. _____

ORIGINATION OF WASTE:

Operations Center _____

Permit No. _____

Property Name _____
(Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | | |
|---|-------|-----------------|-------|
| Drilling Fluids | _____ | Tank Bottoms | _____ |
| Completion Fluids | _____ | Gas Plant Waste | _____ |
| Contaminated Soil | _____ | Other Materials | _____ |
| Exempt Fluids _____ | | | |
| C117 No. _____ | | | |
| Pit No. _____ | | | |
| DESCRIPTION / NOTES | | | |
| PG Asphalt 12 Yds | | | |
| Ben RB-29467 | | | |

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of Generator's Authorized Agent

Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S. Brothers
Address _____
City/State Artesia NM

Telephone No.

4
Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

Gray Stumy
Signature of Transporter's Agent

5/30/09
Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
Address P.O. Box 388
City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

Robert H. H. H.
Signature of Facility Agent

5-30-09 1:23 PM
Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

33707

PART I:

Generator Navajo Ref
Address _____
City/State Artesia NM

()
Telephone No. _____

ORIGIN OF WASTE:

Operations Center _____

Permit No. _____

Property Name _____
(Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | |
|---|-----------------------|---------------------|
| Drilling Fluids _____ | Tank Bottoms _____ | Exempt Fluids _____ |
| Completion Fluids _____ | Gas Plant Waste _____ | C117 No. _____ |
| Contaminated Soil _____ | Other Materials _____ | Pit No. _____ |
| DESCRIPTION / NOTES | | |
| PG Asphalt 12 Yds | | |
| Bin # R-40 | | |

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of Generator's Authorized Agent_____
Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S. Brothers West
Address _____
City/State Artesia NM

Telephone No.4
Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

Greg Shuman
Signature of Transporter's Agent

6-1-07
Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
Address P.O. Box 388
City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
Signature of Facility Agent

1-1-09
Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

33706

PART I: Generator Nouvo Ref
 Address _____
 City/State Artesia NM

()
 Telephone No. _____

ORIGINATION OF WASTE:

Operations Center _____

Permit No. _____

Property Name _____
 (Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | |
|---|-----------------------|---------------------|
| Drilling Fluids _____ | Tank Bottoms _____ | Exempt Fluids _____ |
| Completion Fluids _____ | Gas Plant Waste _____ | C117 No. _____ |
| Contaminated Soil _____ | Other Materials _____ | Pit No. _____ |
| DESCRIPTION / NOTES | | |
| <u>PG Asphalt 12 Yds</u> | | |
| <u>Box # RB29143</u> | | |

CERTIFICATION: The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

 Signature of Generator's Authorized Agent

 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S. Brothers
 Address _____
 City/State Artesia NM

 Telephone No.

4
 Truck No.

CERTIFICATION: I certify that the waste in quantity above was received by me for shipment to the destination below.

Greg Shuman
 Signature of Transporter's Agent

6/1/09
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079

 Telephone No.

www.crihobbs.com

 E-mail

CERTIFICATION: I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
 Signature of Facility Agent

6-1-09
 Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

33267

PART I: Generator Navajo Ref.
Address _____
City/State Artesia, NM

()
Telephone No. _____

ORIGIN OF WASTE:

Operations Center _____

Permit No. _____

Property Name _____
(Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | | | | |
|---|-------|-----------------|-------|---------------|-------|
| Drilling Fluids | _____ | Tank Bottoms | _____ | Exempt Fluids | _____ |
| Completion Fluids | _____ | Gas Plant Waste | _____ | C117 No. | _____ |
| Contaminated Soil | _____ | Other Materials | _____ | Pit No. | _____ |
| DESCRIPTION / NOTES | | | | | |
| <u>PG Asphalt</u> <u>12 Yds</u> | | | | | |
| <u>Bonded</u> | | | | | |

CERTIFICATION: The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of Generator's Authorized Agent _____

Date and Time of Shipment _____

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S. Brothers Waste
Address _____
City/State Artesia NM

Telephone No. _____

Truck No. 4

CERTIFICATION: I certify that the waste in quantity above was received by me for shipment to the destination below.

Greg Sherman
Signature of Transporter's Agent

5/27/09
Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
Address P.O. Box 388
City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION: I certify that the waste described in Part I was received by me via the transporter described in Part II.

Reese Martinez
Signature of Facility Agent

5-27-09
Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

33212

PART I: Generator Navajo Ref.
Address _____
City/State Artesia NM

()
Telephone No.

ORIGINATION OF WASTE:

Operations Center _____

Permit No. _____

Property Name _____
(Well, Tank Battery, Plant, Facility)

WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.)

| | | |
|-------------------------|-----------------------|---------------------|
| Drilling Fluids _____ | Tank Bottoms _____ | Exempt Fluids _____ |
| Completion Fluids _____ | Gas Plant Waste _____ | C117 No. _____ |
| Contaminated Soil _____ | Other Materials _____ | Pit No. _____ |

DESCRIPTION / NOTES

PG Ashpalt

Bin # R2870AT

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of Generator's Authorized Agent

Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S Brothers
Address _____
City/State Artesia NM

Telephone No.

4
Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

Gray Shuman
Signature of Transporter's Agent

6-8-05
Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
Address P.O. Box 388
City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

John A. M. [Signature]
Signature of Facility Agent

6/8/07 6:24 AM
Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

33218

PART I: Generator Navajo Refining Co. LLC
Address PO Box 159
City/State Artesia, NM 88211-0159

575 748-3311
Telephone No.

ORIGINATION OF WASTE:

Operations Center Artesia

Permit No. NMD048918817

Property Name _____
(Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | | |
|---|-------|-----------------|-------|
| Drilling Fluids | _____ | Tank Bottoms | _____ |
| Completion Fluids | _____ | Gas Plant Waste | _____ |
| Contaminated Soil | _____ | Other Materials | _____ |
| Exempt Fluids _____ | | | |
| C117 No. _____ | | | |
| Pit No. _____ | | | |
| DESCRIPTION / NOTES | | | |
| <u>Asphalt</u> | | | |
| <u>Cont. Soil</u> <u>12 yds</u> <u>10 yds</u> | | | |
| <u>PG Rock</u> | | | |
| | | | |
| | | | |

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Camille Amador
Signature of Generator's Authorized Agent

Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S Brothers
Address _____
City/State _____

Telephone No.

2
Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

Wesley D. Winkler
Signature of Transporter's Agent

6-11-09
Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
Address P.O. Box 388
City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

Paul J. Smith
Signature of Facility Agent

6-11-09
Date and Time Received

34080

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Co. LLC
 Address PO Box 159
 City/State Artesia, NM 88211-0159

(575-748-3311)
 Telephone No.

ORIGIN OF WASTE:

Operations Center Artesia

Permit No. NMD048918817

Property Name _____
 (Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | | |
|---|-----------------------|---------------------|--|
| Drilling Fluids _____ | Tank Bottoms _____ | Exempt Fluids _____ | |
| Completion Fluids _____ | Gas Plant Waste _____ | C117 No. _____ | |
| Contaminated Soil _____ | Other Materials _____ | Pit No. _____ | |
| DESCRIPTION / NOTES | | | |
| ASphalt 10 yds | | | |
| Rock Debris 2 yds | | | |
| PG Rock | | | |

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Gamie Hernandez
 Signature of Generator's Authorized Agent

 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S Brothers
 Address _____
 City/State _____

 Telephone No.

2
 Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

Boyd Van Winkle
 Signature of Transporter's Agent

17
6-15-09
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079

 Telephone No.

www.crihobbs.com

 E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

 Signature of Facility Agent

 Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Co. LLC
 Address PO Box 159
 City/State Artesia, NM 88211-0159

(575-748)3311
 Telephone No.

ORIGIN OF WASTE:

Operations Center Artesia

Permit No. NMD048918817

Property Name _____
 (Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | | |
|---|-------|-----------------|-------|
| Drilling Fluids | _____ | Tank Bottoms | _____ |
| Completion Fluids | _____ | Gas Plant Waste | _____ |
| Contaminated Soil | _____ | Other Materials | _____ |
| | | Exempt Fluids | _____ |
| | | C117 No. | _____ |
| | | Pit No. | _____ |
| DESCRIPTION / NOTES | | | |
| Asphalt 10 yds | | | |
| Trash Debris 4 yds | | | |
| PG Rock Bone yard | | | |

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Carrie Hernandez
 Signature of Generator's Authorized Agent

 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S Brothers
 Address _____
 City/State _____

 Telephone No.

2
 Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

Bruce W. White
 Signature of Transporter's Agent

6-17-09
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
 Signature of Facility Agent

6-17-09
 Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

27450

PART I: Generator Navajo Refining Co. LLC
Address PO Box 159
City/State Artesia, NM 88211-0159

(575) 748-3311

Telephone No.

ORIGIN OF WASTE:

Operations Center ArtesiaPermit No. NMD048918817Property Name _____
(Well, Tank Battery, Plant, Facility)

WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.)

| | | |
|-------------------------|-----------------------|---------------------|
| Drilling Fluids _____ | Tank Bottoms _____ | Exempt Fluids _____ |
| Completion Fluids _____ | Gas Plant Waste _____ | C117 No. _____ |
| Contaminated Soil _____ | Other Materials _____ | Pit No. _____ |

DESCRIPTION / NOTES

~~Generator's Waste~~ 17 yds

Cont Soil

P.C. Rock

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Amie Hernandez
Signature of Generator's Authorized Agent

7-6-09

Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S Brothers
Address _____
City/State _____

Telephone No.

Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

[Signature]
Signature of Transporter's Agent

7-6-09

Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
Address P.O. Box 388
City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
Signature of Facility Agent

7-6-09

Date and Time Received

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|---|-----------------------------------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery |

| | | |
|---------------|---------------|-----------|
| Surface Owner | Mineral Owner | Lease No. |
|---------------|---------------|-----------|

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|--|---|
| Type of Release: Diesel | Volume of Release: 45 barrels | Volume Recovered: 40 barrels |
| Source of Release: Diesel coalescer drain near the Tank 843 sump | Date and Hour of Occurrence: 12/17/09 ~ 23:40 | Date and Hour of Discovery: 12/17/09 ~ 23:42 |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? NA | |
| By Whom? NA | Date and Hour: NA | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |

If a Watercourse was Impacted, Describe Fully.*
NA


Describe Cause of Problem and Remedial Action Taken.*

On 12/17/09 at ~ 23:54 operators discovered a diesel spill near the Tank 834 sump. The Shift Foreman thought the problem was associated with the diesel coalescer. A vacuum truck was called and recovered ~ 40 barrels of standing liquid. The contaminated soil will be placed in a roll-off bin and tested for disposal.

Describe Area Affected and Cleanup Action Taken.*

On 12/17/09 at ~ 23:40 operators discovered a diesel spill near the Tank 834 sump. The Shift Foreman thought the problem was associated with the diesel coalescer. The spill occurred and remained within the tank berm. A vacuum truck was called and recovered ~ 40 barrels of standing liquid. The contaminated soil will be placed in a roll-off bin and tested for disposal.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|--|--|----------------------------------|-----------------------------------|
| Signature:  | | OIL CONSERVATION DIVISION | |
| Printed Name: Aaron Strange | | Approved by District Supervisor: | |
| Title: Sr. Environmental Technician | | Approval Date: | Expiration Date: |
| E-mail Address: aaron.strange@hollycorp.com | | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 12/18/09 Phone: 575-703-5057 | | | |

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised October 10, 2003

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | | |
|---|-----------------------------------|-----------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange | |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 | |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery | |
| Surface Owner | Mineral Owner | Lease No. |

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude 32.847169 Longitude -104.391115

NATURE OF RELEASE

| | | |
|--|--|---|
| Type of Release: Diesel | Volume of Release: 5 to 7 barrels | Volume Recovered: ~ 5 barrels mixed with rain water |
| Source of Release: Holly Energy Partners (HEP) flange leak on the pig trap at the Four Corners (4-C) manifold at the Artesia Refinery. | Date and Hour of Occurrence: 12/23/09 ~ 21:35 | Date and Hour of Discovery: 12/23/09 ~ 21:35 |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? National Response Center (NRC) Incident Report # 927024 | |
| By Whom? Lori Clowe (with HEP) | Date and Hour: 12/24/09 ~ 00:22 | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |

If a Watercourse was Impacted, Describe Fully. * NA

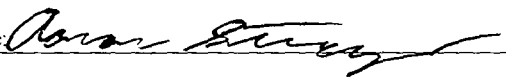
Describe Cause of Problem and Remedial Action Taken. *

On 12/23/09 at ~ 21:35 Ed Fourlines (HEP operator) discovered mist/spray coming from a flange on pig trap at the 12" Four Corners pipeline at the Artesia Refinery. The Flange gasket failed spraying diesel onto the ground and into the fire water pond. The pipeline was shut down. A vacuum truck removed the standing liquid and sorbent pads were used to absorb the diesel on the fire water pond. The ground was wet and covered with puddles of rain water. The diesel (on top of the puddles of rain water) along with rain water was removed with the vacuum truck. Approximately 5 barrels of diesel mixed with rain water was recovered. HEP remove ~ 2 yards of gravel/soil and sorbent pads. We will be monitoring the area for signs of stained soil as the ground dries out and will collect bottom hole samples. Navajo will dispose of the contaminated soil. The reason for the flange gasket failure is unknown. HEP reported this spill to the NRC due to the pipeline being DOT regulated.

Describe Area Affected and Cleanup Action Taken. *

On 12/23/09 at ~ 21:35 Ed Fourlines (HEP operator) discovered mist/spray coming from a flange on pig trap at the 12" Four Corners pipeline at the Artesia Refinery. The Flange gasket failed spraying diesel onto the ground and into the fire water pond. The pipeline was shut down. A vacuum truck removed the standing liquid and sorbent pads were used to absorb the diesel on the fire water pond. The ground was wet and covered with puddles of rain water. The diesel (on top of the puddles of rain water) along with rain water was removed with the vacuum truck. Approximately 5 barrels of diesel mixed with rain water was recovered. HEP remove ~ 2 yards of gravel/soil and sorbent pads. We will be monitoring the area for signs of stained soil as the ground dries out and will collect bottom hole samples. Navajo will dispose of the contaminated soil. The reason for the flange gasket failure is unknown. HEP reported this spill to the NRC due to the pipeline being DOT regulated.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | |
|--|----------------------------------|-----------------------------------|
| Signature:  | OIL CONSERVATION DIVISION | |
| Printed Name: Aaron Strange | Approved by District Supervisor: | |
| Title: Sr. Environmental Technician | Approval Date: | Expiration Date: |
| Email Address: aaron.strange@hollycorp.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 1/07/10 | Phone: 575-703-5057 | |

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
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with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | | | |
|-----------------|------------------------------|---------------|--------------------|
| Name of Company | Navajo Refining Co. | Contact | Darrell Moore |
| Address | 501 E Main Artesia, NM 88211 | Telephone No. | 575-746-5281 |
| Facility Name | Navajo Refining | Facility Type | Petroleum Refinery |
| Surface Owner | Mineral Owner | Lease No. | |

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | | | | |
|-----------------------------|---|---|-------------------------------|----------------------------|---------------|
| Type of Release | Wash Water | Volume of Release | 50 bbls | Volume Recovered | 35 bbls |
| Source of Release | Wash water from units during turn around | Date and Hour of Occurrence | 2/1/09 9am | Date and Hour of Discovery | 2/1/09 9:30am |
| Was Immediate Notice Given? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? | Carl Chavez and Mike Bratcher | | |
| By Whom? | Darrell Moore | Date and Hour | 2/2/09 8 am | | |
| Was a Watercourse Reached? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | | | |

If a Watercourse was Impacted, Describe Fully.*


Describe Cause of Problem and Remedial Action Taken.*

During Turn around at the plant, a section of sewer was bypassed for work related projects. This section was "pumped around" using a diaphragm pump. The diaphragm pump failed and allowed the water to back up and overflow. The water ran to a low spot just north east of the Alky Unit and was sucked up using a vacuum truck.

Describe Area Affected and Cleanup Action Taken.*

Area affected is northeast of the Alky Unit and encompasses about 50 yds long and 15 yds wide. The standing water was sucked up using a vacuum truck and contaminated soil will be removed.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|--|----------------------------------|------------------|-----------------------------------|
| Signature:  | OIL CONSERVATION DIVISION | | |
| Printed Name: Darrell Moore | Approved by District Supervisor: | | |
| Title: Environmental Manager for Water and Waste | Approval Date: | Expiration Date: | |
| E-mail Address: Darrell.moore@hollycorp.com | Conditions of Approval: | | Attached <input type="checkbox"/> |
| Date: February 4, 2009 575-746-5281 | Phone: | | |

District I
1625 N. French Dr., Hobbs, NM 88240
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1301 W. Grand Avenue, Artesia, NM 88210
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1000 Rio Brazos Road, Aztec, NM 87410
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1220 S. St. Francis Dr., Santa Fe, NM 87505

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side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|---|-----------------------------------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery |

| | | |
|---------------|---------------|-----------|
| Surface Owner | Mineral Owner | Lease No. |
|---------------|---------------|-----------|

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE


| | | |
|--|---|--|
| Type of Release: Hazardous Waste Spill K-170 | Volume of Release: ~ 290 barrels | Volume Recovered: ~ 230 barrels |
| Source of Release: FRAC Tank for the T-63 cleaning project. | Date and Hour of Occurrence: 5/5/09 ~ 09:00 | Date and Hour of Discovery: 5/5/09 ~ 09:00 |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? OCD Brad Jones, NMED Hope Monzeqlio, & NRC Jacquelyn Arsenaual (NRC Incident # 904760) | |
| By Whom? Aaron Strange | Date and Hour: 5/5/09 OCD-09:38, NMED-09:40, & NRC-09:45 | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |

If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.*
On 5/6/09 the Navajo Vacuum truck parked to start unloading a FRAC tank being used for the T-63 tank cleaning project. This tank contained the listed hazardous waste; K-170. While pumping the vacuum truck started to roll backward and damaged to tank header. K-170 started to spill onto the ground. The spill was contained with soil berms. A small ditch was created to channel the waste into a hose and pump. The waste (still leaking) was being pumped into T-63. Another vacuum truck was brought in to pump out remaining waste and minimize the amount spilled onto the ground. Approximately 290 barrels of waste spilled onto the ground.

Describe Area Affected and Cleanup Action Taken.*
The spill accrued within the T-834 tank berm on the south east side of T-834. The standing liquid/sludge was pumped directly into T-63 and also removed with a vacuum truck. The contaminated soil was dug up and place into hard top roll-off bins for disposal as the listed hazardous waste K-170.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCID rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCID marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCID acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|--|----------------------------------|------------------|-----------------------------------|
| Signature:  | OIL CONSERVATION DIVISION | | |
| Printed Name: Aaron Strange | Approved by District Supervisor: | | |
| Title: Sr. Environmental Technician | Approval Date: | Expiration Date: | |
| E-mail Address: aaron.strange@hollycorp.com | Conditions of Approval: | | Attached <input type="checkbox"/> |
| Date: 5/7/09 | Phone: 575-746-5451 | | |

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
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State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
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side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | | |
|---|-----------------------------------|-----------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange | |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 | |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery | |
| Surface Owner | Mineral Owner | Lease No. |

LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | |

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|---|--|
| Type of Release: Hazardous Waste Spill K-170 | Volume of Release: ~ 45 barrels | Volume Recovered: ~ 38 barrels |
| Source of Release: North manhole on T-63 | Date and Hour of Occurrence: 5/11/09 ~ 13:30 | Date and Hour of Discovery: 5/11/09 ~ 13:30 |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? OCD Brad Jones, NMED Hope Monzeglio, & NRC Petty Officer Smith (NRC Incident # 905298) | |
| By Whom? Aaron Strange | Date and Hour: 5/11/09 OCD-15:12, NMED-15:23, & NRC-15:28 | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |
| If a Watercourse was Impacted, Describe Fully.* NA | | |
| Describe Cause of Problem and Remedial Action Taken.* On 5/11/09 at ~ 13:30 the manhole on the north side of T-63 was opened and listed hazardous waste K-170 spilled onto the ground. The tank was gauged through the top manhole on the south side of the tank and was said to be low enough to open one of the manholes at the base of the tank. A vacuum truck removed the standing liquid and returned it to the refining process. The contaminated soil was dug up and place into a hard top roll-off bin for disposal as the listed hazardous waste K-170. | | |
| Describe Area Affected and Cleanup Action Taken.* The spill accrued within the T-63 tank berm on the north west side of T-63. A vacuum truck removed the standing liquid. The contaminated soil was dug up and place into a hard top roll-off bin for disposal as the listed hazardous waste K-170. | | |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. | | |
| Signature:  | | OIL CONSERVATION DIVISION |
| Printed Name: Aaron Strange | | Approved by District Supervisor: |
| Title: Sr. Environmental Technician | Approval Date: | Expiration Date: |
| E-mail Address: aaron.strange@hollycorp.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 5/11/09 | Phone: 575-746-5451 | |

* Attach Additional Sheets If Necessary

Box R-82

| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number NMD048918817 | 2. Page 1 of 1 | 3. Emergency Response Phone 505 5511 | 4. Manifest Tracking Number 004092134 JJK | | |
|--|--|--|-------------------|--|---|------------------------------|--|
| 5. Generator's Name and Mailing Address NIAVAJO REFINING 501 E MAIN ARTESIA NM 88214 | | | | Generator's Site Address (if different than mailing address) | | | |
| Generator's Phone: 575-746-5281 | | | | | | | |
| 6. Transporter 1 Company Name FLUID TRANSPORTS INC | | | | U.S. EPA ID Number TXD986057931 | | | |
| 7. Transporter 2 Company Name | | | | U.S. EPA ID Number | | | |
| 8. Designated Facility Name and Site Address PINECO PO BOX 779 BENTON AR 72018 | | | | U.S. EPA ID Number IARD981057870 | | | |
| Facility's Phone: 18003774692 | | | | | | | |
| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | |
| | | No. | Type | | | | |
| X | 1. RO, HAZARDOUS WASTE SOLID, A.O.S., 9, UN3077, PGIII, (K170) | 1 | CM | 27880 | P | K170 | |
| | 2. | | | | | | |
| | 3. | | | | | | |
| | 4. | | | | | | |
| 14. Special Handling Instructions and Additional Information PROFILE 090507735 UNLOAD # 165093 | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | |
| Generators/Offeror's Printed/Typed Name Dorell Moore | | | | Signature Dorell Moore | | Month Day Year 10/5/12/09 | |
| 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.: | | | | | | | |
| 17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Signature Month Day Year Transporter 2 Printed/Typed Name Signature Month Day Year | | | | | | | |
| 18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: 18b. Alternate Facility (or Generator) U.S. EPA ID Number Facility's Phone: 18c. Signature of Alternate Facility (or Generator) Month Day Year | | | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. 2. 3. 4. | | | | | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name Signature Month Day Year | | | | | | | |

| | | | | | | | | | | | |
|---|--------|---|---|--|-------|------------------------------------|------|---|------------------|---|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number AD092134 | | 2. Page 1 of 1 | | 3. Emergency Response Phone | | 4. Manifest Tracking Number 004092134 JJK | | | |
| | | 5. Generator's Name and Mailing Address ALABAMA REFRACTOR 501 E MAIN SHELTON AL 36210 | | Generator's Site Address (if different than mailing address) | | | | | | | |
| Generator's Phone: 205 777-7731 | | 6. Transporter 1 Company Name EPA Transporters Inc | | | | U.S. EPA ID Number 770951057931 | | | | | |
| | | 7. Transporter 2 Company Name | | | | U.S. EPA ID Number | | | | | |
| 8. Designated Facility Name and Site Address RINCO PO BOX 774 SHELTON AL 36218 | | | | | | | | U.S. EPA ID Number | | | |
| Facility's Phone: 205 277-4437 | | | | | | | | AD0921347270 | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) 1. 20, 11700000 WASTE SOLID, A.O.S., 9, UN3077 PLB, (1170) | | | | 10. Containers | | 11. Total Quantity | 12. Unit WL/Vol. | 13. Waste Codes | |
| | | | | | | No. | Type | | | | |
| | X | | 1 | CM | 27810 | P | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 14. Special Handling Instructions and Additional Information PROFUE - 090507735 | | | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | | | |
| Generator's/Offor's Printed/Typed Name Dorrell Moore | | Signature Dorrell Moore | | | | | | Month Day Year 05 12 09 | | | |
| 16. International Shipments | | <input type="checkbox"/> Import to U.S. | | <input type="checkbox"/> Export from U.S. | | Port of entry/exit: | | Date leaving U.S.: | | | |
| Transporter signature (for exports only): | | | | | | | | | | | |
| 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | | | |
| Transporter 1 Printed/Typed Name | | Signature | | | | | | Month Day Year | | | |
| Transporter 2 Printed/Typed Name | | Signature | | | | | | Month Day Year | | | |
| 18. Discrepancy | | | | | | | | | | | |
| 18a. Discrepancy Indication Space | | <input type="checkbox"/> Quantity | | <input type="checkbox"/> Type | | <input type="checkbox"/> Residue | | <input type="checkbox"/> Partial Rejection | | <input type="checkbox"/> Full Rejection | |
| Manifest Reference Number: | | | | | | | | | | | |
| 18b. Alternate Facility (or Generator) | | U.S. EPA ID Number | | | | | | | | | |
| Facility's Phone: | | | | | | | | | | | |
| 18c. Signature of Alternate Facility (or Generator) | | | | | | | | Month Day Year | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | | | |
| 1. | | 2. | | 3. | | 4. | | | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | | | | | |
| Printed/Typed Name | | Signature | | | | | | Month Day Year | | | |

RINECO LAND DISPOSAL RESTRICTIONS NOTIFICATION FORM

Generator: Navajo EPA ID # NM D048918817

Manifest Doc. # 004092134-JSK

EPA Codes K170 Profile # 090507735 Line Item 1.

| EPA Waste Codes | Waste Description & Treatment/ Regulatory Subcategory | NON-WASTEWATER | Concentration in mg/l or Technology Code |
|-----------------|--|----------------|---|
|-----------------|--|----------------|---|

- | | | | |
|-------------------------------|--|--|--|
| <input type="checkbox"/> D001 | Ignitable characteristic wastes, except for 261.21(a)(1) High TOC subcategory that are managed Non-CWA/nonCWA equivalent/non class I SDWA systems. | | DEACT and meet 268.48 standards or RORGS; or CMBST |
| <input type="checkbox"/> D001 | High TOC Ignitable characteristic liquids subcategory based on 40 CFR 261.21(a)(1)-greater than or equal to 10% TOC. | | RORGS; or CMBST; or POLYM |
| <input type="checkbox"/> D002 | Corrosive characteristic wastes that are managed in non-CWA non CWA equivalent, or class / SDWA systems. | | DEACT & meet 268.48 standards |

D004-D011 Heavy Metals Expressed in Concentrations of mg/l (TCLP) and must meet 268.48 Standards. (NON-WASTEWATER)

- | | |
|---|--|
| <input type="checkbox"/> D004 Arsenic 5.0 | <input type="checkbox"/> D008 Lead 0.75 |
| <input type="checkbox"/> D005 Barium 21 | <input type="checkbox"/> D009 Mercury 0.20 low mercury subcategory |
| <input type="checkbox"/> D006 Cadmium 0.11 | <input type="checkbox"/> D010 Selenium 5.7 |
| <input type="checkbox"/> D007 Chromium 0.60 | <input type="checkbox"/> D011 Silver 0.14 |

D012-D043 Concentrations Expressed in mg/kg, and Must Meet 268.48 Standards. (NON-WASTEWATER)

- | | | |
|--|---|---|
| <input type="checkbox"/> D012 Endrin 0.13 | <input type="checkbox"/> D024 m-cresol 5.6 | <input type="checkbox"/> D036 Nitrobenzene 14 |
| <input type="checkbox"/> D013 Lindane 0.066 | <input type="checkbox"/> D025 p-cresol 5.6 | <input type="checkbox"/> D037 Pentachlorophenol 7.4 |
| <input type="checkbox"/> D014 Methoxychlor 0.18 | <input type="checkbox"/> D026 Cresol Mixed Isomer 11.2 | <input type="checkbox"/> D038 Pyridine 16 |
| <input type="checkbox"/> D015 Toxaphene 2.6 | <input type="checkbox"/> D027 p-dichlorobenzene 6.0 | <input type="checkbox"/> D039 Tetrachloroethylene 6.0 |
| <input type="checkbox"/> D016 2,4 D 10 | <input type="checkbox"/> D028 1,2-dichloroethane 6.0 | <input type="checkbox"/> D040 Trichloroethylene 6.0 |
| <input type="checkbox"/> D017 2,4,5-TP Silvex 7.9 | <input type="checkbox"/> D029 1,1-dichloroethylene 6.0 | <input type="checkbox"/> D041 2,4,5-Trichlorophenol 7.4 |
| <input type="checkbox"/> D018 Benzene 10 | <input type="checkbox"/> D030 2,4-dinitrotoluene 140 | <input type="checkbox"/> D042 2,4,6-Trichlorophenol 7.4 |
| <input type="checkbox"/> D019 Carbon Tetrachloride 6.0 | <input type="checkbox"/> D031 Heptachlor & epoxides 0.066 | <input type="checkbox"/> D043 Vinyl Chloride 6.0 |
| <input type="checkbox"/> D020 Chlordane 0.26 | <input type="checkbox"/> D032 Hexachlorbenzene 10 | |
| <input type="checkbox"/> D021 Chlorobenzene 6.0 | <input type="checkbox"/> D033 Hexachlorobutadiene 5.6 | |
| <input type="checkbox"/> D022 Chloroform 6.0 | <input type="checkbox"/> D034 Hexachloroethane 30 | |
| <input type="checkbox"/> D023 o-cresol 5.6 | <input type="checkbox"/> D035 Methyl Ethyl Ketone 36 | |

| | |
|---|--|
| F001-F005 Spent Solvents: (NON-WASTEWATER) | F003-F005 Non-Wastewater spent solvents |
| concentrations expressed mg/kg | expressed in mg/l (TCLP) |

- | | | |
|--|---|---|
| <input type="checkbox"/> Acetone 160 | <input type="checkbox"/> Isobutyl Alcohol 170 | <input type="checkbox"/> Carbon disulfide 4.8 |
| <input type="checkbox"/> Benzene 10 | <input type="checkbox"/> Methylene Chloride 30 | <input type="checkbox"/> Cyclohexanone 0.75 |
| <input type="checkbox"/> N-butyl alcohol | <input type="checkbox"/> Methyl Ethyl Ketone 36 | <input type="checkbox"/> Methanol 0.75 |
| <input type="checkbox"/> carbontetrachloride 6.0 | <input type="checkbox"/> Methyl Isobutyl Ketone 33 | |
| <input type="checkbox"/> chlorobenzene 6.0 | <input type="checkbox"/> Nitrobenzene 14 | |
| <input type="checkbox"/> o-cresol 5.6 | <input type="checkbox"/> Pyridine 16 | |
| <input type="checkbox"/> m-cresol 5.6 | <input type="checkbox"/> Tetrachloroethylene 6.0 | |
| <input type="checkbox"/> p-cresol 5.6 | <input type="checkbox"/> Toluene 10 | |
| <input type="checkbox"/> Cresol mixed isomers 11.2 | <input type="checkbox"/> 111-Trichloroethane 6.0 | |
| <input type="checkbox"/> O-Dichlorobenzene 6.0 | <input type="checkbox"/> 112-Trichloroethane 6.0 | |
| <input type="checkbox"/> Ethyl Acetate 33 | <input type="checkbox"/> 112-Trichloro-122-trifluoroethane 30 | |
| <input type="checkbox"/> Ethyl Benzene 10 | <input type="checkbox"/> Trichloroethylene 6.0 | |
| <input type="checkbox"/> Ethyl Ether 160 | <input type="checkbox"/> Trichloromonofluoromethane 30 | |
| | <input type="checkbox"/> Xylene (mixed isomers) 30 | |

GENERATOR COPY

RINECO LAND DISPOSAL RESTRICTIONS NOTIFICATION FORM

Generator:

Navajo

EPA ID #

NUM D04871881

| EPA Waste Codes | (NON-WASTEWATER) | Technology Code |
|-----------------|------------------|-----------------|
|-----------------|------------------|-----------------|

| | | |
|--------------------------|---|-----------------------------|
| <input type="checkbox"/> | U023, U086,U099,U103,U109,U133,U135,U160,U189,U249 | CHOXD;CHRED; or CMBST |
| <input type="checkbox"/> | U246 | CHOXD;WETOX; or CMBST |
| <input type="checkbox"/> | U115 | CHOXD; or CMBST |
| <input type="checkbox"/> | K047 | DEACT |
| <input type="checkbox"/> | F005 (2-Nitropropane, 2-ethoxyethanol),F024,K025,K026,K027,K039,K107, K108,K109,K110,K112,K113,K114,K115,K116,K123,K124,K125,K126, U001,U003,U006,U007,U008,U010,U011,U014,U015,U016,U017,U020, U021,U026,U033,U034,U035,U038,U041,U042,U046,U049,U053,U055, U056,U057,U058,U059,U062,U064,U073,U074,U085,U087,U089,U090, U091,U092,U093,U094,U095,U097,U108,U110,U113,U114,U116,U119, U122,U123,U124,U125,U126,U132,U143,U147,U148,U149,U150,U153, U154,U156,U163,U164,U166,U167,U168,U171,U173,U176,U177,U178, U182,U184,U186,U191,U193,U194,U197,U200,U201,U202,U206,U213, U218,U219,U221,U222,U223,U234,U236,U237,U238,U240,U244,U248, U328,U353,U359 | CMBST |
| <input type="checkbox"/> | K106 | RMERC |
| <input type="checkbox"/> | U134 | ADGAS fb NEUTR; or NEUTR |

If there are any codes not listed on this form that apply to this waste stream, please list the EPA waste code and the treatment standard below.

*Note: Retain one copy for your files, send one copy with your shipment

Navajo Refining Company
Darrell Moore
P O Box 159
Artesia, NM 88211-0159

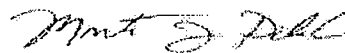
06/02/2009

Certificate of Disposal

Navajo Refining Company, Artesia, NM
Manifest # 004092134JJK
Received 5/20/2009

This is to certify that the waste materials received from the above referenced generator and manifest number have been managed and disposed of in accordance with all applicable Federal, State, and Local laws and regulations.

By:



Monte J. Dilick, Vice President of Sales & Marketing

| | | | | | | | | | | | | |
|--|---|--|--|-----------------------|--|--|----------------------------------|--|-----------------------------------|-----------------|------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number ALMO 048918817 | | 2. Page 1 of 1 | | 3. Emergency Response Phone 505-748-3311 | | 4. Manifest Tracking Number 004092115 JJK | | | | |
| | | 5. Generator's Name and Mailing Address NAVATO REFINING 501 E MAIN ARTESIA NM 88210 | | | | | | Generator's Site Address (if different than mailing address) | | | | |
| Generator's Phone: 575-746-5281 | | 6. Transporter 1 Company Name FLUID TRANSPORTS | | | | | | U.S. EPA ID Number TXA 988057731 | | | | |
| | | 7. Transporter 2 Company Name | | | | | | U.S. EPA ID Number | | | | |
| 8. Designated Facility Name and Site Address RINECO P.O. BOX 729 BEATON AR 72018 | | | | | | | | U.S. EPA ID Number TXA 981057870 | | | | |
| Facility's Phone: 800-377-4692 | | | | | | | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | | | | 10. Containers No. Type | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | | |
| | X | 1. HAZARDOUS WASTE SOLID, N.O.S., 9, NIA 3077, PG III, (K170) | | | | 1 | | CM | 28960 | P | K170 | |
| | | 2. | | | | | | | | | | |
| | | 3. | | | | | | | | | | |
| | | 4. | | | | | | | | | | |
| 14. Special Handling Instructions and Additional Information PROFILE # 090507735 | | | | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | | | | |
| Generator's/Offor's Printed/Typed Name Darrell Moore | | | | | | Signature <i>Darrell Moore</i> | | Month Day Year 05 22 09 | | | | |
| INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name Ale McKenzie | | | | | | Signature <i>Ale McKenzie</i> | | Month Day Year 05 12 09 | | | |
| | Transporter 2 Printed/Typed Name | | | | | | Signature | | Month Day Year | | | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | | | | | |
| | Manifest Reference Number: | | | | | | | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | | | | | | |
| | Facility's Phone: | | | | | | | | | | | |
| 18c. Signature of Alternate Facility (or Generator) Month Day Year | | | | | | | | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | | | | |
| 1. HOU1 | | 2. | | 3. | | 4. | | | | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | | | | | | |
| Printed/Typed Name Whitney Sunde | | | | | | Signature <i>Whitney Sunde</i> | | Month Day Year 05 27 09 | | | | |



P.O. Box 729
Benton, AR 72018
(800) 377-4692
www.rineco.com

Navajo Refining Company
Darrell Moore
P O Box 159
Artesia, NM 88211-0159

06/09/2009

Certificate of Disposal

Navajo Refining Company, Artesia, NM
Manifest # 004092115JJK
Received 5/27/2009

This is to certify that the waste materials received from the above referenced generator and manifest number have been managed and disposed of in accordance with all applicable Federal, State, and Local laws and regulations.

By:

Monte J. Dilick, Vice President of Sales & Marketing

| | | | | | | | | | | |
|--|---|--|----|-----------------------|--|--------------------------------------|---|-----------------------------------|-----------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number <i>ALMA 012918017</i> | | 2. Page 1 of <i>1</i> | 3. Emergency Response Phone | | 4. Manifest Tracking Number 004092115 JJK | | | |
| 5. Generator's Name and Mailing Address <i>ALMA 012918017</i> | | | | | Generator's Site Address (if different than mailing address) | | | | | |
| Generator's Phone: <i>575-708-751</i> | | | | | | | | | | |
| 6. Transporter 1 Company Name <i>ELMIRA TRANSPORT</i> | | | | | U.S. EPA ID Number <i>780140004781</i> | | | | | |
| 7. Transporter 2 Company Name | | | | | U.S. EPA ID Number | | | | | |
| 8. Designated Facility Name and Site Address <i>ELMIRA</i> | | | | | U.S. EPA ID Number | | | | | |
| Facility's Phone: <i>603-777-4197</i> | | | | | <i>1180 131047870</i> | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | | | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | |
| | | | | | No. | Type | | | | |
| | X | <i>1. 100, HAZARDOUS WASTE SOLID, A.C. 1, 9, 100 3077, 2001 (10100)</i> | | | 1 | <i>CM 28960</i> | | <i>P</i> | <i>1170</i> | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| 14. Special Handling Instructions and Additional Information <i>Profile # 090507735</i> | | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | | |
| Generator's/Offoror's Printed/Typed Name <i>Danell Moore</i> | | | | | Signature <i>Danell Moore</i> | | Month Day Year <i>05 22 09</i> | | | |
| INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____ | | | | | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name <i>ELMIRA TRANSPORT</i> | | | | | Signature <i>ELMIRA TRANSPORT</i> | | Month Day Year <i>05 22 09</i> | | |
| | Transporter 2 Printed/Typed Name | | | | | Signature | | Month Day Year | | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____ | | | | | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | | | | |
| | Facility's Phone: _____ | | | | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) Month Day Year | | | | | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | | |
| 1. | | | 2. | | | 3. | | | 4. | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | | | | |
| Printed/Typed Name | | | | | Signature | | Month Day Year | | | |

RINECO LAND DISPOSAL RESTRICTIONS NOTIFICATION FORM

Generator: Navajo EPA ID # NMDC48918817

Manifest Doc. # 004092115 JTK

EPA Codes K170 Profile # 090507735 Line Item 1.

| EPA Waste Codes | Waste Description & Treatment/ Regulatory Subcategory | NON-WASTEWATER | Concentration In mg/l or Technology Code |
|-------------------------------|--|----------------|--|
| <input type="checkbox"/> D001 | Ignitable characteristic wastes, except for 261.21(a)(1) High TOC subcategory that are managed Non-CWA/nonCWA equivalent/non class I SDWA systems. | | DEACT and meet 268.48 standards or RORGS; or CMBST |
| <input type="checkbox"/> D001 | High TOC Ignitable characteristic liquids subcategory based on 40 CFR 261.21(a)(1)-greater than or equal to 10% TOC. | | RORGS; or CMBST; or POLYM |
| <input type="checkbox"/> D002 | Corrosive characteristic wastes that are managed in non-CWA non CWA equivalent, or class / SDWA systems. | | DEACT & meet 268.48 standards |

D004-D011 Heavy Metals Expressed in Concentrations of mg/l (TCLP) and must meet 268.48 Standards. (NON-WASTEWATER)

| | | | |
|-------------------------------|---------------|-------------------------------|--------------------------------------|
| <input type="checkbox"/> D004 | Arsenic 5.0 | <input type="checkbox"/> D008 | Lead 0.75 |
| <input type="checkbox"/> D005 | Barium 21 | <input type="checkbox"/> D009 | Mercury 0.20 low mercury subcategory |
| <input type="checkbox"/> D006 | Cadmium 0.11 | <input type="checkbox"/> D010 | Selenium 5.7 |
| <input type="checkbox"/> D007 | Chromium 0.60 | <input type="checkbox"/> D011 | Silver 0.14 |

D012-D043 Concentrations Expressed in mg/kg, and Must Meet 268.48 Standards. (NON-WASTEWATER)

| | | | | | |
|-------------------------------|--------------------------|-------------------------------|-----------------------------|-------------------------------|---------------------------|
| <input type="checkbox"/> D012 | Endrin 0.13 | <input type="checkbox"/> D024 | m-cresol 5.6 | <input type="checkbox"/> D036 | Nitrobenzene 14 |
| <input type="checkbox"/> D013 | Lindane 0.066 | <input type="checkbox"/> D025 | p-cresol 5.6 | <input type="checkbox"/> D037 | Pentachlorophenol 7.4 |
| <input type="checkbox"/> D014 | Methoxychlor 0.18 | <input type="checkbox"/> D026 | Cresol Mixed Isomer 11.2 | <input type="checkbox"/> D038 | Pyridine 16 |
| <input type="checkbox"/> D015 | Toxaphene 2.6 | <input type="checkbox"/> D027 | p-dichlorobenzene 6.0 | <input type="checkbox"/> D039 | Tetrachloroethylene 6.0 |
| <input type="checkbox"/> D016 | 2,4 D 10 | <input type="checkbox"/> D028 | 1,2-dichloroethane 6.0 | <input type="checkbox"/> D040 | Trichloroethylene 6.0 |
| <input type="checkbox"/> D017 | 2,4,5-TP Silvex 7.9 | <input type="checkbox"/> D029 | 1,1-dichloroethylene 6.0 | <input type="checkbox"/> D041 | 2,4,5-Trichlorophenol 7.4 |
| <input type="checkbox"/> D018 | Benzene 10 | <input type="checkbox"/> D030 | 2,4-dinitrotoluene 140 | <input type="checkbox"/> D042 | 2,4,6-Trichlorophenol 7.4 |
| <input type="checkbox"/> D019 | Carbon Tetrachloride 6.0 | <input type="checkbox"/> D031 | Heptachlor & epoxides 0.066 | <input type="checkbox"/> D043 | Vinyl Chloride 6.0 |
| <input type="checkbox"/> D020 | Chlordane 0.26 | <input type="checkbox"/> D032 | Hexachlorbenzene 10 | | |
| <input type="checkbox"/> D021 | Chlorobenzene 6.0 | <input type="checkbox"/> D033 | Hexachlorobutadiene 5.6 | | |
| <input type="checkbox"/> D022 | Chloroform 6.0 | <input type="checkbox"/> D034 | Hexachloroethane 30 | | |
| <input type="checkbox"/> D023 | o-cresol 5.6 | <input type="checkbox"/> D035 | Methyl Ethyl Ketone 36 | | |

F001-F005 Spent Solvents:

concentrations expressed mg/kg

(NON-WASTEWATER)

F003-F005 Non-Wastewater spent solvents

expressed in mg/l (TCLP)

| | | | | | |
|--------------------------|---------------------------|--------------------------|--------------------------------------|--------------------------|----------------------|
| <input type="checkbox"/> | Acetone 160 | <input type="checkbox"/> | Isobutyl Alcohol 170 | <input type="checkbox"/> | Carbon disulfide 4.8 |
| <input type="checkbox"/> | Benzene 10 | <input type="checkbox"/> | Methylene Chloride 30 | <input type="checkbox"/> | Cyclohexanone 0.75 |
| <input type="checkbox"/> | N-butyl alcohol | <input type="checkbox"/> | Methyl Ethyl Ketone 36 | <input type="checkbox"/> | Methanol 0.75 |
| <input type="checkbox"/> | carbontetrachloride 6.0 | <input type="checkbox"/> | Methyl Isobutyl Ketone 33 | | |
| <input type="checkbox"/> | chlorobenzene 6.0 | <input type="checkbox"/> | Nitrobenzene 14 | | |
| <input type="checkbox"/> | o-cresol 5.6 | <input type="checkbox"/> | Pyridine 16 | | |
| <input type="checkbox"/> | m-cresol 5.6 | <input type="checkbox"/> | Tetrachloroethylene 6.0 | | |
| <input type="checkbox"/> | p-cresol 5.6 | <input type="checkbox"/> | Toluene 10 | | |
| <input type="checkbox"/> | Cresol mixed isomers 11.2 | <input type="checkbox"/> | 111-Trichloroethane 6.0 | | |
| <input type="checkbox"/> | O-Dichlorobenzene 6.0 | <input type="checkbox"/> | 112-Trichloroethane 6.0 | | |
| <input type="checkbox"/> | Ethyl Acetate 33 | <input type="checkbox"/> | 112-Trichloro-122-trifluoroethane 30 | | |
| <input type="checkbox"/> | Ethyl Benzene 10 | <input type="checkbox"/> | Trichloroethylene 6.0 | | |
| <input type="checkbox"/> | Ethyl Ether 160 | <input type="checkbox"/> | Trichloromonofluoromethane 30 | | |
| | | <input type="checkbox"/> | Xylene (mixed isomers) 30 | | |

GENERATOR COPY

RINECO LAND DISPOSAL RESTRICTIONS NOTIFICATION FORM

Generator:

Navajo

EPA ID #

NM D048718817

EPA Waste Codes

(NON-WASTEWATER)

Technology Code

| | |
|---|-----------------------------|
| <input type="checkbox"/> U023, U086, U099, U103, U109, U133, U135, U160, U189, U249 | CHOXD; CHRED; or CMBST |
| <input type="checkbox"/> U246 | CHOXD; WETOX; or CMBST |
| <input type="checkbox"/> U115 | CHOXD; or CMBST |
| <input type="checkbox"/> K047 | DEACT |
| <input type="checkbox"/> F005 (2-Nitropropane, 2-ethoxyethanol), F024, K025, K026, K027, K039, K107, K108, K109, K110, K112, K113, K114, K115, K116, K123, K124, K125, K126, U001, U003, U006, U007, U008, U010, U011, U014, U015, U016, U017, U020, U021, U026, U033, U034, U035, U038, U041, U042, U046, U049, U053, U055, U056, U057, U058, U059, U062, U064, U073, U074, U085, U087, U089, U090, U091, U092, U093, U094, U095, U097, U108, U110, U113, U114, U116, U119, U122, U123, U124, U125, U126, U132, U143, U147, U148, U149, U150, U153, U154, U156, U163, U164, U166, U167, U168, U171, U173, U176, U177, U178, U182, U184, U186, U191, U193, U194, U197, U200, U201, U202, U206, U213, U218, U219, U221, U222, U223, U234, U236, U237, U238, U240, U244, U248, U328, U353, U359 | CMBST |
| <input type="checkbox"/> K106 | RMERC |
| <input type="checkbox"/> U134 | ADGAS fb NEUTR; or NEUTR |

If there are any codes not listed on this form that apply to this waste stream, please list the EPA waste code and the treatment standard below.

*Note: Retain one copy for your files, send one copy with your shipment

| | | | | | | | | | | | |
|--|---|---|--|-----------------------|--|--|-------------------|--|-------------------------------|--------------------------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number NMA 048918517 | | 2. Page 1 of 1 | | 3. Emergency Response Phone 505-748-3311 | | 4. Manifest Tracking Number 004092114 JJK | | | |
| | | 5. Generator's Name and Mailing Address NAVADO REFINING 501 E MAIN ARTESIA NM 88210 | | | | | | Generator's Site Address (if different than mailing address) | | | |
| Generator's Phone: 505-748-5241 | | 6. Transporter 1 Company Name ELIJA TRANSPORTS | | | | U.S. EPA ID Number TXA 988057931 | | | | | |
| | | 7. Transporter 2 Company Name | | | | U.S. EPA ID Number | | | | | |
| 8. Designated Facility Name and Site Address PINECO P.O. BOX 729 BEATON AR 72018 | | | | | | U.S. EPA ID Number ARK 981057870 | | | | | |
| Facility's Phone: 800-377-4692 | | | | | | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) 1. RD. HAZARDOUS WASTE SOLID, N.O.S., 9, NA3077, PG III (K170) | | | | 10. Containers | | 11. Total Quantity Approx 27800 | 12. Unit Wt./Vol. P | 13. Waste Codes K170 | |
| | | | | | | No. | Type | | | | |
| | X | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 14. Special Handling Instructions and Additional Information PROFILE # 090507735 Box # 29138 165032 | | | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | | | |
| Generator's/Offor's Printed/Typed Name Darrell Moore | | | | | | Signature <i>Darrell Moore</i> | | Month 05 | | Day 22 | |
| | | | | | | | | Year 09 | | | |
| INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | | | | |
| | Transporter signature (for exports only): _____ | | | | | | | | | | |
| TRANSPORTER | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | | |
| | Transporter 1 Printed/Typed Name BOB STECKERT | | | | | Signature <i>Bob Stecker</i> | | Month 05 | | Day 22 | |
| | | | | | | | Year 09 | | | | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | | | | |
| | Manifest Reference Number: _____ | | | | | | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number _____ | | | | | | | | | | |
| | Facility's Phone: _____ | | | | | | | | | | |
| 18c. Signature of Alternate Facility (or Generator) _____ Month _____ Day _____ Year _____ | | | | | | | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | | | |
| 1. H061 | | 2. _____ | | 3. _____ | | 4. _____ | | | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | | | | | |
| Printed/Typed Name Carrie LeBeau | | | | | | Signature <i>Carrie LeBeau</i> | | Month 5 | | Day 29 | |
| | | | | | | | | Year 09 | | | |



P.O. Box 729
Benton, AR 72018
(800) 377-4692
www.rineco.com

Navajo Refining Company
Darrell Moore
P O Box 159
Artesia, NM 88211-0159

06/10/2009

Certificate of Disposal

Navajo Refining Company, Artesia, NM
Manifest # 004092114JJK
Received 5/28/2009

This is to certify that the waste materials received from the above referenced generator and manifest number have been managed and disposed of in accordance with all applicable Federal, State, and Local laws and regulations.

By:

Monte J. Dillick, Vice President of Sales & Marketing

GENERATOR'S INITIAL COPY

RINECO LAND DISPOSAL RESTRICTIONS NOTIFICATION FORM

Generator: Navajo EPA ID # NMDO48919817

Manifest Doc. # 004092114JTR

EPA Codes

K170

Profile #

090507735

Line Item

1.

| EPA Waste Codes | Waste Description & Treatment/ Regulatory Subcategory | NON-WASTEWATER | Concentration in mg/l or Technology Code |
|-------------------------------|--|----------------|--|
| <input type="checkbox"/> D001 | Ignitable characteristic wastes, except for 261.21(a)(1) High TOC subcategory that are managed Non-CWA/nonCWA equivalent/non class I SDWA systems. | | DEACT and meet 268.48 standards or RORGS; or CMBST |
| <input type="checkbox"/> D001 | High TOC Ignitable characteristic liquids subcategory based on 40 CFR 261.21(a)(1)-greater than or equal to 10% TOC. | | RORGS; or CMBST; or POLYM |
| <input type="checkbox"/> D002 | Corrosive characteristic wastes that are managed in non-CWA non CWA equivalent, or class / SDWA systems. | | DEACT & meet 268.48 standards |

D004-D011 Heavy Metals Expressed in Concentrations of mg/l (TCLP) and must meet 268.48 Standards. (NON-WASTEWATER)

| | | | |
|-------------------------------|---------------|-------------------------------|--------------------------------------|
| <input type="checkbox"/> D004 | Arsenic 5.0 | <input type="checkbox"/> D008 | Lead 0.75 |
| <input type="checkbox"/> D005 | Barium 21 | <input type="checkbox"/> D009 | Mercury 0.20 low mercury subcategory |
| <input type="checkbox"/> D006 | Cadmium 0.11 | <input type="checkbox"/> D010 | Selenium 5.7 |
| <input type="checkbox"/> D007 | Chromium 0.60 | <input type="checkbox"/> D011 | Silver 0.14 |

D012-D043 Concentrations Expressed in mg/kg, and Must Meet 268.48 Standards. (NON-WASTEWATER)

| | | | | | |
|-------------------------------|--------------------------|-------------------------------|-----------------------------|-------------------------------|---------------------------|
| <input type="checkbox"/> D012 | Endrin 0.13 | <input type="checkbox"/> D024 | m-cresol 5.6 | <input type="checkbox"/> D036 | Nitrobenzene 14 |
| <input type="checkbox"/> D013 | Lindane 0.066 | <input type="checkbox"/> D025 | p-cresol 5.6 | <input type="checkbox"/> D037 | Pentachlorophenol 7.4 |
| <input type="checkbox"/> D014 | Methoxychlor 0.18 | <input type="checkbox"/> D026 | Cresol Mixed Isomer 11.2 | <input type="checkbox"/> D038 | Pyridine 16 |
| <input type="checkbox"/> D015 | Toxaphene 2.6 | <input type="checkbox"/> D027 | p-dichlorobenzene 6.0 | <input type="checkbox"/> D039 | Tetrachloroethylene 6.0 |
| <input type="checkbox"/> D016 | 2,4 D 10 | <input type="checkbox"/> D028 | 1,2-dichloroethane 6.0 | <input type="checkbox"/> D040 | Trichloroethylene 6.0 |
| <input type="checkbox"/> D017 | 2,4,5-TP Silvex 7.9 | <input type="checkbox"/> D029 | 1,1-dichloroethylene 6.0 | <input type="checkbox"/> D041 | 2,4,5-Trichlorophenol 7.4 |
| <input type="checkbox"/> D018 | Benzene 10 | <input type="checkbox"/> D030 | 2,4-dinitrotoluene 140 | <input type="checkbox"/> D042 | 2,4,6-Trichlorophenol 7.4 |
| <input type="checkbox"/> D019 | Carbon Tetrachloride 6.0 | <input type="checkbox"/> D031 | Heptachlor & epoxides 0.066 | <input type="checkbox"/> D043 | Vinyl Chloride 6.0 |
| <input type="checkbox"/> D020 | Chlordane 0.26 | <input type="checkbox"/> D032 | Hexachlorobenzene 10 | | |
| <input type="checkbox"/> D021 | Chlorobenzene 6.0 | <input type="checkbox"/> D033 | Hexachlorobutadiene 5.6 | | |
| <input type="checkbox"/> D022 | Chloroform 6.0 | <input type="checkbox"/> D034 | Hexachloroethane 30 | | |
| <input type="checkbox"/> D023 | o-cresol 5.6 | <input type="checkbox"/> D035 | Methyl Ethyl Ketone 36 | | |

F001-F005 Spent Solvents:

(NON-WASTEWATER)

concentrations expressed mg/kg

F003-F005 Non-Wastewater spent solvents

expressed in mg/l (TCLP)

| | | | | | |
|--------------------------|---------------------------|--------------------------|--------------------------------------|--------------------------|----------------------|
| <input type="checkbox"/> | Acetone 160 | <input type="checkbox"/> | Isobutyl Alcohol 170 | <input type="checkbox"/> | Carbon disulfide 4.8 |
| <input type="checkbox"/> | Benzene 10 | <input type="checkbox"/> | Methylene Chloride 30 | <input type="checkbox"/> | Cyclohexanone 0.75 |
| <input type="checkbox"/> | N-butyl alcohol | <input type="checkbox"/> | Methyl Ethyl Ketone 36 | <input type="checkbox"/> | Methanol 0.75 |
| <input type="checkbox"/> | carbontetrachloride 6.0 | <input type="checkbox"/> | Methyl Isobutyl Ketone 33 | | |
| <input type="checkbox"/> | chlorobenzene 6.0 | <input type="checkbox"/> | Nitrobenzene 14 | | |
| <input type="checkbox"/> | o-cresol 5.6 | <input type="checkbox"/> | Pyridine 16 | | |
| <input type="checkbox"/> | m-cresol 5.6 | <input type="checkbox"/> | Tetrachloroethylene 6.0 | | |
| <input type="checkbox"/> | p-cresol 5.6 | <input type="checkbox"/> | Toluene 10 | | |
| <input type="checkbox"/> | Cresol mixed isomers 11.2 | <input type="checkbox"/> | 111-Trichloroethane 6.0 | | |
| <input type="checkbox"/> | O-Dichlorobenzene 6.0 | <input type="checkbox"/> | 112-Trichloroethane 6.0 | | |
| <input type="checkbox"/> | Ethyl Acetate 33 | <input type="checkbox"/> | 112-Trichloro-122-trifluoroethane 30 | | |
| <input type="checkbox"/> | Ethyl Benzene 10 | <input type="checkbox"/> | Trichloroethylene 6.0 | | |
| <input type="checkbox"/> | Ethyl Ether 160 | <input type="checkbox"/> | Trichloromonofluoromethane 30 | | |
| | | <input type="checkbox"/> | Xylene (mixed isomers) 30 | | |

GENERATOR COPY

RINECO LAND DISPOSAL RESTRICTIONS NOTIFICATION FORM

Generator:

Navajo

EPA ID #

NUMD048918817

EPA Waste
Codes

(NON-WASTEWATER)

Technology Code

| | | |
|--------------------------|--|-----------------------------|
| <input type="checkbox"/> | U023, U086, U099, U103, U109, U133, U135, U160, U189, U249 | CHOXD; CHRED; or CMBST |
| <input type="checkbox"/> | U246 | CHOXD; WETOX; or CMBST |
| <input type="checkbox"/> | U115 | CHOXD; or CMBST |
| <input type="checkbox"/> | K047 | DEACT |
| <input type="checkbox"/> | F005 (2-Nitropropane, 2-ethoxyethanol), F024, K025, K026, K027, K039, K107, K108, K109, K110, K112, K113, K114, K115, K116, K123, K124, K125, K126, U001, U003, U006, U007, U008, U010, U011, U014, U015, U016, U017, U020, U021, U026, U033, U034, U035, U038, U041, U042, U046, U049, U053, U055, U056, U057, U058, U059, U062, U064, U073, U074, U085, U087, U089, U090, U091, U092, U093, U094, U095, U097, U108, U110, U113, U114, U116, U119, U122, U123, U124, U125, U126, U132, U143, U147, U148, U149, U150, U153, U154, U156, U163, U164, U166, U167, U168, U171, U173, U176, U177, U178, U182, U184, U186, U191, U193, U194, U197, U200, U201, U202, U206, U213, U218, U219, U221, U222, U223, U234, U236, U237, U238, U240, U244, U248, U328, U353, U359 | CMBST |
| <input type="checkbox"/> | K106 | RMERC |
| <input type="checkbox"/> | U134 | ADGAS fb NEUTR; or NEUTR |

If there are any codes not listed on this form that apply to this waste stream, please list the EPA waste code and the treatment standard below.

*Note: Retain one copy for your files, send one copy with your shipment

| | | | | | | | | | |
|---|--|--|--|--|--|----|---|----|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number EMD048918817 | | 2. Page 1 of 1 | 3. Emergency Response Phone 575-365-8365 | | 4. Manifest Tracking Number 005035534 JJK | | |
| | | 5. Generator's Name and Mailing Address Navajo Refining Company (D0035) P.O. Box 159 Artesia, NM 88211-0159 Generator's Phone: 505 748-3311 | | Generator's Site Address (if different than mailing address) 501 East Main Artesia, NM 88210 | | | | | |
| GENERATOR | | 6. Transporter 1 Company Name Fluid Transport (41382) | | | | | U.S. EPA ID Number TXD988057931 | | |
| | | 7. Transporter 2 Company Name | | | | | U.S. EPA ID Number | | |
| DESIGNATED FACILITY | | 8. Designated Facility Name and Site Address DuraTherm, Inc. (34814) 2700 Avenue S San Leon, TX 77539 Facility's Phone: 281-339-1352 | | | | | U.S. EPA ID Number TXD981053770 | | |
| | | 9a. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) 1. RQ, Hazardous Waste Solid, n.o.s., 9, NA3077, PGIII (K170) | | | | | 10. Containers No. 1 Type CM | | 11. Total Quantity Approx 25,360 |
| TRANSPORTER INTL | | 14. Special Handling Instructions and Additional Information Profile 090074 Caliche w/Oily Sludge Trans. Phone # | | | | | H039 <i>33998</i> | | |
| | | 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | |
| DESIGNATED FACILITY | | Generator's/Offendor's Printed/Typed Name Darrell Moore | | | | | Signature <i>Darrell Moore</i> | | Month Day Year 05/26/89 |
| | | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____ | | | | | | | |
| TRANSPORTER INTL | | 17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Jimmy Allen | | | | | Signature <i>Jimmy Allen</i> | | Month Day Year 05/26/89 |
| | | Transporter 2 Printed/Typed Name | | | | | Signature | | Month Day Year |
| DESIGNATED FACILITY | | 18. Discrepancy | | | | | | | |
| | | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Actual Weight Received 23900 pounds PP Manifest Reference Number: _____ | | | | | | | |
| DESIGNATED FACILITY | | 18b. Alternate Facility (or Generator) | | | | | U.S. EPA ID Number | | |
| | | Facility's Phone: _____ | | | | | 18c. Signature of Alternate Facility (or Generator) | | |
| DESIGNATED FACILITY | | 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | |
| | | 1. H039 | | 2. | | 3. | | 4. | |
| DESIGNATED FACILITY | | 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | |
| | | Printed/Typed Name Marcelly Edmond | | | | | Signature <i>Marcelly Edmond</i> | | Month Day Year 5/28/9 |

| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number | 2. Page 1 of | 3. Emergency Response Phone | 4. Manifest Tracking Number | | | | |
|--|--|------------------------|--|-----------------------------|-----------------------------|-------------------|-----------------|------|------|
| | | MD048918617 | 1 | 575-365-8365 | 005035534 JJK | | | | |
| 5. Generator's Name and Mailing Address | | | Generator's Site Address (if different than mailing address) | | | | | | |
| Navajo Refining Company (D0035) P.O. Box 159 Artesia, NM 88211-0159 Generator's Phone: 505 748-3311 | | | 501 East Main Artesia, NM 88210 | | | | | | |
| 6. Transporter 1 Company Name | | | U.S. EPA ID Number | | | | | | |
| Fluid Transport (41382) | | | TKD988057931 | | | | | | |
| 7. Transporter 2 Company Name | | | U.S. EPA ID Number | | | | | | |
| 8. Designated Facility Name and Site Address | | | U.S. EPA ID Number | | | | | | |
| DuraTherm, Inc. (34814) 2700 Avenue S San Leon, TX 77539 Facility's Phone: 281-339-1352 | | | TKD981053770 | | | | | | |
| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | | |
| | | | No. | Type | | | | | |
| 1 | 1. RQ, Hazardous Waste Solid, n.e.s., 9, H3077, PGIII (K170) | | 1 | CM | Approx 25,360 | P | K170 | OUTG | AB9H |
| | 2. | | | | | | | | |
| | 3. | | | | | | | | |
| | 4. | | | | | | | | |
| 14. Special Handling Instructions and Additional Information | | | | | | | | | |
| Profile 090074 Caliche w/Oily Sludge Trans. Phone # H039 | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | |
| Generator's/Officer's Printed/Typed Name | | | Signature | | | Month Day Year | | | |
| Darrell Moore | | | [Signature] | | | 05/26/09 | | | |
| 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | | | |
| 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | |
| Transporter 1 Printed/Typed Name | | | Signature | | | Month Day Year | | | |
| Jimmy Allen | | | [Signature] | | | 05/26/09 | | | |
| Transporter 2 Printed/Typed Name | | | Signature | | | Month Day Year | | | |
| | | | | | | | | | |
| 18. Discrepancy | | | | | | | | | |
| 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | | | |
| Actual Weight Received 23900 pounds Manifest Reference Number: _____ | | | | | | | | | |
| 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | | | | |
| Facility's Phone: _____ | | | | | | | | | |
| 18c. Signature of Alternate Facility (or Generator) Month Day Year | | | | | | | | | |
| | | | | | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | |
| 1. H039 2. 3. 4. | | | | | | | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | | | |
| Printed/Typed Name | | | Signature | | | Month Day Year | | | |
| M. H. Edmund | | | [Signature] | | | 5/28/9 | | | |

| | | | | | | | |
|--|--|---|--|--|---|-----------------------------------|-----------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number WMD048918817 | 2. Page 1 of 1 | 3. Emergency Response Phone 525-365-8365 | 4. Manifest Tracking Number 005035534 JJK | | |
| 5. Generator's Name and Mailing Address Navajo Refining Company (D0035) P.O. Box 159 Artesia, NM 88211-0159 Generator's Phone: 505 746-3311 | | | Generator's Site Address (if different than mailing address) 501 East Main Artesia, NM 88210 | | | | |
| 6. Transporter 1 Company Name Fluid Transport (41392) | | | U.S. EPA ID Number TXD988057931 | | | | |
| 7. Transporter 2 Company Name | | | U.S. EPA ID Number | | | | |
| 8. Designated Facility Name and Site Address DuraTherm, Inc. (34814) 2700 Avenue B San Leon, TX 77539 Facility's Phone: 281-339-1352 | | | U.S. EPA ID Number TXD981053770 | | | | |
| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
| | | | No. | Type | | | |
| | 1. HQ, Hazardous Waste Solid, n.e.e., 9, HA3077, PGIII (K170) | | 1 | DR | 16 pdr 25,360 | P | K170 OUTS 409H |
| | 2. | | | | | | |
| | 3. | | | | | | |
| 4. | | | | | | | |
| 14. Special Handling Instructions and Additional Information Profile 090074 Caliche w/Oily Sludge Trans. Phone # H039 30798 | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | |
| Generator's/Offor's Printed/Typed Name Darrell Moore | | | Signature <i>Darrell Moore</i> | | | Month Day Year 05/26/09 | |
| 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | |
| 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | |
| Transporter 1 Printed/Typed Name Jim Allen | | | Signature <i>Jim Allen</i> | | | Month Day Year 05/26/09 | |
| Transporter 2 Printed/Typed Name | | | Signature | | | Month Day Year | |
| 18. Discrepancy | | | | | | | |
| 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | |
| Actual Weight Received 23900 pounds PP Manifest Reference Number: _____ | | | | | | | |
| 18b. Alternate Facility (or Generator) | | | | | | U.S. EPA ID Number | |
| Facility's Phone: | | | | | | | |
| 18c. Signature of Alternate Facility (or Generator) | | | | | | Month Day Year | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | |
| 1. H039 | | 2. | | 3. | | 4. | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | |
| Printed/Typed Name Mary Edmond | | | Signature <i>Mary Edmond</i> | | | Month Day Year 05/28/09 | |

| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number 800040915817 | 2. Page 1 of 1 | 3. Emergency Response Phone 760 3 111 | 4. Manifest Tracking Number 005035534 JJK | | |
|--|---|--|--|--|--|----------------------------|----------------------------|
| 5. Generator's Name and Mailing Address Navajo Refining Company (D0035) P.O. Box 159 Artesia, NM 88211-0159 Generator's Phone: 505 748-3311 | | | Generator's Site Address (if different than mailing address) 501 East Main Artesia, NM 88210 | | | | |
| 6. Transporter 1 Company Name Fluid Transport (41382) | | | U.S. EPA ID Number TXD988057931 | | | | |
| 7. Transporter 2 Company Name | | | U.S. EPA ID Number | | | | |
| 8. Designated Facility Name and Site Address Durathena, Inc. (34014) 2700 Avenue S San Leon, TX 77539 Facility's Phone: 281-339-1352 | | | U.S. EPA ID Number TXD981053770 | | | | |
| GENERATOR X | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. Type | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
| | | 1. RQ, Hazardous Waste Solid, n.o.s., 9, HA3077, PGIII (K170) | 1 | CM | 25,260 | # | K170 DQTE 400H |
| | | 2. | | | | | |
| | | 3. | | | | | |
| | | 4. | | | | | |
| 14. Special Handling Instructions and Additional Information Profile 090074 Caliche w/oily Sludge Trans. Phone # CEI Bin H039 | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | |
| Generator's/Offeror's Printed/Typed Name Dennis H. ... | | | Signature Dennis H. ... | | | Month Day Year 10 26 09 | |
| INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.: | | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name ... | | | Signature ... | | | Month Day Year 10 26 09 |
| | Transporter 2 Printed/Typed Name ... | | | Signature ... | | | Month Day Year |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: | | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | |
| | Facility's Phone: | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) Month Day Year | | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | |
| 1. | | 2. | | 3. | | 4. | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | |
| Printed/Typed Name | | | Signature | | | Month Day Year | |

DuraTherm, Inc.

Land Disposal Notification Form

Generator Name **Navajo Refining-Artesia**

EPA ID No. **NMD048918817**

DuraTherm Waste Profile No. 090074

Manifest No. 005035534 JJK

Identified below are the EPA hazardous waste codes applicable to this waste shipment as defined by 40 CFR 261, including the applicable subcategory.

[illegible]

This waste must be managed in accordance with 40 CFR 268.7 as indicated below:

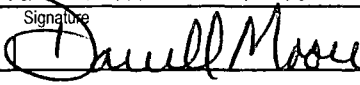
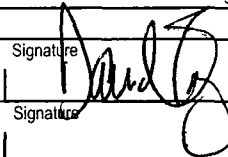
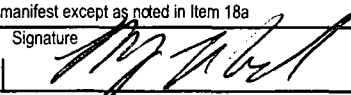
- ☒ Restricted waste requires treatment to applicable concentration based standards in 40 CFR 268.40
- ☐ Restricted waste requires treatment to applicable technology based standards in 40 CFR 268.42, 40 CFR 268.32 or RCRA 3004 (d)
- ☐ Restricted waste requiring no further treatment - I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification and that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004 (d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.
- ☐ Restricted waste treated to performance standards - I certify under penalty of law that I personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of these individuals immediately responsible for obtaining this information. I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004 (d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.
- ☐ Restricted waste subject to a variance – This waste is subject to a variance under 40 CFR 268.6 or 40 CFR Subpart C. Supporting documentation is ☒ Attached or ☒ On file at DuraTherm, Inc.
- ☐ Non-restricted waste – not subject to 40 CFR 268 restrictions
- ☐ Restricted waste requiring treatment (stabilization) for metals. Organics meet UTS/LDR requirements.

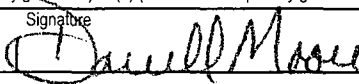
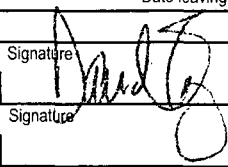
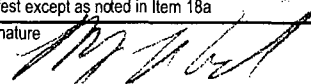
I hereby certify that the information submitted is true, accurate, and complete to the best of my knowledge and information.

Darrell Moore Darrell Moore
Name Authorized Signature

Enu. Mgr
Title

5/26/09
Date

| | | | | | | | | |
|--|--|--|-----------------------|--|---|-----------------------------------|-----------------------------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number NMD048918817 | 2. Page 1 of 1 | 3. Emergency Response Phone 575-365-8365 | 4. Manifest Tracking Number 005035535 JJK | | | |
| 5. Generator's Name and Mailing Address Navajo Refining Company (D0035) P.O. Box 159 Artesia, NM 88211-0159 Generator's Phone: 505 748-3311 | | | | Generator's Site Address (if different than mailing address) 501 East Main Artesia, NM 88210 | | | | |
| 6. Transporter 1 Company Name Fluid Transport (41382) | | | | U.S. EPA ID Number TXD988057931 | | | | |
| 7. Transporter 2 Company Name | | | | U.S. EPA ID Number | | | | |
| 8. Designated Facility Name and Site Address DuraTherm, Inc. (34814) 2700 Avenue S San Leon, TX 77539 Facility's Phone: 281-339-1352 | | | | U.S. EPA ID Number TXD981053770 | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | |
| | | | No. | Type | | | | |
| | X | 1. RQ, Hazardous Waste Solid, n.o.s., 9, HA3077, PGIII (K170) | 1 | CM | Approx. 26780 | P | K170 OUTS 489H | |
| | | 2. | | | | | | |
| | | 3. | | | | | | |
| | 4. | | | | | | | |
| 14. Special Handling Instructions and Additional Information Profile 090074 Caliche w/Oily Sludge Trans. Phone # H039 Box # R 18 34017 | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | |
| Generator's/Offor's Printed/Typed Name Darrell Moore | | | | Signature  | | Month Day Year 05 27 09 | | |
| TRANSPORTER INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | |
| | Transporter 1 Printed/Typed Name DAVID TRIGBY | | | | Signature  | | Month Day Year 05 27 09 | |
| | Transporter 2 Printed/Typed Name | | | | Signature | | Month Day Year | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input checked="" type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | |
| | Actual Weight Received 25860 Pounds PP | | | | | | | |
| | 18b. Alternate Facility (or Generator) _____ U.S. EPA ID Number _____ | | | | | | | |
| | Facility's Phone: _____ | | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) _____ | | | | | | Month Day Year ____ | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | |
| H039 | | 2. _____ | | 3. _____ | | 4. _____ | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | | |
| Printed/Typed Name Marvella Edmond | | | | Signature  | | Month Day Year 5 29 9 | | |

| | | | | | | | |
|--|---|--|--|---|---|-----------------------------------|-----------------------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number EMD048918817 | 2. Page 1 of 1 | 3. Emergency Response Phone 575-365-8365 | 4. Manifest Tracking Number 005035535 JJK | | |
| 5. Generator's Name and Mailing Address Savajo Refining Company (D0035) P.O. Box 159 Artesia, NM 88211-0159 Generator's Phone: 308 748-3311 | | | Generator's Site Address (if different than mailing address) 501 East Main Artesia, NM 88210 | | | | |
| 6. Transporter 1 Company Name Fluid Transport (41382) | | | | U.S. EPA ID Number TND988057931 | | | |
| 7. Transporter 2 Company Name | | | | U.S. EPA ID Number | | | |
| 8. Designated Facility Name and Site Address DuraTherm, Inc. (34814) 2700 Avenue S San Leon, TX 77539 Facility's Phone: 281-339-1352 | | | | U.S. EPA ID Number TND981053770 | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
| | | | No. | Type | | | |
| | | 1. HQ, Hazardous Waste Solid, n.e.s., 9, HA3077, PGIII (K170) | 1 | CM | Approx. 26780 | P | K170 OUTS 489H |
| | | 2. | | | | | |
| | | 3. | | | | | |
| 14. Special Handling Instructions and Additional Information Profile 090074 Caliche w/Oily Sludge Trans. Phone # <div style="text-align: right;">Box # R 18 34017 H039</div> | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | |
| Generator's/Officer's Printed/Typed Name Darrell Moore | | | | | Signature  | | Month Day Year 05 27 09 |
| TRANSPORTER INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. | | Port of entry/exit: _____ Date leaving U.S.: _____ | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name DAVID TRGEM | | Signature  | | Month Day Year 05 27 09 | | |
| DESIGNATED FACILITY | Transporter 2 Printed/Typed Name | | Signature | | Month Day Year | | |
| | 18. Discrepancy | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | |
| | Actual Weight Received 25860 Pounds PP | | | | Manifest Reference Number: _____ | | |
| | 18b. Alternate Facility (or Generator) | | | | U.S. EPA ID Number | | |
| Facility's Phone: _____ | | | | | | | |
| 18c. Signature of Alternate Facility (or Generator) | | | | | | | |
| Month Day Year | | | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | |
| 1. H039 | | 2. | | 3. | | 4. | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | |
| Printed/Typed Name Marcel Edmund | | | | Signature  | | Month Day Year 05 29 09 | |

| | | | | | | |
|--|---|--|--|--|---|-----------------------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number HM0046918917 | 2. Page 1 of 1 | 3. Emergency Response Phone 575-365-8365 | 4. Manifest Tracking Number 005035535 JJK | |
| 5. Generator's Name and Mailing Address Havajo Refining Company (D0035) P.O. Box 159 Artesia, NM 88211-0159 Generator's Phone: 505 748-3311 | | | Generator's Site Address (if different than mailing address) 501 East Main Artesia, NM 88210 | | | |
| 6. Transporter 1 Company Name Fluid Transport (41382) | | | U.S. EPA ID Number TXD988057931 | | | |
| 7. Transporter 2 Company Name | | | U.S. EPA ID Number | | | |
| 8. Designated Facility Name and Site Address DuraTherm, Inc. (34814) 2700 Avenue S San Leon, TX 77539 Facility's Phone: 281-339-1352 | | | U.S. EPA ID Number TXD981053770 | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. Type | | 11. Total Quantity | 12. Unit Wt./Vol. |
| | X | 1. BQ, Hazardous Waste Solid, n.o.s., 9, HA3077, PGIII (K170) | 1 | CM | Approx. 26780 | P |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 13. Waste Codes K170 OUT2 489H | | | | | | |
| 14. Special Handling Instructions and Additional Information Profile 096074 Caliche w/Oily Sludge Trans. Phone # Box # R 18 34017 H039 | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | |
| Generator's/Officer's Printed/Typed Name Darrell Moore | | | | Signature <i>Darrell Moore</i> | | Month Day Year 05 27 09 |
| TRANSPORTER INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____ | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name DAVID TREWBY | | | | Signature <i>David Trewby</i> | |
| | Transporter 2 Printed/Typed Name | | | | Signature | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input checked="" type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | |
| | Actual Weight Received 25860 Pounds Manifest Reference Number: _____ | | | | | |
| | 18b. Alternate Facility (or Generator) Facility's Phone: _____ U.S. EPA ID Number: _____ | | | | | |
| DESIGNATED FACILITY | 18c. Signature of Alternate Facility (or Generator) Month Day Year | | | | | |
| | 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | |
| | 1. H039 2. 3. 4. | | | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | |
| Printed/Typed Name Harvey E. Jordan | | | | Signature <i>Harvey E. Jordan</i> | | Month Day Year 05 29 09 |

| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number | 2. Page 1 of | 3. Emergency Response Phone | 4. Manifest Tracking Number |
|--|--|--|--------------|-----------------------------|-----------------------------|
| | | WMD048916817 | 1 | 515 813 8445 | 005035535 JJK |
| 5. Generator's Name and Mailing Address | | Generator's Site Address (if different than mailing address) | | | |
| Navajo Refining Company (D0035) P.O. Box 159 Artesia, NM 88211-0159 Generator's Phone: 404 748-3211 | | 501 East Main Artesia, NM 88210 | | | |
| 6. Transporter 1 Company Name | | U.S. EPA ID Number | | | |
| Fluid Transport (41382) | | TXD948057937 | | | |
| 7. Transporter 2 Company Name | | U.S. EPA ID Number | | | |
| 8. Designated Facility Name and Site Address | | U.S. EPA ID Number | | | |
| DuroTherm, Inc. (34814) 2700 Avenue S San Leon, TX 77539 Facility's Phone: 281-339-1352 | | TXD981053770 | | | |
| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. Type | | 11. Total Quantity | 12. Unit Wt./Vol. |
| X | 1. RQ, Hazardous Waste Solid, n.o.s., 9, HA3077, PGR III (K170) | 1 CM | | 26780 | P |
| | 2. | | | | |
| | 3. | | | | |
| | 4. | | | | |
| 13. Waste Codes | | | | | |
| K170 OUTS 489H | | | | | |
| 14. Special Handling Instructions and Additional Information | | | | | |
| Profile 090074 Caliche w/oily Sludge Trans. Phone # CRI | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | |
| Generator's/Offor's Printed/Typed Name | | Signature | | Month | Day Year |
| James H. Moore | | James H. Moore | | 12 | 27 09 |
| 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.: | | | | | |
| 17. Transporter Acknowledgment of Receipt of Materials | | | | | |
| Transporter 1 Printed/Typed Name | | Signature | | Month | Day Year |
| DANIEL J. MOORE | | Daniel J. Moore | | 12 | 27 09 |
| Transporter 2 Printed/Typed Name | | Signature | | Month | Day Year |
| | | | | | |
| 18. Discrepancy | | | | | |
| 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | |
| Manifest Reference Number: | | | | | |
| 18b. Alternate Facility (or Generator) | | U.S. EPA ID Number | | | |
| Facility's Phone: | | | | | |
| 18c. Signature of Alternate Facility (or Generator) | | Month | | Day | Year |
| | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | |
| 1. | | 2. | | 3. | |
| | | | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | |
| Printed/Typed Name | | Signature | | Month | Day Year |
| | | | | | |

Land Disposal Notification Form

Generator Name **Navajo Refining-Artesia**

EPA ID No. **NMD048918817**

DuraTherm Waste Profile No. 090074

Manifest No. 005035535 JJK

Identified below are the EPA hazardous waste codes applicable to this waste shipment as defined by 40 CFR 261, including the applicable subcategory.

[illegible]

This waste must be managed in accordance with 40 CFR 268.7 as indicated below:

- ☒ Restricted waste requires treatment to applicable concentration based standards in 40 CFR 268.40
- ☐ Restricted waste requires treatment to applicable technology based standards in 40 CFR 268.42, 40 CFR 268.32 or RCRA 3004 (d)
- ☐ Restricted waste requiring no further treatment - I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification and that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004 (d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.
- ☐ Restricted waste treated to performance standards - I certify under penalty of law that I personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of these individuals immediately responsible for obtaining this information. I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004 (d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.
- ☐ Restricted waste subject to a variance – This waste is subject to a variance under 40 CFR 268.6 or 40 CFR Subpart C. Supporting documentation is ☒ Attached or ☒ On file at DuraTherm, Inc.
- ☐ Non-restricted waste – not subject to 40 CFR 268 restrictions
- ☐ Restricted waste requiring treatment (stabilization) for metals. Organics meet UTS/LDR requirements.

I hereby certify that the information submitted is true, accurate, and complete to the best of my knowledge and information.

Darrell Moore Darrell Moore
Name Authorized Signature

Eav. Mgr.
Title

5/27/00
Date

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report


| | | |
|---|-----------------------------------|-----------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange | |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 | |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery | |
| Surface Owner | Mineral Owner | Lease No. |

LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|---|--|
| Type of Release: Sewer backup of water and hydrocarbon | Volume of Release: ~ 15 barrels | Volume Recovered: ~ 10 barrels |
| Source of Release: Sewers at D-80 and North of the ISOM unit. | Date and Hour of Occurrence: 6/18/09 ~ 23:00 | Date and Hour of Discovery: 6/19/09 ~ 03:00 |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? NA | |
| By Whom? NA | Date and Hour: NA | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |
| If a Watercourse was Impacted, Describe Fully.* NA | | |
| Describe Cause of Problem and Remedial Action Taken.* On 6/18/09 at ~ 23:00 the sewers at D-80 and north of the ISOM unit backed up spilled onto the ground. A vacuum truck removed the standing liquid and put it back into the Waste Water Sewers. The contaminated soil was dug up and placed into hard top roll-off bins. | | |
| Describe Area Affected and Cleanup Action Taken.* The spill occurred at D-80 and north of the ISOM unit. This section of sewers runs along the South side of Eagle Draw. Most of the spill collected near the sewer inlet, sewer vents, and a sewer cleanout. Some of the spill collected in a storm water ditch next to Eagle Draw that prevents releases from getting into the draw. A vacuum truck removed the standing liquid. The contaminated soil was dug up and placed into hard top roll-off bins for disposal. A disposal facility will be chosen, based on the analytical test results. | | |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. | | |
| Signature:  | OIL CONSERVATION DIVISION | |
| Printed Name: Aaron Strange | Approved by District Supervisor: | |
| Title: Sr. Environmental Technician | Approval Date: | Expiration Date: |
| E-mail Address: aaron.strange@hollycorp.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 6/19/09 | Phone: 575-746-5451 | |

* Attach Additional Sheets If Necessary

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Co. LLC
 Address PO Box 159
 City/State Artesia, NM 88211-0159

(575) 748-3311
 Telephone No.

ORIGIN OF WASTE:

Operations Center Artesia

Permit No. NMD048918817

Property Name 3 Mile Ditch
 (Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | | |
|---|-------|-----------------|-------|
| Drilling Fluids | _____ | Tank Bottoms | _____ |
| Completion Fluids | _____ | Gas Plant Waste | _____ |
| Contaminated Soil | _____ | Other Materials | _____ |
| Exempt Fluids _____ | | | |
| C117 No. _____ | | | |
| Pit No. _____ | | | |
| DESCRIPTION / NOTES | | | |
| 12 Yds Cont. Soil <i>drilled</i> | | | |
| 3 Mile Ditch <i>Sewer Spill</i> | | | |
| | | | |
| | | | |

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Cornelia Hernandez
 Signature of Generator's Authorized Agent

 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S Brothers
 Address _____
 City/State _____

 Telephone No.

2

 Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

Gregory Van Winkle
 Signature of Transporter's Agent

6-30-09
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079

 Telephone No.

www.crihobbs.com

 E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

Robert McDonald
 Signature of Facility Agent

6/30/09 6:37 AM
 Date and Time Received

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | | |
|---|-----------------------------------|-----------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange | |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 | |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery | |
| Surface Owner | Mineral Owner | Lease No. |

LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|---|---|
| Type of Release: Sewer backup of plant waste water | Volume of Release: ~ 50 barrels | Volume Recovered: ~ 40 barrels |
| Source of Release: South Bundle Cleaning Pad. | Date and Hour of Occurrence: 10/08/09 ~20:00 | Date and Hour of Discovery: 10/08/09 ~ 08:15 |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? OCD | |
| By Whom? Aaron Strange | Date and Hour: 10-08-2009 at ~22:16 | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |

If a Watercourse was Impacted, Describe Fully.*
NA


Describe Cause of Problem and Remedial Action Taken.*

On 10/08/09 at ~ 20:00 the South Bundle Cleaning pad overflowed. The sewer plugged and plant waste overflowed the pad and ran down Chisum Ave. and part of East Fifth St. A vacuum truck removed the standing liquid and put it back into the Waste Water Sewers. Any contaminated soil will be dug up and placed into hard top roll-off bins.

Describe Area Affected and Cleanup Action Taken.*

The spill occurred at the South Bundle Cleaning Pad and ran down Chisum Ave. and part of East Fifth St. A vacuum truck removed the standing liquid and put it back into the Waste Water Sewers. Any contaminated soil will be dug up and placed into hard top roll-off bins. A disposal facility will be chosen, based on the analytical test results.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|--|--|-----------------------------------|------------------|
| Signature:  | | OIL CONSERVATION DIVISION | |
| Printed Name: Aaron Strange | | Approved by District Supervisor: | |
| Title: Sr. Environmental Technician | | Approval Date: | Expiration Date: |
| E-mail Address: aaron.strange@hollycorp.com | | Conditions of Approval: | |
| Date: 10/09/09 5451 or 575-703-5057 | | Attached <input type="checkbox"/> | |

* Attach Additional Sheets If Necessary

ALS Laboratory Group

Date: 21-Jan-10

Client: Holly Energy Partners
Project: South Bundle Pad
Sample ID: BH #1
Collection Date: 1/6/2010 08:45 AM

Work Order: 1001092
Lab ID: 1001092-01
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|--------|------|----------------|-------|-----------------------------|---------------------|
| TPH DRO/ORO | | | SW8015M | | Prep Date: 1/8/2010 | Analyst: KMB |
| TPH (Diesel Range) | 23 | | 8.5 | mg/Kg | 5 | 1/13/2010 10:52 AM |
| TPH (Motor Oil Range) | 250 | | 17 | mg/Kg | 5 | 1/13/2010 10:52 AM |
| Surr: 2-Fluorobiphenyl | 102 | | 70-130 | %REC | 5 | 1/13/2010 10:52 AM |
| GASOLINE RANGE ORGANICS | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | ND | | 0.050 | mg/Kg | 1 | 1/13/2010 06:45 PM |
| Surr: 4-Bromofluorobenzene | 92.9 | | 70-130 | %REC | 1 | 1/13/2010 06:45 PM |
| MERCURY | | | SW7471A | | Prep Date: 1/12/2010 | Analyst: JCJ |
| Mercury | 0.0366 | | 0.00346 | mg/Kg | 1 | 1/12/2010 04:15 PM |
| METALS | | | SW6020 | | Prep Date: 1/11/2010 | Analyst: SKS |
| Arsenic | 5.27 | | 0.463 | mg/Kg | 1 | 1/11/2010 08:42 PM |
| Barium | 153 | | 0.463 | mg/Kg | 1 | 1/11/2010 08:42 PM |
| Cadmium | ND | | 0.463 | mg/Kg | 1 | 1/11/2010 08:42 PM |
| Chromium | 22.5 | | 0.463 | mg/Kg | 1 | 1/11/2010 08:42 PM |
| Lead | 16.6 | | 0.463 | mg/Kg | 1 | 1/11/2010 08:42 PM |
| Selenium | 1.04 | | 0.463 | mg/Kg | 1 | 1/11/2010 08:42 PM |
| Silver | ND | | 0.463 | mg/Kg | 1 | 1/11/2010 08:42 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 21-Jan-10

Client: Holly Energy Partners

Project: South Bundle Pad

Sample ID: BH #2

Collection Date: 1/6/2010 08:52 AM

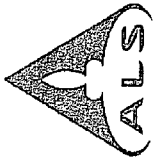
Work Order: 1001092

Lab ID: 1001092-02

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|--------|------|----------------|-------|----------------------|--------------------|
| TPH DRO/ORO | | | SW8015M | | Prep Date: 1/8/2010 | Analyst: KMB |
| TPH (Diesel Range) | 11 | | 8.5 | mg/Kg | 5 | 1/13/2010 11:11 AM |
| TPH (Motor Oil Range) | 250 | | 17 | mg/Kg | 5 | 1/13/2010 11:11 AM |
| Surr: 2-Fluorobiphenyl | 119 | | 70-130 | %REC | 5 | 1/13/2010 11:11 AM |
| GASOLINE RANGE ORGANICS | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | ND | | 0.050 | mg/Kg | 1 | 1/13/2010 07:10 PM |
| Surr: 4-Bromofluorobenzene | 90.3 | | 70-130 | %REC | 1 | 1/13/2010 07:10 PM |
| MERCURY | | | SW7471A | | Prep Date: 1/12/2010 | Analyst: JCJ |
| Mercury | 0.0697 | | 0.00348 | mg/Kg | 1 | 1/12/2010 04:17 PM |
| METALS | | | SW6020 | | Prep Date: 1/11/2010 | Analyst: SKS |
| Arsenic | 4.41 | | 0.439 | mg/Kg | 1 | 1/11/2010 08:48 PM |
| Barium | 121 | | 0.439 | mg/Kg | 1 | 1/11/2010 08:48 PM |
| Cadmium | ND | | 0.439 | mg/Kg | 1 | 1/11/2010 08:48 PM |
| Chromium | 16.0 | | 0.439 | mg/Kg | 1 | 1/11/2010 08:48 PM |
| Lead | 31.4 | | 0.439 | mg/Kg | 1 | 1/11/2010 08:48 PM |
| Selenium | 0.715 | | 0.439 | mg/Kg | 1 | 1/11/2010 08:48 PM |
| Silver | ND | | 0.439 | mg/Kg | 1 | 1/11/2010 08:48 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.



ALS Laboratory Group
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Fax. +1 281 530 5887

Chain of Custody Form

☐ **ALS Laboratory Group**
3352 128th Ave.
Holland, MI 49424-9263
Tel: +1 616 399 6070
Fax: +1 616 399 6185

Page 1 of 1

| Customer Information | | | | Project Information | | | | ALS Project Manager: | | | | ALS Work Order #: | | | | | |
|----------------------|--------------------|--------|------|---------------------|-------|-----------|---|----------------------|---|---|---|---------------------------------------|---|---|---|---|------|
| Project Name | | | | South Bundle Pad | | | | 1001092 | | | | Parameter/Method Request for Analysis | | | | | |
| Project Number | | | | | | | | | | | | | | | | | |
| Bill To Company | | | | | | | | | | | | | | | | | |
| Invoice Attn | | | | | | | | | | | | | | | | | |
| Address | | | | | | | | | | | | | | | | | |
| City/State/Zip | | | | Arlington NM 88210 | | | | | | | | | | | | | |
| Phone | | | | 575-748-3311 | | | | | | | | | | | | | |
| Fax | | | | 575-746-5421 | | | | | | | | | | | | | |
| e-Mail Address | | | | | | | | | | | | | | | | | |
| No. | Sample Description | Date | Time | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
| 1 | BH #1 | 1-6-10 | 0845 | S | Y | 1 | X | X | X | | X | X | | | | | |
| 2 | BH #2 | 1-6-10 | 0852 | S | Y | 1 | X | X | X | | X | X | | | | | |
| 3 | Temp. Blank | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |

| Sampler(s) Please Print & Sign | | Shipment Method | | Required Turnaround Time: (Check Box) | | Results Due Date: | | | |
|--|-------------------------|--------------------------|-------------------------|---|--|-------------------|--|-------------|---|
| Aaron Strange | | Fed Ex | | <input checked="" 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: | Date: 1-6-10 Time: 1615 | Received by: | Date: 1-7-10 Time: 0946 | Notes: | | | | | |
| Relinquished by: | | Checked by (Laboratory): | | | | | | | |
| Logged by (Laboratory): | Date: Time: | Checked by (Laboratory): | Date: Time: | | | | | | |
| Preservative (Key): 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₃ 7-Other 8-4°C 9-5035 | | | | Cooler ID | | | | Cooler Temp | QC Package: (Check One Box Below) |
| | | | | | | | | | <input type="checkbox"/> Level II Std QC <input type="checkbox"/> TRRP Checklist |
| | | | | | | | | | <input type="checkbox"/> Level III Std QC/Raw Data <input type="checkbox"/> TRRP Level IV |
| | | | | | | | | | <input type="checkbox"/> Level IV SW846/CLP <input type="checkbox"/> Other |

Note: 1. Any changes must be made in writing once samples and COC form have been submitted to ALS Laboratory Group.
2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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ALS Laboratory Group

Date: 19-Nov-09

Client: Holly Energy Partners
Project: South Bundle Pad
Sample ID: F037 BH#1
Collection Date: 11/4/2009 01:36 PM

Work Order: 0911117
Lab ID: 0911117-01
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|--------|------|----------------|-------|-----------------------|---------------------|
| TPH DRO/ORO | | | SW8015M | | Prep Date: 11/6/2009 | Analyst: KMB |
| TPH (Diesel Range) | 160 | | 34 | mg/Kg | 20 | 11/17/2009 05:53 PM |
| Surr: 2-Fluorobiphenyl | 105 | | 70-130 | %REC | 20 | 11/17/2009 05:53 PM |
| GASOLINE RANGE ORGANICS | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | ND | | 0.050 | mg/Kg | 1 | 11/9/2009 01:39 PM |
| Surr: 4-Bromofluorobenzene | 80.2 | | 70-130 | %REC | 1 | 11/9/2009 01:39 PM |
| MERCURY | | | SW7471A | | Prep Date: 11/9/2009 | Analyst: JCJ |
| Mercury | 0.204 | | 0.00335 | mg/Kg | 1 | 11/9/2009 09:02 PM |
| METALS | | | SW6020 | | Prep Date: 11/9/2009 | Analyst: SKS |
| Arsenic | 6.71 | | 0.439 | mg/Kg | 1 | 11/9/2009 06:38 PM |
| Barium | 126 | | 0.439 | mg/Kg | 1 | 11/9/2009 06:38 PM |
| Cadmium | ND | | 0.439 | mg/Kg | 1 | 11/9/2009 06:38 PM |
| Chromium | 36.2 | | 0.439 | mg/Kg | 1 | 11/9/2009 06:38 PM |
| Lead | 20.1 | | 0.439 | mg/Kg | 1 | 11/9/2009 06:38 PM |
| Selenium | 9.09 | | 0.439 | mg/Kg | 1 | 11/9/2009 06:38 PM |
| Silver | ND | | 0.439 | mg/Kg | 1 | 11/9/2009 06:38 PM |
| LOW-LEVEL PAHS | | | SW8270 | | Prep Date: 11/18/2009 | Analyst: LG |
| Acenaphthene | ND | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Acenaphthylene | ND | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Anthracene | ND | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Benz(a)anthracene | 0.010 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Benzo(a)pyrene | 0.014 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Benzo(b)fluoranthene | 0.0099 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Benzo(g,h,i)perylene | 0.019 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Benzo(k)fluoranthene | 0.012 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Chrysene | 0.064 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Dibenz(a,h)anthracene | ND | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Fluoranthene | 0.010 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Fluorene | ND | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Indeno(1,2,3-cd)pyrene | 0.0097 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Naphthalene | ND | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Phenanthrene | 0.013 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Pyrene | 0.050 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:03 PM |
| Surr: 2-Fluorobiphenyl | 82.4 | | 43-125 | %REC | 1 | 11/18/2009 05:03 PM |
| Surr: 4-Terphenyl-d14 | 96.1 | | 32-125 | %REC | 1 | 11/18/2009 05:03 PM |
| Surr: Nitrobenzene-d5 | 64.8 | | 37-125 | %REC | 1 | 11/18/2009 05:03 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 19-Nov-09

Client: Holly Energy Partners
Project: South Bundle Pad
Sample ID: F037 BH#2
Collection Date: 11/4/2009 01:38 PM

Work Order: 0911117
Lab ID: 0911117-02
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|--------|------|----------------|-------|-----------------|-----------------------------------|
| TPH DRO/ORO | | | SW8015M | | | Prep Date: 11/6/2009 Analyst: KMB |
| TPH (Diesel Range) | 16 | | 1.7 | mg/Kg | 1 | 11/17/2009 05:21 PM |
| Surr: 2-Fluorobiphenyl | 85.8 | | 70-130 | %REC | 1 | 11/17/2009 05:21 PM |
| GASOLINE RANGE ORGANICS | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | ND | | 0.050 | mg/Kg | 1 | 11/10/2009 04:28 PM |
| Surr: 4-Bromofluorobenzene | 82.4 | | 70-130 | %REC | 1 | 11/10/2009 04:28 PM |
| MERCURY | | | SW7471A | | | Prep Date: 11/9/2009 Analyst: JCJ |
| Mercury | 0.0594 | | 0.00350 | mg/Kg | 1 | 11/9/2009 09:04 PM |
| METALS | | | SW6020 | | | Prep Date: 11/9/2009 Analyst: SKS |
| Arsenic | 5.57 | | 0.442 | mg/Kg | 1 | 11/9/2009 06:44 PM |
| Barium | 105 | | 0.442 | mg/Kg | 1 | 11/9/2009 06:44 PM |
| Cadmium | ND | | 0.442 | mg/Kg | 1 | 11/9/2009 06:44 PM |
| Chromium | 16.1 | | 0.442 | mg/Kg | 1 | 11/9/2009 06:44 PM |
| Lead | 14.8 | | 0.442 | mg/Kg | 1 | 11/9/2009 06:44 PM |
| Selenium | 0.958 | | 0.442 | mg/Kg | 1 | 11/9/2009 06:44 PM |
| Silver | ND | | 0.442 | mg/Kg | 1 | 11/9/2009 06:44 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 19-Nov-09

Client: Holly Energy Partners

Project: South Bundle Pad

Sample ID: F037 BH#3

Collection Date: 11/4/2009 01:41 PM

Work Order: 0911117

Lab ID: 0911117-03

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|--------|------|----------------|-------|----------------------|---------------------|
| TPH DRO/ORO | | | SW8015M | | Prep Date: 11/6/2009 | Analyst: KMB |
| TPH (Diesel Range) | ND | | 34 | mg/Kg | 20 | 11/17/2009 04:48 PM |
| Surr: 2-Fluorobiphenyl | 87.7 | | 70-130 | %REC | 20 | 11/17/2009 04:48 PM |
| GASOLINE RANGE ORGANICS | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | ND | | 0.050 | mg/Kg | 1 | 11/10/2009 04:52 PM |
| Surr: 4-Bromofluorobenzene | 81.6 | | 70-130 | %REC | 1 | 11/10/2009 04:52 PM |
| MERCURY | | | SW7471A | | Prep Date: 11/9/2009 | Analyst: JCJ |
| Mercury | 0.0403 | | 0.00348 | mg/Kg | 1 | 11/9/2009 09:06 PM |
| METALS | | | SW6020 | | Prep Date: 11/9/2009 | Analyst: SKS |
| Arsenic | 4.10 | | 0.442 | mg/Kg | 1 | 11/9/2009 06:50 PM |
| Barium | 126 | | 0.442 | mg/Kg | 1 | 11/9/2009 06:50 PM |
| Cadmium | ND | | 0.442 | mg/Kg | 1 | 11/9/2009 06:50 PM |
| Chromium | 12.3 | | 0.442 | mg/Kg | 1 | 11/9/2009 06:50 PM |
| Lead | 48.0 | | 0.442 | mg/Kg | 1 | 11/9/2009 06:50 PM |
| Selenium | 1.07 | | 0.442 | mg/Kg | 1 | 11/9/2009 06:50 PM |
| Silver | ND | | 0.442 | mg/Kg | 1 | 11/9/2009 06:50 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 19-Nov-09

Client: Holly Energy Partners
Project: South Bundle Pad
Sample ID: F037 BH#4
Collection Date: 11/4/2009 01:49 PM

Work Order: 0911117
Lab ID: 0911117-04
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|--------|------|----------------|-------|-----------------------|---------------------|
| TPH DRO/ORO | | | SW8015M | | Prep Date: 11/6/2009 | Analyst: KMB |
| TPH (Diesel Range) | 580 | | 34 | mg/Kg | 20 | 11/17/2009 05:21 PM |
| Surr: 2-Fluorobiphenyl | 59.5 | S | 70-130 | %REC | 20 | 11/17/2009 05:21 PM |
| GASOLINE RANGE ORGANICS | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | ND | | 0.050 | mg/Kg | 1 | 11/10/2009 01:52 PM |
| Surr: 4-Bromofluorobenzene | 82.3 | | 70-130 | %REC | 1 | 11/10/2009 01:52 PM |
| MERCURY | | | SW7471A | | Prep Date: 11/9/2009 | Analyst: JCJ |
| Mercury | 0.0496 | | 0.00348 | mg/Kg | 1 | 11/9/2009 09:08 PM |
| METALS | | | SW6020 | | Prep Date: 11/9/2009 | Analyst: SKS |
| Arsenic | 6.39 | | 0.463 | mg/Kg | 1 | 11/9/2009 06:56 PM |
| Barium | 121 | | 0.463 | mg/Kg | 1 | 11/9/2009 06:56 PM |
| Cadmium | ND | | 0.463 | mg/Kg | 1 | 11/9/2009 06:56 PM |
| Chromium | 16.3 | | 0.463 | mg/Kg | 1 | 11/9/2009 06:56 PM |
| Lead | 27.0 | | 0.463 | mg/Kg | 1 | 11/9/2009 06:56 PM |
| Selenium | 0.930 | | 0.463 | mg/Kg | 1 | 11/9/2009 06:56 PM |
| Silver | ND | | 0.463 | mg/Kg | 1 | 11/9/2009 06:56 PM |
| LOW-LEVEL PAHS | | | SW8270 | | Prep Date: 11/18/2009 | Analyst: LG |
| Acenaphthene | ND | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Acenaphthylene | ND | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Anthracene | ND | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Benz(a)anthracene | 0.016 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Benzo(a)pyrene | 0.016 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Benzo(b)fluoranthene | 0.021 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Benzo(g,h,i)perylene | 0.012 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Benzo(k)fluoranthene | 0.016 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Chrysene | 0.048 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Dibenz(a,h)anthracene | ND | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Fluoranthene | 0.036 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Fluorene | ND | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Indeno(1,2,3-cd)pyrene | 0.015 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Naphthalene | ND | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Phenanthrene | 0.023 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Pyrene | 0.043 | | 0.0066 | mg/Kg | 1 | 11/18/2009 05:24 PM |
| Surr: 2-Fluorobiphenyl | 79.3 | | 43-125 | %REC | 1 | 11/18/2009 05:24 PM |
| Surr: 4-Terphenyl-d14 | 91.1 | | 32-125 | %REC | 1 | 11/18/2009 05:24 PM |
| Surr: Nitrobenzene-d5 | 60.6 | | 37-125 | %REC | 1 | 11/18/2009 05:24 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 19-Nov-09

Client: Holly Energy Partners
Project: South Bundle Pad
Sample ID: F037 BH#5
Collection Date: 11/4/2009 01:53 PM

Work Order: 0911117
Lab ID: 0911117-05
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|--------|------|----------------|-------|----------------------|---------------------|
| TPH DRO/ORO | | | SW8015M | | Prep Date: 11/6/2009 | Analyst: KMB |
| TPH (Diesel Range) | 35 | | 34 | mg/Kg | 20 | 11/11/2009 04:31 PM |
| Surr: 2-Fluorobiphenyl | 84.6 | | 70-130 | %REC | 20 | 11/11/2009 04:31 PM |
| GASOLINE RANGE ORGANICS | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | ND | | 0.050 | mg/Kg | 1 | 11/10/2009 05:17 PM |
| Surr: 4-Bromofluorobenzene | 84.9 | | 70-130 | %REC | 1 | 11/10/2009 05:17 PM |
| MERCURY | | | SW7471A | | Prep Date: 11/9/2009 | Analyst: JCJ |
| Mercury | 0.0496 | | 0.00349 | mg/Kg | 1 | 11/9/2009 09:10 PM |
| METALS | | | SW6020 | | Prep Date: 11/9/2009 | Analyst: SKS |
| Arsenic | 5.26 | | 0.455 | mg/Kg | 1 | 11/9/2009 07:08 PM |
| Barium | 140 | | 0.455 | mg/Kg | 1 | 11/9/2009 07:08 PM |
| Cadmium | ND | | 0.455 | mg/Kg | 1 | 11/9/2009 07:08 PM |
| Chromium | 19.0 | | 0.455 | mg/Kg | 1 | 11/9/2009 07:08 PM |
| Lead | 32.7 | | 0.455 | mg/Kg | 1 | 11/9/2009 07:08 PM |
| Selenium | 1.10 | | 0.455 | mg/Kg | 1 | 11/9/2009 07:08 PM |
| Silver | ND | | 0.455 | mg/Kg | 1 | 11/9/2009 07:08 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 19-Nov-09

Client: Holly Energy Partners
Project: South Bundle Pad
Sample ID: F037 BH#6
Collection Date: 11/4/2009 01:56 PM

Work Order: 0911117
Lab ID: 0911117-06
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|--------|------|----------------|-------|----------------------|---------------------|
| TPH DRO/ORO | | | SW8015M | | Prep Date: 11/6/2009 | Analyst: KMB |
| TPH (Diesel Range) | 26 | | 1.7 | mg/Kg | 1 | 11/17/2009 05:53 PM |
| Surr: 2-Fluorobiphenyl | 108 | | 70-130 | %REC | 1 | 11/17/2009 05:53 PM |
| GASOLINE RANGE ORGANICS | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | ND | | 0.050 | mg/Kg | 1 | 11/12/2009 03:13 PM |
| Surr: 4-Bromofluorobenzene | 84.1 | | 70-130 | %REC | 1 | 11/12/2009 03:13 PM |
| MERCURY | | | SW7471A | | Prep Date: 11/9/2009 | Analyst: JCJ |
| Mercury | 0.0131 | | 0.00358 | mg/Kg | 1 | 11/9/2009 09:12 PM |
| METALS | | | SW6020 | | Prep Date: 11/9/2009 | Analyst: SKS |
| Arsenic | 3.21 | | 0.463 | mg/Kg | 1 | 11/9/2009 07:14 PM |
| Barium | 142 | | 0.463 | mg/Kg | 1 | 11/9/2009 07:14 PM |
| Cadmium | ND | | 0.463 | mg/Kg | 1 | 11/9/2009 07:14 PM |
| Chromium | 10.8 | | 0.463 | mg/Kg | 1 | 11/9/2009 07:14 PM |
| Lead | 11.4 | | 0.463 | mg/Kg | 1 | 11/9/2009 07:14 PM |
| Selenium | 0.994 | | 0.463 | mg/Kg | 1 | 11/9/2009 07:14 PM |
| Silver | ND | | 0.463 | mg/Kg | 1 | 11/9/2009 07:14 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 19-Nov-09

Client: Holly Energy Partners

Project: South Bundle Pad

Work Order: 0911117

Sample ID: Trip Blank

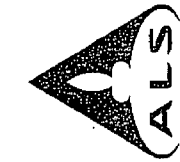
Lab ID: 0911117-07

Collection Date: 11/4/2009 01:56 PM

Matrix: WATER

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|--------|------|-----------------|-------|--------------------|--------------------|
| GASOLINE RANGE ORGANICS | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | ND | | 0.0500 | mg/L | 1 | 11/8/2009 11:06 PM |
| Surr: 4-Bromofluorobenzene | 81.0 | | 70-130 | %REC | 1 | 11/8/2009 11:06 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.



ALS Laboratory Group
10450 Stancil Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

Chain of Custody Form

☐ **ALS Laboratory Group**
3352 128th Ave.
Holland, MI 49424-9263
Tel: +1 616 399 6070
Fax: +1 616 399 6185

Page 1 of 1

| Customer Information | | | | Project Information | | | | ALS Work Order #: | | | | | | | | | | | |
|----------------------|--------------------|---------|------|--------------------------|-------|-----------|---|--|---|---|---|---|---|---|---|---|------|--|--|
| ALS Project Manager: | | | | ALS Work Order #: | | | | Parameter/Method Request for Analysis | | | | | | | | | | | |
| Project Name | | | | Project Number | | | | DRO | | | | | | | | | | | |
| Bill to Company | | | | Navajo Refining Company | | | | GRO (Permeable) | | | | | | | | | | | |
| Invoice/Attn | | | | Aaron Strange | | | | RCRA Metals | | | | | | | | | | | |
| P.O. Box 159 | | | | P.O. Box 159 | | | | If GRO Greater than 80mg/kg Run VOCs | | | | | | | | | | | |
| City/State/Zip | | | | Artesia, NM 80211 | | | | If DRO Greater than 200mg/kg Run SVOCs | | | | | | | | | | | |
| Phone | | | | 748-3311 | | | | | | | | | | | | | | | |
| Fax | | | | 745-5421 | | | | | | | | | | | | | | | |
| e-Mail Address | | | | aaron@navajorefining.com | | | | | | | | | | | | | | | |
| No. | Sample Description | Date | Time | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold | | |
| 1 | F037 BH #1 | 11-4-09 | 1336 | S | Y | 1 | X | X | X | X | X | X | | | | | | | |
| 2 | " " #2 | | 1338 | | | 1 | X | X | X | X | X | X | | | | | | | |
| 3 | " " #3 | | 1341 | | | 1 | X | X | X | X | X | X | | | | | | | |
| 4 | " " #4 | | 1349 | | | 1 | X | X | X | X | X | X | | | | | | | |
| 5 | " " #5 | | 1353 | | | 1 | X | X | X | X | X | X | | | | | | | |
| 6 | " " #6 | | 1356 | | | 1 | X | X | X | X | X | X | | | | | | | |
| 7 | Temp Blank | | | | | | | | | | | | | | | | | | |
| 8 | Trip Blank | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | |

| Sampler(s) Please Print & Sign | | Shipment Method | | Required Turnaround Time (Check Box) | | Results Due Date: | |
|--------------------------------|--|-----------------|--|--------------------------------------|--|-------------------|--|
| Fed Ex | | Fed Ex | | 5 Wks Days | | 11-4-09 | |

| Requested by: | | Received by: | | Time: | |
|---------------|--|---------------|--|--------------|--|
| Aaron Strange | | Aaron Strange | | 11-4-09 1615 | |

| Relinquished by: | | Received by (Laboratory): | | Time: | |
|------------------|--|---------------------------|--|-------------|--|
| Aaron Strange | | Kenny B | | 11-5-09 133 | |

| Preservative Key: | | Cooler Temp: | | Cooler ID: | | Cooler Temp: | | Cooler ID: | | Cooler Temp: | | Cooler ID: | |
|---|--|--------------|--|------------|--|--------------|--|------------|--|--------------|--|------------|--|
| 1-HCl, 2-HNO ₃ , 3-H ₂ SO ₄ , 4-NaOH | | 8-4°C | | 7-Other | | 9-5095 | | 10-5095 | | 11-5095 | | 12-5095 | |

| QC Package: (Check One Box Below) | | Level III Std OC/Row Date | | Level IV SW/6/6/CLP | | Other | |
|-----------------------------------|--|---------------------------|--|---------------------|--|-------|--|
| Level III Std OC | | | | | | | |

Please print or type: (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS
WASTE MANIFEST

1. Generator ID Number
NMD048918817

2. Page 1 of 1

3. Emergency Response Phone

5. Generator's Name and Mailing Address

Navajo Refining Company
501 E. Main
Artesia, NM 88210-0159

Generator's Site Address (if different than mailing address)

Navajo Refining Company
501 E. Main
Artesia, NM 88210

Generator's Phone: 505-748-3311 Darrell Moore

6. Transporter 1 Company Name

Fluid Transports, Inc.

U.S. EPA ID Number

TXD988057931

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

RENSCO
1007 Vulcan Road
Benton, AR 72015

U.S. EPA ID Number

ARD981057870

Facility's Phone: 501-778-6325

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | |
|-----------|--|----------------|------|-----------------------|----------------------|-----------------|-------|
| | | No. | Type | | | | |
| 1 | 1. EQ, NA3077, Hazardous Waste Solid, NOS (F037), 9 PG III, () | 1 | CM | APPROX 13,500 | P | F037 | D-018 |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |

14. Special Handling Instructions and Additional Information

1. 0910-18555 ERG#171 F037 Tank Sludge

Box 20503

SPWET OVERTFLOW
171718

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name

Signature

Month Day Year

Aaron Strange

Aaron Strange

10 26 09

16. International Shipments

☐ Import to U.S.

☐ Export from U.S.

Port of entry/exit:

Date leaving U.S.:

Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

DAVID TEEBIE

David Teebie

10 26 09

Transporter 2 Printed/Typed Name

Signature

Month Day Year

18. Discrepancy

18a. Discrepancy Indication Space

☐ Quantity

☐ Type

☐ Residue

☐ Partial Rejection

☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)

Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. H061

2.

3.

4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name

Signature

Month Day Year

Whitney Buck

Whitney Buck

11 02 09

UNIFORM HAZARDOUS
WASTE MANIFEST

1. Generator ID Number

UN004092208

2. Page 1 of 1

3. Emergency Response Phone

Generator's Site Address (if different than mailing address)

5. Generator's Name and Mailing Address

Navajo Refining Company

PO Box 159

Alameda, NM 88211-0159 USA

Generator's Phone:

505-746-3311-Darrell Moore

6. Transporter 1 Company Name

FLUID TRANSPORTS, INC.

U.S. EPA ID Number

1709F8057931

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

1007 VULCAN ROAD
BENTON, AR

U.S. EPA ID Number

AR0001057870

Facility's Phone:

501-778-6325

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | |
|-----------|--|----------------|------|------------------------|----------------------|-----------------|-------|
| | | No. | Type | | | | |
| 1 | RD. HAZARDOUS WASTE SOLID NOS (F037) 2, PG III, () | 1 | CM | APPROX 22266 160 | P | F037 | D-018 |
| 2 | | | | 20920 | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |

14. Special Handling Instructions and Additional Information

1. 0910-18555 EPCW171 F037 Tank Sludge

SWEEP OVERFLOW

unload # 172229 11:00 AM Friday BOX # 20517

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.

I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offor's Printed/Typed Name

Signature

Month Day Year

Adam Strange

Adam Strange

10 28 09

16. International Shipments

☐ Import to U.S.☐ Export from U.S.

Port of entry/exit:

Transporter signature (for exports only):

Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

BOB STECKERT

Bob Steckert

10 28 09

Transporter 2 Printed/Typed Name

Signature

Month Day Year

18. Discrepancy

18a. Discrepancy Indication Space

☒ Quantity☐ Type☐ Residue☐ Partial Rejection☐ Full Rejection

Three received codes on line 1. This discrepancy was resolved within 15 days.
See above correction.

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)

Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

| | | | |
|---------|----|----|----|
| 1. H001 | 2. | 3. | 4. |
|---------|----|----|----|

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name

Signature

Marie LeBeau

Marie LeBeau

DESIGNATE

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report


| | | |
|---|-----------------------------------|-----------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange | |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 | |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery | |
| Surface Owner | Mineral Owner | Lease No. |

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|--|---|
| Type of Release: Sewer backup of process water | Volume of Release: ~ 10 barrels | Volume Recovered: ~ 8 barrels |
| Source of Release: Sewer Box at the north end of ISOM unit. | Date and Hour of Occurrence: 10/13/09 ~21:00 | Date and Hour of Discovery: 10/14/09 ~ 06:00 |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? N/A | |
| By Whom? N/A | Date and Hour: 10-08-2009 at ~22:16 | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. N/A | |
| If a Watercourse was Impacted, Describe Fully.* N/A | | |
| Describe Cause of Problem and Remedial Action Taken.* On 10/13/09 at ~ 21:00 a sump (connected to the sewer) at the north end of the ISOM unit was high. A diaphragm pump was used to transfer it to another sump downstream to prevent it from overflowing. However during the night the downstream sump overflowed. The pump was first turned off then the downstream sump was pumped into another sewer. A vacuum truck has been removing the standing liquid and putting it back into the Waste Water Sewers. Any contaminated soil will be dug up and placed into hard top roll-off bins. | | |
| Describe Area Affected and Cleanup Action Taken.* The spill occurred north of the ISOM unit by the North Side Flare Drum. It left puddles by the flare drum and also collected in the storm water ditch. A vacuum truck has been removing the standing liquid and putting it back into the Waste Water Sewers. The contaminated soil is being dug up and placed into hard top roll-off bins. The contaminated soil will be disposed of as hazardous waste F037/F038 with D018. | | |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. | | |
| Signature:  | | OIL CONSERVATION DIVISION |
| Printed Name: Aaron Strange | | Approved by District Supervisor: |
| Title: Sr. Environmental Technician | Approval Date: | Expiration Date: |
| E-mail Address: aaron.strange@hollycorp.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 10/14/09 5451 or 575-703-5057 | Phone: 575-746- | |

* Attach Additional Sheets If Necessary

ALS Laboratory Group

Date: 16-Nov-09

Client: Holly Energy Partners

Project: ISDM Overflow

Sample ID: F037 BH#1

Collection Date: 11/4/2009 02:22 PM

Work Order: 0911131

Lab ID: 0911131-01

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|------------------------------------|--------|------|--------------|---------------|-----------------|--|
| TPH AND MISCELLANEOUS GCFID | | | | | | |
| TPH (Diesel Range) | ND | | SW8015M | 49 mg/Kg | 1 | Analyst: KMB 11/10/2009 09:27 PM |
| Surr: 2-Fluorobiphenyl | 84.9 | | 70-130 | %REC | 1 | 11/10/2009 09:27 PM |
| GASOLINE RANGE ORGANICS | | | | | | |
| Gasoline Range Organics | ND | | SW8015 | 0.050 mg/Kg | 1 | Analyst: RKG 11/10/2009 06:06 PM |
| Surr: 4-Bromofluorobenzene | 82.6 | | 70-130 | %REC | 1 | 11/10/2009 06:06 PM |
| MERCURY | | | | | | |
| Mercury | 0.139 | | SW7471A | 0.00353 mg/Kg | 1 | Prep Date: 11/9/2009 Analyst: JCJ 11/9/2009 09:14 PM |
| METALS | | | | | | |
| Arsenic | 6.60 | | SW6020 | 0.450 mg/Kg | 1 | Prep Date: 11/9/2009 Analyst: SKS 11/9/2009 10:42 PM |
| Barium | 142 | | | 0.450 mg/Kg | 1 | 11/9/2009 10:42 PM |
| Cadmium | 0.631 | | | 0.450 mg/Kg | 1 | 11/9/2009 10:42 PM |
| Chromium | 42.9 | | | 0.450 mg/Kg | 1 | 11/9/2009 10:42 PM |
| Lead | 78.3 | | | 0.450 mg/Kg | 1 | 11/9/2009 10:42 PM |
| Selenium | 5.06 | | | 0.450 mg/Kg | 1 | 11/9/2009 10:42 PM |
| Silver | ND | | | 0.450 mg/Kg | 1 | 11/9/2009 10:42 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 16-Nov-09

Client: Holly Energy Partners

Project: ISDM Overflow

Work Order: 0911131

Sample ID: F037 BH#2

Lab ID: 0911131-02

Collection Date: 11/4/2009 02:24 PM

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|------------------------------------|--------|------|----------------|-------|----------------------|---------------------|
| TPH AND MISCELLANEOUS GCFID | | | | | | |
| | | | SW8015M | | Prep Date: 11/6/2009 | Analyst: KMB |
| TPH (Diesel Range) | 570 | | 49 | mg/Kg | 1 | 11/10/2009 07:49 PM |
| Surr: 2-Fluorobiphenyl | 103 | | 70-130 | %REC | 1 | 11/10/2009 07:49 PM |
| GASOLINE RANGE ORGANICS | | | | | | |
| | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | ND | | 0.050 | mg/Kg | 1 | 11/12/2009 11:50 PM |
| Surr: 4-Bromofluorobenzene | 88.4 | | 70-130 | %REC | 1 | 11/12/2009 11:50 PM |
| MERCURY | | | | | | |
| | | | SW7471A | | Prep Date: 11/9/2009 | Analyst: JCJ |
| Mercury | 0.144 | | 0.00355 | mg/Kg | 1 | 11/9/2009 09:20 PM |
| METALS | | | | | | |
| | | | SW6020 | | Prep Date: 11/9/2009 | Analyst: SKS |
| Arsenic | 5.75 | | 0.481 | mg/Kg | 1 | 11/9/2009 10:48 PM |
| Barium | 170 | | 0.481 | mg/Kg | 1 | 11/9/2009 10:48 PM |
| Cadmium | ND | | 0.481 | mg/Kg | 1 | 11/9/2009 10:48 PM |
| Chromium | 27.4 | | 0.481 | mg/Kg | 1 | 11/9/2009 10:48 PM |
| Lead | 153 | | 0.481 | mg/Kg | 1 | 11/9/2009 10:48 PM |
| Selenium | 1.61 | | 0.481 | mg/Kg | 1 | 11/9/2009 10:48 PM |
| Silver | ND | | 0.481 | mg/Kg | 1 | 11/9/2009 10:48 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 16-Nov-09

Client: Holly Energy Partners
 Project: ISDM Overflow
 Sample ID: F037 BH#3
 Collection Date: 11/4/2009 02:27 PM

Work Order: 0911131
 Lab ID: 0911131-03
 Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|------------------------------------|--------|------|--------------|-------|-----------------|---------------------|
| TPH AND MISCELLANEOUS GCFID | | | | | | |
| TPH (Diesel Range) | ND | | 50 | mg/Kg | 1 | 11/10/2009 08:21 PM |
| Surr: 2-Fluorobiphenyl | 82.9 | | 70-130 | %REC | 1 | 11/10/2009 08:21 PM |
| GASOLINE RANGE ORGANICS | | | | | | |
| Gasoline Range Organics | ND | | 0.050 | mg/Kg | 1 | 11/13/2009 12:14 AM |
| Surr: 4-Bromofluorobenzene | 89.9 | | 70-130 | %REC | 1 | 11/13/2009 12:14 AM |
| MERCURY | | | | | | |
| Mercury | 0.271 | | 0.00356 | mg/Kg | 1 | 11/9/2009 09:22 PM |
| METALS | | | | | | |
| Arsenic | 6.09 | | 0.439 | mg/Kg | 1 | 11/9/2009 10:54 PM |
| Barium | 120 | | 0.439 | mg/Kg | 1 | 11/9/2009 10:54 PM |
| Cadmium | ND | | 0.439 | mg/Kg | 1 | 11/9/2009 10:54 PM |
| Chromium | 148 | | 0.439 | mg/Kg | 1 | 11/9/2009 10:54 PM |
| Lead | 227 | | 4.39 | mg/Kg | 10 | 11/10/2009 03:31 PM |
| Selenium | 3.48 | | 0.439 | mg/Kg | 1 | 11/9/2009 10:54 PM |
| Silver | ND | | 0.439 | mg/Kg | 1 | 11/9/2009 10:54 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 16-Nov-09

Client: Holly Energy Partners

Project: ISDM Overflow

Work Order: 0911131

Sample ID: F037 BH#4

Lab ID: 0911131-04

Collection Date: 11/4/2009 02:30 PM

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|------------------------------------|--------|------|--------------|---------------|-----------------|--|
| TPH AND MISCELLANEOUS GCFID | | | | | | |
| TPH (Diesel Range) | 890 | | SW8015M | 49 mg/Kg | 1 | Analyst: KMB 11/10/2009 08:54 PM |
| Surr: 2-Fluorobiphenyl | 80.4 | | 70-130 | %REC | 1 | 11/10/2009 08:54 PM |
| GASOLINE RANGE ORGANICS | | | | | | |
| Gasoline Range Organics | ND | | SW8015 | 0.050 mg/Kg | 1 | Analyst: RKG 11/13/2009 12:39 AM |
| Surr: 4-Bromofluorobenzene | 93.2 | | 70-130 | %REC | 1 | 11/13/2009 12:39 AM |
| MERCURY | | | | | | |
| Mercury | 0.342 | | SW7471A | 0.00355 mg/Kg | 1 | Prep Date: 11/9/2009 Analyst: JCJ 11/9/2009 09:24 PM |
| METALS | | | | | | |
| Arsenic | 5.76 | | SW6020 | 0.446 mg/Kg | 1 | Prep Date: 11/9/2009 Analyst: SKS 11/9/2009 11:00 PM |
| Barium | 126 | | | 0.446 mg/Kg | 1 | 11/9/2009 11:00 PM |
| Cadmium | ND | | | 0.446 mg/Kg | 1 | 11/9/2009 11:00 PM |
| Chromium | 141 | | | 0.446 mg/Kg | 1 | 11/9/2009 11:00 PM |
| Lead | 262 | | | 4.46 mg/Kg | 10 | 11/10/2009 03:37 PM |
| Selenium | 4.82 | | | 0.446 mg/Kg | 1 | 11/9/2009 11:00 PM |
| Silver | ND | | | 0.446 mg/Kg | 1 | 11/9/2009 11:00 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 16-Nov-09

Client: Holly Energy Partners

Project: ISDM Overflow

Sample ID: F037 BH#5

Collection Date: 11/4/2009 02:32 PM

Work Order: 0911131

Lab ID: 0911131-05

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|------------------------------------|--------|------|--------------|---------------|-----------------|--|
| TPH AND MISCELLANEOUS GCFID | | | | | | |
| TPH (Diesel Range) | 1,200 | | SW8015M | 50 mg/Kg | 1 | Prep Date: 11/6/2009 Analyst: KMB 11/10/2009 09:27 PM |
| Surr: 2-Fluorobiphenyl | 124 | | 70-130 | %REC | 1 | 11/10/2009 09:27 PM |
| GASOLINE RANGE ORGANICS | | | | | | |
| Gasoline Range Organics | ND | | SW8015 | 0.050 mg/Kg | 1 | Analyst: RKG 11/10/2009 07:45 PM |
| Surr: 4-Bromofluorobenzene | 80.3 | | 70-130 | %REC | 1 | 11/10/2009 07:45 PM |
| MERCURY | | | | | | |
| Mercury | 0.379 | | SW7471A | 0.00358 mg/Kg | 1 | Prep Date: 11/9/2009 Analyst: JCJ 11/9/2009 09:26 PM |
| METALS | | | | | | |
| Arsenic | 7.36 | | SW6020 | 0.476 mg/Kg | 1 | Prep Date: 11/9/2009 Analyst: SKS 11/9/2009 11:06 PM |
| Barium | 151 | | | 0.476 mg/Kg | 1 | 11/9/2009 11:06 PM |
| Cadmium | ND | | | 0.476 mg/Kg | 1 | 11/9/2009 11:06 PM |
| Chromium | 210 | | | 4.76 mg/Kg | 10 | 11/10/2009 03:43 PM |
| Lead | 351 | | | 4.76 mg/Kg | 10 | 11/10/2009 03:43 PM |
| Selenium | 6.04 | | | 0.476 mg/Kg | 1 | 11/9/2009 11:06 PM |
| Silver | ND | | | 0.476 mg/Kg | 1 | 11/9/2009 11:06 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 16-Nov-09

Client: Holly Energy Partners

Project: ISDM Overflow

Work Order: 0911131

Sample ID: F037 BH#6

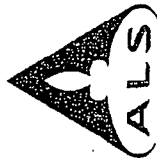
Lab ID: 0911131-06

Collection Date: 11/4/2009 02:35 PM

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|------------------------------------|--------|------|--------------|---------------|-----------------|--|
| TPH AND MISCELLANEOUS GCFID | | | | | | |
| TPH (Diesel Range) | 800 | | SW8015M | 49 mg/Kg | 1 | Prep Date: 11/6/2009 Analyst: KMB 11/10/2009 09:59 PM |
| Surr: 2-Fluorobiphenyl | 94.7 | | 70-130 | %REC | 1 | 11/10/2009 09:59 PM |
| GASOLINE RANGE ORGANICS | | | | | | |
| Gasoline Range Organics | ND | | SW8015 | 0.050 mg/Kg | 1 | Analyst: RKG 11/10/2009 08:10 PM |
| Surr: 4-Bromofluorobenzene | 78.9 | | 70-130 | %REC | 1 | 11/10/2009 08:10 PM |
| MERCURY | | | | | | |
| Mercury | 0.171 | | SW7471A | 0.00353 mg/Kg | 1 | Prep Date: 11/9/2009 Analyst: JCJ 11/9/2009 09:28 PM |
| METALS | | | | | | |
| Arsenic | 8.37 | | SW6020 | 0.481 mg/Kg | 1 | Prep Date: 11/9/2009 Analyst: SKS 11/9/2009 11:24 PM |
| Barium | 142 | | | 0.481 mg/Kg | 1 | 11/9/2009 11:24 PM |
| Cadmium | ND | | | 0.481 mg/Kg | 1 | 11/9/2009 11:24 PM |
| Chromium | 102 | | | 0.481 mg/Kg | 1 | 11/9/2009 11:24 PM |
| Lead | 148 | | | 4.81 mg/Kg | 10 | 11/10/2009 03:49 PM |
| Selenium | 3.60 | | | 0.481 mg/Kg | 1 | 11/9/2009 11:24 PM |
| Silver | ND | | | 0.481 mg/Kg | 1 | 11/9/2009 11:24 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.



ALS Laboratory Group
10450 Stanciliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

Chain of Custody Form

☐ **ALS Laboratory Group**

3352 128th Ave.
Holland, MI 49424-9263
Tel. +1 616 399 6070
Fax: +1 616 399 6185

Page 1 of 1

| Customer Information | | | | Project Information | | | | ALS Project Manager: <u>ALS Work Order #:</u> <u>091131</u> | | | | | | | | | | | |
|---------------------------------------|--------------------|---------|------|---------------------------------------|------|-----------|---|---|---|---|---|---|---|---|---|---|------|--|--|
| Parameter/Method Request for Analysis | | | | Parameter/Method Request for Analysis | | | | Parameter/Method Request for Analysis | | | | | | | | | | | |
| Project Name | | | | Project Name | | | | Project Name | | | | | | | | | | | |
| Project Number | | | | Project Number | | | | Project Number | | | | | | | | | | | |
| Bill To Company | | | | Bill To Company | | | | Bill To Company | | | | | | | | | | | |
| Navajo Refining Company | | | | Navajo Refining Company | | | | Navajo Refining Company | | | | | | | | | | | |
| Aarion Strange | | | | Aarion Strange | | | | Aarion Strange | | | | | | | | | | | |
| P.O. Box 159 | | | | P.O. Box 159 | | | | P.O. Box 159 | | | | | | | | | | | |
| Address | | | | Address | | | | Address | | | | | | | | | | | |
| City/State/Zip | | | | City/State/Zip | | | | City/State/Zip | | | | | | | | | | | |
| Arlasia, NM 88211 | | | | Arlasia, NM 88211 | | | | Arlasia, NM 88211 | | | | | | | | | | | |
| Phone | | | | Phone | | | | Phone | | | | | | | | | | | |
| 748-3311 | | | | 748-3311 | | | | 748-3311 | | | | | | | | | | | |
| Fax | | | | Fax | | | | Fax | | | | | | | | | | | |
| 746-5421 | | | | 746-5421 | | | | 746-5421 | | | | | | | | | | | |
| e-Mail Address | | | | e-Mail Address | | | | e-Mail Address | | | | | | | | | | | |
| ALS Laboratory Group | | | | ALS Laboratory Group | | | | ALS Laboratory Group | | | | | | | | | | | |
| No. | Sample Description | Date | Time | Matrix | Pres | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold | | |
| 1 | F037 BH #1 | 11-4-09 | 1422 | S | Y | 1 | X | X | X | X | X | X | X | X | X | X | | | |
| 2 | 11 11 #2 | 11-4-09 | 1424 | S | Y | 1 | X | X | X | X | X | X | X | X | X | X | | | |
| 3 | 11 11 #3 | 11-4-09 | 1427 | S | Y | 1 | X | X | X | X | X | X | X | X | X | X | | | |
| 4 | 11 11 #4 | 11-4-09 | 1430 | S | Y | 1 | X | X | X | X | X | X | X | X | X | X | | | |
| 5 | 11 11 #5 | 11-4-09 | 1432 | S | Y | 1 | X | X | X | X | X | X | X | X | X | X | | | |
| 6 | 11 11 #6 | 11-4-09 | 1435 | S | Y | 1 | X | X | X | X | X | X | X | X | X | X | | | |
| 7 | Temp Blank | | | | | | | | | | | | | | | | | | |
| 8 | Trip Blank | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | |

| Sampler(s) (Please Print & Sign) | Shipment Method | Required Turnaround Time (Check Box) | Other | Results Due Date |
|----------------------------------|-----------------|--------------------------------------|-----------|------------------|
| Aaron Strange | Fed Ex | Std 40 Wk Days | 5 Wk Days | |

| Relinquished by | Date | Time | Received by | Date | Time |
|-----------------|---------|------|-------------|---------|------|
| Alan Garg | 11-4-09 | 1615 | Alan Garg | 11-4-09 | 1615 |

| Relinquished by | Date | Time | Received by | Date | Time |
|-----------------|---------|------|-------------|---------|------|
| Alan Garg | 11-4-09 | 1615 | Alan Garg | 11-4-09 | 1615 |

| Logged by (Laboratory) | Date | Time | Checked by (Laboratory) | Date | Time |
|------------------------|------|------|-------------------------|------|------|
| | | | | | |

| Preservative Key | 1-HCl | 2-HNO ₃ | 3-H ₂ SO ₄ | 4-NaOH | 5-Na ₂ O ₂ | 6-NaHSO ₄ | 7-Other | 8-4°C | 9-5035 |
|------------------|-------|--------------------|----------------------------------|--------|----------------------------------|----------------------|---------|-------|--------|
| | | | | | | | | | |

| QC Package | Check One (Box Below) | Level | Std | QC | Raw Data | Level | Std | QC | Raw Data | Level | Std | QC | Raw Data |
|------------|-----------------------|-------|-----|----|----------|-------|-----|----|----------|-------|-----|----|----------|
| | | | | | | | | | | | | | |

| Notes | 5 WORK DAYS (A1) |
|-------|------------------|
| | |

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.
2. Unless otherwise noted in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.

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WASTE MANIFEST

WASTE MANIFEST

505-749-3811

004052203JUK

5. Generator's Name and Mailing Address

Navajo Refining Company

501 E. Main

BENTON, NM 86211-0159 USA

Generator's Site Address (if different than mailing address)

Navajo Refining Company

BENTON, NM 86211-0159 USA

501 E. Main

Generator's Phone:

505-749-3811

6. Transporter 1 Company Name

FLUID TRANSPORTS, INC.

U.S. EPA ID Number

FD000051331

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

RINECO

1007 VULCAN ROAD

BENTON, AR

U.S. EPA ID Number

FD000051331

Facility's Phone:

501-776-6325

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | | |
|-----------|--|----------------|------|-----------------------|----------------------|-----------------|-------|--|
| | | No. | Type | | | | | |
| X | 1. RQ, NA3077, Hazardous Waste Solid, NOS (F037), 2, PG III, (1) | 1 | CM | APPROX 9,260 | P | F037 | D-018 | |
| | 2. | | | | | | | |
| | 3. | | | | | | | |
| | 4. | | | | | | | |

14. Special Handling Instructions and Additional Information

1. 0910-10005 ERGWIN F037 Tank Sludge

SHEET OVERFLOW

172230

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.

I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offor's Printed/Typed Name

Aaron Stange

Signature

Aaron Stange

Month Day Year

10 29 09

GENERATOR

16. International Shipments

☐

Import to U.S.

☐

Export from U.S.

Port of entry/exit:

Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

BOB STECKERT

Signature

Bob Steckert

Month Day Year

10 29 09

Transporter 2 Printed/Typed Name

Signature

Month Day Year

TRANSPORTER

18. Discrepancy

18a. Discrepancy Indication Space

☐

Quantity

☐

Type

☐

Residue

☐

Partial Rejection

☐

Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)

Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

| | | | |
|---------|----|----|----|
| 1. H001 | 2. | 3. | 4. |
|---------|----|----|----|

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name

Whitney Lund

Signature

Whitney Lund

Month Day Year

11 14 09

DESIGNATED FACILITY

WASTE MANIFEST

NMED048915517

Generator's Site Address (if different than mailing address)

5. Generator's Name and Mailing Address

Navajo Refining Company

501 E Main

Alamosa, NM 86210 US

Navajo Refining Company

Alamosa, NM 86210 US

501 E Main

Generator's Phone: 505-742-3311-Dan Moore

6. Transporter 1 Company Name

FLUID TRANSPORTS, INC

U.S. EPA ID Number

7YU9RCL

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

KINECO

1007 VULCAN ROAD

BENTON, AR

U.S. EPA ID Number

AR0501057777

Facility's Phone: 501-776-8835

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | | |
|-----------|--|----------------|------|--------------------|-------------------|-----------------|-------|--|
| | | No. | Type | | | | | |
| X | 1. RC, NA3077, Hazardous Waste Solid NOS (F037) 9. PG III, (C) | 1 | DR | APPROX 12,120 | 0 | F037 | D-018 | |
| | 2. | | | 10240 | | | | |
| | 3. | | | | | | | |
| | 4. | | | | | | | |

14. Special Handling Instructions and Additional Information

1. 0910-12555 ERG#171 F037 Tank Sledge

sewer overflow

Box # 20555

171750

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.

I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offor's Printed/Typed Name

Signature

Month Day Year

Aaron Strange

Aaron Strange

10 30 09

16. International Shipments

☐ Import to U.S.☐ Export from U.S.

Port of entry/exit:

Date leaving U.S.:

Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

BOB STECKERT

Bob Steckert

10 30 09

Transporter 2 Printed/Typed Name

Signature

Month Day Year

18. Discrepancy

18a. Discrepancy Indication Space

☒ Quantity☐ Type☐ Residue☐ Partial Rejection☐ Full Rejection

None received 10240 within 1. This discrepancy was resolved within 15 days per above instruction.

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)

Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

| | | | |
|---------|----|----|----|
| 1. H001 | 2. | 3. | 4. |
|---------|----|----|----|

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name

Signature

Month Day Year

Carmel LeBeau

Carmel LeBeau

11 11 13

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report


| | | |
|---|-----------------------------------|-----------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange | |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 | |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery | |
| Surface Owner | Mineral Owner | Lease No. |

LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|--|---|
| Type of Release: Process Water (After Aerobic Treatment) | Volume of Release: ~ 120 barrels | Volume Recovered: ~ 100 barrels |
| Source of Release: Waste water from T-836. | Date and Hour of Occurrence: 10/25/09 ~ 17:00 | Date and Hour of Discovery: 10/25/09 ~ 17:15 |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? OCD | |
| By Whom? Aaron Strange | Date and Hour: 10-25-2009 at ~18:05 | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. N/A | |
| If a Watercourse was Impacted, Describe Fully.* N/A | | |
| Describe Cause of Problem and Remedial Action Taken.* On 10/25/09 at ~ 17:00 a flex line connected to T-437 split open. Waste water was being pumped from T-836 to T-437 to provide more capacity during a Fall-Off test for one of Navajo's injection wells. The line was replaced and a vacuum truck has removed the standing liquid and put it back into the Waste Water Sewers. | | |
| Describe Area Affected and Cleanup Action Taken.* The spill occurred at T-437 within the tanks berm. The water collected inside the tank berm with rain water that was already present. A vacuum truck has removed the standing liquid and put it back into the Waste Water Sewers. | | |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. | | |
| Signature:  | OIL CONSERVATION DIVISION | |
| Printed Name: Aaron Strange | Approved by District Supervisor: | |
| Title: Sr. Environmental Technician | Approval Date: | Expiration Date: |
| E-mail Address: aaron.strange@hollycorp.com | Conditions of Approval: | |
| Date: 10/26/09 5451 or 575-703-5057 | Phone: 575-746- | Attached <input type="checkbox"/> |

* Attach Additional Sheets If Necessary

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Co. LLC
 Address PO Box 159
 City/State Artesia, NM 88211-0159

(575) 748-3311
 Telephone No.

ORIGIN OF WASTE:

Operations Center Artesia

Permit No. NMD048918817

Property Name ~~3 Well Ditch~~ North Plant
 (Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | | |
|---|-------|-----------------|-------|
| Drilling Fluids | _____ | Tank Bottoms | _____ |
| Completion Fluids | _____ | Gas Plant Waste | _____ |
| Contaminated Soil | _____ | Other Materials | _____ |
| Exempt Fluids _____ | | | |
| C117 No. _____ | | | |
| Pit No. _____ | | | |
| DESCRIPTION / NOTES | | | |
| 12 Yds Cont. Soil | | | |
| North Side Spill | | | |
| | | | |
| | | | |

CERTIFICATION: The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Carrie Hernandez
 Signature of Generator's Authorized Agent

 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S Brothers
 Address _____
 City/State _____

 Telephone No.

2
 Truck No.

CERTIFICATION: I certify that the waste in quantity above was received by me for shipment to the destination below.

Samuel Hernandez
 Signature of Transporter's Agent

7-2-09
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION: I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
 Signature of Facility Agent

7-2-09
 Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Co. LLC
 Address PO Box 159
 City/State Artesia, NM 88211-0159

(575) 748-3311
 Telephone No.

ORIGIN OF WASTE:

Operations Center Artesia

Permit No. NMD048918817

Property Name ~~3441-1-10 North Plant~~ North Plant
 (Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | |
|---|-----------------------|---------------------|
| Drilling Fluids _____ | Tank Bottoms _____ | Exempt Fluids _____ |
| Completion Fluids _____ | Gas Plant Waste _____ | C117 No. _____ |
| Contaminated Soil _____ | Other Materials _____ | Pit No. _____ |
| DESCRIPTION / NOTES | | |
| 12 Yds Cont. Soil | | |
| North Side spill | | |
| | | |
| | | |

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Chenille Hernandez
 Signature of Generator's Authorized Agent

 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S Brothers
 Address _____
 City/State _____

 Telephone No.

2
 Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

Boyle
 Signature of Transporter's Agent

7-2-09
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

Robert
 Signature of Facility Agent

7/7/09
 Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Co. LLC
 Address PO Box 159
 City/State Artesia, NM 88211-0159

(575) 748-3311
 Telephone No.

ORIGIN OF WASTE:

Operations Center Artesia

Permit No. NMD048918817

Property Name ~~3-11-01 Ditch~~ North plant
 (Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | | |
|---|-------|-----------------|-------|
| Drilling Fluids | _____ | Tank Bottoms | _____ |
| Completion Fluids | _____ | Gas Plant Waste | _____ |
| Contaminated Soil | _____ | Other Materials | _____ |
| Exempt Fluids _____ | | | |
| C117 No. _____ | | | |
| Pit No. _____ | | | |
| DESCRIPTION / NOTES | | | |
| 12 Yds Cont. Soil | | | |
| North side spill | | | |
| | | | |
| | | | |
| | | | |

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Carmel Hernandez

Signature of Generator's Authorized Agent

 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S Brothers
 Address _____
 City/State _____

 Telephone No.

2

 Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

Ray J. Doble

Signature of Transporter's Agent

7-1-09
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079

 Telephone No.

www.crihobbs.com

 E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]

Signature of Facility Agent

7-1-09
 Date and Time Received

34149

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Co. LLC
 Address PO Box 159
 City/State Artesia, NM 88211-0159

(575) 748-3311
 Telephone No.

ORIGINATION OF WASTE:

Operations Center Artesia

Permit No. NMD048918817

Property Name 3 Mile Ditch
 (Well, Tank Battery, Plant, Facility)

| WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.) | | |
|---|-----------------------|---------------------|
| Drilling Fluids _____ | Tank Bottoms _____ | Exempt Fluids _____ |
| Completion Fluids _____ | Gas Plant Waste _____ | C117 No. _____ |
| Contaminated Soil _____ | Other Materials _____ | Pit No. _____ |
| DESCRIPTION / NOTES | | |
| 12 Yds Cont. Soil | | |
| North Side Spill | | |
| | | |
| | | |

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

Carrie Hernandez
 Signature of Generator's Authorized Agent

 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name S Brothers
 Address _____
 City/State _____

 Telephone No.

2
 Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

Harry Van Winkle
 Signature of Transporter's Agent

7-1-09
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079

 Telephone No.

www.crihobbs.com

 E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
 Signature of Facility Agent

7-1-09
 Date and Time Received

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|---|-----------------------------------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery |

| | | |
|---------------|---------------|-----------|
| Surface Owner | Mineral Owner | Lease No. |
|---------------|---------------|-----------|

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|---|--|
| Type of Release: Mercury | Volume of Release: NA | Volume Recovered: NA |
| Source of Release: Excavation for new pipe support footers in Unit #35 (Saturates Gas Plant). | Date and Hour of Occurrence: 11/12/09 ~ 13:00 | Date and Hour of Discovery: 11/12/09 ~ 13:00 |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? NA | |
| By Whom? NA | Date and Hour: NA | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |

If a Watercourse was Impacted, Describe Fully.*
NA


Describe Cause of Problem and Remedial Action Taken.*

On 11/12/09 at ~ 13:00 contractors began to remove several sections of concrete slab in Unit #35 to excavate for new pipe support footers. After removing much of the concrete, the contractors found beads of Mercury under one of the section of concrete slab. All excavation has been stopped and the exposed soil and pieces of concrete have been roped off. Safety and Environmental Solutions has been contacted to delineate the mercury contamination. We will send a final report and sample analysis.

Describe Area Affected and Cleanup Action Taken.*

The Mercury was found under the northern most section of concrete slab in Unit #35 that was removed for new pipe support footers. All excavation has been stopped and the exposed soil and pieces of concrete have been roped off. Safety and Environmental Solutions has been contacted to delineate the mercury contamination. We will send a final report and sample analysis.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | |
|--|----------------------------------|-----------------------------------|
| Signature:  | OIL CONSERVATION DIVISION | |
| Printed Name: Aaron Strange | Approved by District Supervisor: | |
| Title: Sr. Environmental Technician | Approval Date: | Expiration Date: |
| E-mail Address: aaron.strange@hollycorp.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 11/13/09 | Phone: 575-703-5057 | |

* Attach Additional Sheets If Necessary

| | | | | | | |
|--|--|---|---|---|---|--------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number NMD045918517 | 2. Page 1 of 1 | 3. Emergency Response Phone 575-365-3365 | 4. Manifest Tracking Number 004323672 JJK | |
| 5. Generator's Name and Mailing Address Navajo Refining PO Box 159 Artesia, NM 88211 USA Generator's Phone: 575-746-3311 | | | Generator's Site Address (if different than mailing address) 501 E Main Artesia, NM 88210 USA | | | |
| 6. Transporter 1 Company Name HRW Industrial Services, LLC | | | U.S. EPA ID Number TXD000075507 | | | |
| 7. Transporter 2 Company Name Phillips Reclamation Services | | | U.S. EPA ID Number TXD074196338 | | | |
| 8. Designated Facility Name and Site Address PSC Environmental 405 Powell Avalon, TX 76623 USA Facility's Phone: | | | U.S. EPA ID Number TXD045544700 | | | |
| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
| | | No. | Type | | | |
| X | Waste Mercury Contaminated Soil, S, EPCG#72, UN2809, PG III (D009) | 009 | DM | 4,500 | P | D009 OUTS 302 H |
| 2. | | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |
| 14. Special Handling Instructions and Additional Information 1) 454938 SOUTH PLANT + MERCURY/CONT. SOIL | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | |
| Generator's/Offor's Printed/Typed Name ARON STRONG | | Signature <i>[Signature]</i> | | Month 12 | Day 17 | Year 09 |
| 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. | | Port of entry/exit: Date leaving U.S.: | | | | |
| 17. Transporter Acknowledgment of Receipt of Materials | | | | | | |
| Transporter 1 Printed/Typed Name COLE DOISEY | | Signature <i>[Signature]</i> | | Month 12 | Day 17 | Year 09 |
| Transporter 2 Printed/Typed Name JOHNNY DALLIE | | Signature <i>[Signature]</i> | | Month 12 | Day 29 | Year 09 |
| 18. Discrepancy | | | | | | |
| 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection ACTUAL WEIGHT 4089 LBS | | | | | | |
| 18b. Alternate Facility (or Generator) | | | U.S. EPA ID Number | | | |
| Facility's Phone: | | | | | | |
| 18c. Signature of Alternate Facility (or Generator) | | | Month Day Year | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | |
| 1. | 2. | 3. | 4. | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | |
| Printed/Typed Name SCOTT LEE | | Signature <i>[Signature]</i> | | Month 12 | Day 30 | Year 09 |

ALS Laboratory Group

Date: 25-Nov-09

Client: Navajo Refining Company
Project: South Plant Mercury Recap
Work Order: 0911550

Work Order Sample Summary

| <u>Lab Samp 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> |
|--------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 0911550-01 | NE Corner | Soil | | 11/19/2009 09:22 | 11/21/2009 08:35 | <input type="checkbox"/> |
| 0911550-02 | SE Corner | Soil | | 11/19/2009 09:25 | 11/21/2009 08:35 | <input type="checkbox"/> |
| 0911550-03 | SW Corner | Soil | | 11/19/2009 09:27 | 11/21/2009 08:35 | <input type="checkbox"/> |
| 0911550-04 | Bottom 18" | Soil | | 11/19/2009 09:30 | 11/21/2009 08:35 | <input type="checkbox"/> |
| 0911550-05 | NW Corner | Soil | | 11/19/2009 09:33 | 11/21/2009 08:35 | <input type="checkbox"/> |
| 0911550-06 | West Wall | Soil | | 11/19/2009 09:35 | 11/21/2009 08:35 | <input type="checkbox"/> |

ALS Laboratory Group

Date: 25-Nov-09

Client: Holly Energy Partners
 Project: South Plant Mercury Recap
 Sample ID: NE Corner
 Collection Date: 11/19/2009 09:22 AM

Work Order: 0911550
 Lab ID: 0911550-01
 Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|---------|------|--------------|-------------|-----------------|---|
| TPH DRO/ORO | | | | | | |
| TPH (Diesel Range) | 1,200 | | SW8015M | 42 mg/Kg | 25 | Prep Date: 11/23/2009 Analyst: KMB 11/25/2009 03:14 PM |
| Surr: 2-Fluorobiphenyl | 341 | S | 70-130 | %REC | 25 | 11/25/2009 03:14 PM |
| GASOLINE RANGE ORGANICS | | | | | | |
| Gasoline Range Organics | 110 | | SW8015 | 0.25 mg/Kg | 5 | Analyst: RKG 11/24/2009 03:50 PM |
| Surr: 4-Bromofluorobenzene | 125 | | 70-130 | %REC | 5 | 11/24/2009 03:50 PM |
| MERCURY | | | | | | |
| Mercury | 104,000 | | SW7471A | 1,780 µg/Kg | 500 | Prep Date: 11/23/2009 Analyst: JCJ 11/24/2009 10:54 AM |
| METALS | | | | | | |
| Arsenic | 4.15 | | SW6020 | 0.472 mg/Kg | 1 | Prep Date: 11/23/2009 Analyst: ALR 11/23/2009 11:51 PM |
| Barium | 103 | | | 0.472 mg/Kg | 1 | 11/23/2009 11:51 PM |
| Cadmium | 0.484 | | | 0.472 mg/Kg | 1 | 11/23/2009 11:51 PM |
| Chromium | 24.0 | | | 0.472 mg/Kg | 1 | 11/23/2009 11:51 PM |
| Lead | 50.8 | | | 0.472 mg/Kg | 1 | 11/23/2009 11:51 PM |
| Selenium | 1.45 | | | 0.472 mg/Kg | 1 | 11/23/2009 11:51 PM |
| Silver | ND | | | 0.472 mg/Kg | 1 | 11/23/2009 11:51 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 25-Nov-09

Client: Holly Energy Partners
 Project: South Plant Mercury Recap
 Sample ID: SE Corner
 Collection Date: 11/19/2009 09:25 AM

Work Order: 0911550
 Lab ID: 0911550-02
 Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|--------|------|----------------|-------|-----------------------|---------------------|
| TPH DRO/ORO | | | | | | |
| | | | SW8015M | | Prep Date: 11/23/2009 | Analyst: KMB |
| TPH (Diesel Range) | 630 | | 34 | mg/Kg | 20 | 11/24/2009 10:45 AM |
| Surr: 2-Fluorobiphenyl | 172 | S | 70-130 | %REC | 20 | 11/24/2009 10:45 AM |
| GASOLINE RANGE ORGANICS | | | | | | |
| | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | 97 | | 0.25 | mg/Kg | 5 | 11/24/2009 04:14 PM |
| Surr: 4-Bromofluorobenzene | 87.4 | | 70-130 | %REC | 5 | 11/24/2009 04:14 PM |
| MERCURY | | | | | | |
| | | | SW7471A | | Prep Date: 11/23/2009 | Analyst: JCJ |
| Mercury | 31,200 | | 356 | µg/Kg | 100 | 11/24/2009 10:56 AM |
| METALS | | | | | | |
| | | | SW6020 | | Prep Date: 11/23/2009 | Analyst: ALR |
| Arsenic | 3.05 | | 0.455 | mg/Kg | 1 | 11/23/2009 11:57 PM |
| Barium | 73.9 | | 0.455 | mg/Kg | 1 | 11/23/2009 11:57 PM |
| Cadmium | ND | | 0.455 | mg/Kg | 1 | 11/23/2009 11:57 PM |
| Chromium | 7.29 | | 0.455 | mg/Kg | 1 | 11/23/2009 11:57 PM |
| Lead | 28.0 | | 0.455 | mg/Kg | 1 | 11/23/2009 11:57 PM |
| Selenium | 0.605 | | 0.455 | mg/Kg | 1 | 11/23/2009 11:57 PM |
| Silver | ND | | 0.455 | mg/Kg | 1 | 11/23/2009 11:57 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 25-Nov-09

Client: Holly Energy Partners
 Project: South Plant Mercury Recap
 Sample ID: SW Corner
 Collection Date: 11/19/2009 09:27 AM

Work Order: 0911550
 Lab ID: 0911550-03
 Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|---------|------|--------------|-------------|-----------------|---|
| TPH DRO/ORO | | | | | | |
| TPH (Diesel Range) | 820 | | SW8015M | 34 mg/Kg | 20 | Prep Date: 11/23/2009 Analyst: KMB 11/24/2009 11:04 AM |
| Surr: 2-Fluorobiphenyl | 403 | S | 70-130 | %REC | 20 | 11/24/2009 11:04 AM |
| GASOLINE RANGE ORGANICS | | | | | | |
| Gasoline Range Organics | 1.6 | | SW8015 | 0.25 mg/Kg | 5 | Analyst: RKG 11/24/2009 04:39 PM |
| Surr: 4-Bromofluorobenzene | 72.6 | | 70-130 | %REC | 5 | 11/24/2009 04:39 PM |
| MERCURY | | | | | | |
| Mercury | 320,000 | | SW7471A | 3,530 µg/Kg | 1000 | Prep Date: 11/23/2009 Analyst: JCJ 11/24/2009 10:20 AM |
| METALS | | | | | | |
| Arsenic | 3.12 | | SW6020 | 0.476 mg/Kg | 1 | Prep Date: 11/23/2009 Analyst: ALR 11/24/2009 12:03 AM |
| Barium | 101 | | | 0.476 mg/Kg | 1 | 11/24/2009 12:03 AM |
| Cadmium | 2.75 | | | 0.476 mg/Kg | 1 | 11/24/2009 12:03 AM |
| Chromium | 13.2 | | | 0.476 mg/Kg | 1 | 11/24/2009 12:03 AM |
| Lead | 28.6 | | | 0.476 mg/Kg | 1 | 11/24/2009 12:03 AM |
| Selenium | 1.64 | | | 0.476 mg/Kg | 1 | 11/24/2009 12:03 AM |
| Silver | ND | | | 0.476 mg/Kg | 1 | 11/24/2009 12:03 AM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 25-Nov-09

Client: Holly Energy Partners
Project: South Plant Mercury Recap
Sample ID: Bottom 18"
Collection Date: 11/19/2009 09:30 AM

Work Order: 0911550
Lab ID: 0911550-04
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|---------|------|----------------|-------|-----------------------|---------------------|
| TPH DRO/ORO | | | SW8015M | | Prep Date: 11/23/2009 | Analyst: KMB |
| TPH (Diesel Range) | 4,700 | | 340 | mg/Kg | 200 | 11/25/2009 03:14 PM |
| Surr: 2-Fluorobiphenyl | 0 | S | 70-130 | %REC | 200 | 11/25/2009 03:14 PM |
| GASOLINE RANGE ORGANICS | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | 92 | | 0.25 | mg/Kg | 5 | 11/24/2009 05:31 PM |
| Surr: 4-Bromofluorobenzene | 100 | | 70-130 | %REC | 5 | 11/24/2009 05:31 PM |
| MERCURY | | | SW7471A | | Prep Date: 11/23/2009 | Analyst: JCJ |
| Mercury | 373,000 | | 3,400 | µg/Kg | 1000 | 11/24/2009 10:58 AM |
| METALS | | | SW6020 | | Prep Date: 11/23/2009 | Analyst: ALR |
| Arsenic | 1.97 | | 0.435 | mg/Kg | 1 | 11/24/2009 12:09 AM |
| Barium | 73.8 | | 0.435 | mg/Kg | 1 | 11/24/2009 12:09 AM |
| Cadmium | ND | | 0.435 | mg/Kg | 1 | 11/24/2009 12:09 AM |
| Chromium | 10.7 | | 0.435 | mg/Kg | 1 | 11/24/2009 12:09 AM |
| Lead | 19.7 | | 0.435 | mg/Kg | 1 | 11/24/2009 12:09 AM |
| Selenium | 0.902 | | 0.435 | mg/Kg | 1 | 11/24/2009 12:09 AM |
| Silver | ND | | 0.435 | mg/Kg | 1 | 11/24/2009 12:09 AM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 25-Nov-09

Client: Holly Energy Partners
 Project: South Plant Mercury Recap
 Sample ID: NW Corner
 Collection Date: 11/19/2009 09:33 AM

Work Order: 0911550
 Lab ID: 0911550-05
 Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|--------|------|--------------|-------|-----------------------|---------------------|
| TPH DRO/ORO | | | | | | |
| | | | SW8015M | | Prep Date: 11/23/2009 | Analyst: KMB |
| TPH (Diesel Range) | 1,300 | | 34 | mg/Kg | 20 | 11/24/2009 11:41 AM |
| Surr: 2-Fluorobiphenyl | 665 | S | 70-130 | %REC | 20 | 11/24/2009 11:41 AM |
| GASOLINE RANGE ORGANICS | | | | | | |
| | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | 90 | | 0.25 | mg/Kg | 5 | 11/24/2009 05:56 PM |
| Surr: 4-Bromofluorobenzene | 84.2 | | 70-130 | %REC | 5 | 11/24/2009 05:56 PM |
| MERCURY | | | | | | |
| | | | SW7471A | | Prep Date: 11/23/2009 | Analyst: JCJ |
| Mercury | 74,200 | | 707 | µg/Kg | 200 | 11/24/2009 11:00 AM |
| METALS | | | | | | |
| | | | SW6020 | | Prep Date: 11/23/2009 | Analyst: ALR |
| Arsenic | 4.37 | | 0.450 | mg/Kg | 1 | 11/24/2009 12:15 AM |
| Barium | 146 | | 0.450 | mg/Kg | 1 | 11/24/2009 12:15 AM |
| Cadmium | 0.501 | | 0.450 | mg/Kg | 1 | 11/24/2009 12:15 AM |
| Chromium | 27.0 | | 0.450 | mg/Kg | 1 | 11/24/2009 12:15 AM |
| Lead | 63.7 | | 0.450 | mg/Kg | 1 | 11/24/2009 12:15 AM |
| Selenium | 1.52 | | 0.450 | mg/Kg | 1 | 11/24/2009 12:15 AM |
| Silver | ND | | 0.450 | mg/Kg | 1 | 11/24/2009 12:15 AM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 25-Nov-09

Client: Holly Energy Partners
Project: South Plant Mercury Recap
Sample ID: West Wall
Collection Date: 11/19/2009 09:35 AM

Work Order: 0911550
Lab ID: 0911550-06
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|--------|------|----------------|-------|-----------------|------------------------------------|
| TPH DRO/ORO | | | SW8015M | | | Prep Date: 11/23/2009 Analyst: KMB |
| TPH (Diesel Range) | 2,400 | | 170 | mg/Kg | 100 | 11/25/2009 03:33 PM |
| Surr: 2-Fluorobiphenyl | 0 | S | 70-130 | %REC | 100 | 11/25/2009 03:33 PM |
| GASOLINE RANGE ORGANICS | | | SW8015 | | | Analyst: RKG |
| Gasoline Range Organics | 0.82 | | 0.25 | mg/Kg | 5 | 11/24/2009 02:56 PM |
| Surr: 4-Bromofluorobenzene | 70.2 | | 70-130 | %REC | 5 | 11/24/2009 02:56 PM |
| MERCURY | | | SW7471A | | | Prep Date: 11/23/2009 Analyst: JCJ |
| Mercury | 20,600 | | 354 | µg/Kg | 100 | 11/24/2009 10:31 AM |
| METALS | | | SW6020 | | | Prep Date: 11/23/2009 Analyst: ALR |
| Arsenic | 2.95 | | 0.476 | mg/Kg | 1 | 11/24/2009 12:22 AM |
| Barium | 124 | | 0.476 | mg/Kg | 1 | 11/24/2009 12:22 AM |
| Cadmium | ND | | 0.476 | mg/Kg | 1 | 11/24/2009 12:22 AM |
| Chromium | 6.88 | | 0.476 | mg/Kg | 1 | 11/24/2009 12:22 AM |
| Lead | 22.4 | | 0.476 | mg/Kg | 1 | 11/24/2009 12:22 AM |
| Selenium | 0.538 | | 0.476 | mg/Kg | 1 | 11/24/2009 12:22 AM |
| Silver | ND | | 0.476 | mg/Kg | 1 | 11/24/2009 12:22 AM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 17-Dec-09

Client: Holly Energy Partners

Project: South Plant

Work Order: 0912072

Sample ID: Composite Drum

Lab ID: 0912072-01

Collection Date: 12/2/2009 10:00 AM

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|-----------|------|--------------|-------|-----------------------|---------------------|
| TPH DRO/ORO | | | | | | |
| TPH (Diesel Range) | 3,000 | | SW8015M | | Prep Date: 12/7/2009 | Analyst: KMB |
| Surr: 2-Fluorobiphenyl | 0 | S | 130 mg/Kg | | 50 | 12/15/2009 10:32 AM |
| | | | 70-130 %REC | | 50 | 12/15/2009 10:32 AM |
| GASOLINE RANGE ORGANICS | | | | | | |
| Gasoline Range Organics | 98 | | SW8015 | | | Analyst: RKG |
| Surr: 4-Bromofluorobenzene | 182 | S | 0.25 mg/Kg | | 5 | 12/15/2009 01:04 PM |
| | | | 70-130 %REC | | 5 | 12/15/2009 01:04 PM |
| MERCURY | | | | | | |
| Mercury | 3,550,000 | | SW7471A | | Prep Date: 12/11/2009 | Analyst: JCJ |
| | | | 34,200 µg/Kg | | 10000 | 12/11/2009 07:04 PM |
| METALS | | | | | | |
| Arsenic | 5.65 | | SW6020 | | Prep Date: 12/4/2009 | Analyst: SKS |
| Barium | 124 | | 0.446 mg/Kg | | 1 | 12/4/2009 07:48 PM |
| Cadmium | 1.91 | | 0.446 mg/Kg | | 1 | 12/4/2009 07:48 PM |
| Chromium | 58.5 | | 0.446 mg/Kg | | 1 | 12/4/2009 07:48 PM |
| Lead | 38.3 | | 0.446 mg/Kg | | 1 | 12/4/2009 07:48 PM |
| Selenium | 3.05 | | 0.446 mg/Kg | | 1 | 12/4/2009 07:48 PM |
| Silver | ND | | 0.446 mg/Kg | | 1 | 12/4/2009 07:48 PM |
| SEMIVOLATILES | | | | | | |
| 1,2,4-Trichlorobenzene | ND | | SW8270 | | Prep Date: 12/8/2009 | Analyst: ACN |
| 1,2-Dichlorobenzene | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 1,3-Dichlorobenzene | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 1,4-Dichlorobenzene | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 2,4,5-Trichlorophenol | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 2,4,6-Trichlorophenol | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 2,4-Dichlorophenol | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 2,4-Dimethylphenol | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 2,4-Dinitrophenol | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 2,4-Dinitrotoluene | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 2,6-Dinitrotoluene | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 2-Chloronaphthalene | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 2-Chlorophenol | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 2-Methylnaphthalene | 26,000 | | 1,300 µg/Kg | | 5 | 12/9/2009 03:15 AM |
| 2-Methylphenol | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 2-Nitroaniline | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 2-Nitrophenol | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 3&4-Methylphenol | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 3,3'-Dichlorobenzidine | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 3-Nitroaniline | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |
| 4,6-Dinitro-2-methylphenol | ND | | 250 µg/Kg | | 1 | 12/12/2009 11:18 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 17-Dec-09

Client: Holly Energy Partners

Project: South Plant

Work Order: 0912072

Sample ID: Composite Drum

Lab ID: 0912072-01

Collection Date: 12/2/2009 10:00 AM

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|-----------------------------|--------|------|--------------|-------|-----------------|---------------------|
| 4-Bromophenyl phenyl ether | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| 4-Chloro-3-methylphenol | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| 4-Chloroaniline | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| 4-Chlorophenyl phenyl ether | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| 4-Nitroaniline | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| 4-Nitrophenol | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Acenaphthene | 360 | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Acenaphthylene | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Anthracene | 350 | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Benz(a)anthracene | 400 | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Benzo(a)pyrene | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Benzo(b)fluoranthene | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Benzo(g,h,i)perylene | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Benzo(k)fluoranthene | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Bis(2-chloroethoxy)methane | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Bis(2-chloroethyl)ether | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Bis(2-chloroisopropyl)ether | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Bis(2-ethylhexyl)phthalate | 29,000 | | 1,300 | µg/Kg | 5 | 12/9/2009 03:15 AM |
| Butyl benzyl phthalate | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Carbazole | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Chrysene | 770 | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Di-n-butyl phthalate | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Di-n-octyl phthalate | 450 | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Dibenz(a,h)anthracene | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Dibenzofuran | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Diethyl phthalate | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Dimethyl phthalate | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Fluoranthene | 530 | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Fluorene | 780 | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Hexachlorobenzene | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Hexachlorobutadiene | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Hexachlorocyclopentadiene | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Hexachloroethane | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Indeno(1,2,3-cd)pyrene | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Isophorone | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| N-Nitrosodi-n-propylamine | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| N-Nitrosodiphenylamine | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Naphthalene | 7,600 | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Nitrobenzene | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Pentachlorophenol | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 17-Dec-09

Client: Holly Energy Partners

Project: South Plant

Work Order: 0912072

Sample ID: Composite Drum

Lab ID: 0912072-01

Collection Date: 12/2/2009 10:00 AM

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|----------------------------|--------|------|--------------|-------|-----------------|---------------------|
| Phenanthrene | 5,000 | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Phenol | ND | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Pyrene | 1,700 | | 250 | µg/Kg | 1 | 12/12/2009 11:18 PM |
| Surr: 2,4,6-Tribromophenol | 93.9 | | 36-126 | %REC | 1 | 12/12/2009 11:18 PM |
| Surr: 2,4,6-Tribromophenol | 73.8 | | 36-126 | %REC | 5 | 12/9/2009 03:15 AM |
| Surr: 2-Fluorobiphenyl | 82.5 | | 43-125 | %REC | 1 | 12/12/2009 11:18 PM |
| Surr: 2-Fluorobiphenyl | 81.9 | | 43-125 | %REC | 5 | 12/9/2009 03:15 AM |
| Surr: 2-Fluorophenol | 77.2 | | 37-125 | %REC | 1 | 12/12/2009 11:18 PM |
| Surr: 2-Fluorophenol | 65.8 | | 37-125 | %REC | 5 | 12/9/2009 03:15 AM |
| Surr: 4-Terphenyl-d14 | 78.5 | | 32-125 | %REC | 5 | 12/9/2009 03:15 AM |
| Surr: 4-Terphenyl-d14 | 85.1 | | 32-125 | %REC | 1 | 12/12/2009 11:18 PM |
| Surr: Nitrobenzene-d5 | 71.1 | | 37-125 | %REC | 5 | 12/9/2009 03:15 AM |
| Surr: Nitrobenzene-d5 | 72.6 | | 37-125 | %REC | 1 | 12/12/2009 11:18 PM |
| Surr: Phenol-d6 | 84.0 | | 40-125 | %REC | 1 | 12/12/2009 11:18 PM |
| Surr: Phenol-d6 | 72.1 | | 40-125 | %REC | 5 | 12/9/2009 03:15 AM |

TCL VOLATILES

SW8260

Analyst: WLR

| | | | | | | |
|---------------------------|-------|--|-------|-------|-----|---------------------|
| 1,1,1-Trichloroethane | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| 1,1,2,2-Tetrachloroethane | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| 1,1,2-Trichloroethane | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| 1,1-Dichloroethane | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| 1,1-Dichloroethene | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| 1,2-Dichloroethane | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| 1,2-Dichloropropane | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| 2-Butanone | ND | | 0.025 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| 2-Hexanone | ND | | 0.025 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| 4-Methyl-2-pentanone | ND | | 0.025 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Acetone | 0.087 | | 0.062 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Benzene | 0.11 | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Bromodichloromethane | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Bromoform | ND | | 0.025 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Bromomethane | ND | | 0.025 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Carbon disulfide | ND | | 0.025 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Carbon tetrachloride | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Chlorobenzene | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Chloroethane | ND | | 0.025 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Chloroform | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Chloromethane | ND | | 0.025 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| cis-1,2-Dichloroethene | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| cis-1,3-Dichloropropene | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Dibromochloromethane | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 17-Dec-09

Client: Holly Energy Partners
Project: South Plant
Sample ID: Composite Drum
Collection Date: 12/2/2009 10:00 AM

Work Order: 0912072
Lab ID: 0912072-01
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|-----------------------------|----------|------|--------------|----------|-----------------|---------------------|
| Dichloromethane | ND | | 0.025 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Ethylbenzene | 0.12 | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Methyl tert-butyl ether | ND | | | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Styrene | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Tetrachloroethene | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Toluene | 0.15 | | 0.012 | mg/Kg | 2.5 | 12/8/2009 09:21 PM |
| trans-1,2-Dichloroethene | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| trans-1,3-Dichloropropene | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Trichloroethene | ND | | 0.012 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Vinyl chloride | ND | | 0.0050 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Xylenes, Total | 0.90 | | 0.038 | mg/Kg | 2.5 | 12/13/2009 05:00 AM |
| Surr: 1,2-Dichloroethane-d4 | 112 | | 70-128 | %REC | 2.5 | 12/13/2009 05:00 AM |
| Surr: 1,2-Dichloroethane-d4 | 94.8 | | 70-128 | %REC | 2.5 | 12/8/2009 09:21 PM |
| Surr: 4-Bromofluorobenzene | 98.1 | | 73-126 | %REC | 2.5 | 12/8/2009 09:21 PM |
| Surr: 4-Bromofluorobenzene | 116 | | 73-126 | %REC | 2.5 | 12/13/2009 05:00 AM |
| Surr: Dibromofluoromethane | 90.9 | | 71-128 | %REC | 2.5 | 12/8/2009 09:21 PM |
| Surr: Dibromofluoromethane | 99.1 | | 71-128 | %REC | 2.5 | 12/13/2009 05:00 AM |
| Surr: Toluene-d8 | 101 | | 73-127 | %REC | 2.5 | 12/8/2009 09:21 PM |
| Surr: Toluene-d8 | 104 | | 73-127 | %REC | 2.5 | 12/13/2009 05:00 AM |
| REACTIVE CYANIDE | | | SW-846 | | | Analyst: HN |
| Reactive Cyanide | ND | | 40.0 | mg/Kg | 1 | 12/4/2009 11:45 AM |
| REACTIVE SULFIDE | | | SW-846 | | | Analyst: HN |
| Reactive Sulfide | ND | | 40.0 | mg/Kg | 1 | 12/4/2009 11:45 AM |
| IGNITABILITY | | | SW1030 | | | Analyst: TDW |
| Ignitability, Solid | Negative | | | no unit | 1 | 12/4/2009 10:00 AM |
| PH | | | SW9045B | | | Analyst: TDW |
| pH | 8.82 | | 0.100 | pH Units | 1 | 12/10/2009 11:00 AM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 17-Dec-09

Client: Holly Energy Partners

Project: South Plant

Work Order: 0912072

Sample ID: Drum 2 of 9

Lab ID: 0912072-02

Collection Date: 12/2/2009 10:15 AM

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|-----------|------|--------------|---------------|-----------------|--|
| TPH DRO/ORO | | | | | | |
| TPH (Diesel Range) | 890 | | SW8015M | 34 mg/Kg | 20 | Analyst: KMB 12/15/2009 10:51 AM |
| Surr: 2-Fluorobiphenyl | 0 | S | 70-130 | %REC | 20 | 12/15/2009 10:51 AM |
| GASOLINE RANGE ORGANICS | | | | | | |
| Gasoline Range Organics | 23 | | SW8015 | 0.25 mg/Kg | 5 | Analyst: RKG 12/7/2009 01:04 PM |
| Surr: 4-Bromofluorobenzene | 127 | | 70-130 | %REC | 5 | 12/7/2009 01:04 PM |
| MERCURY | | | | | | |
| Mercury | 7,410,000 | | SW7471A | 173,000 µg/Kg | 50000 | Prep Date: 12/15/2009 Analyst: JCJ 12/15/2009 04:47 PM |
| METALS | | | | | | |
| Arsenic | 3.67 | | SW6020 | 0.435 mg/Kg | 1 | Prep Date: 12/4/2009 Analyst: SKS 12/7/2009 06:17 PM |
| Barium | 107 | | | 0.435 mg/Kg | 1 | 12/7/2009 06:17 PM |
| Cadmium | ND | | | 0.435 mg/Kg | 1 | 12/7/2009 06:17 PM |
| Chromium | 19.3 | | | 0.435 mg/Kg | 1 | 12/7/2009 06:17 PM |
| Lead | 33.5 | | | 0.435 mg/Kg | 1 | 12/7/2009 06:17 PM |
| Selenium | 0.711 | | | 0.435 mg/Kg | 1 | 12/7/2009 06:17 PM |
| Silver | ND | | | 0.435 mg/Kg | 1 | 12/7/2009 06:17 PM |
| SEMIVOLATILES | | | | | | |
| 1,2,4-Trichlorobenzene | ND | | SW8270 | 170 µg/Kg | 1 | Prep Date: 12/8/2009 Analyst: ACN 12/13/2009 12:27 AM |
| 1,2-Dichlorobenzene | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 1,3-Dichlorobenzene | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 1,4-Dichlorobenzene | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2,4,5-Trichlorophenol | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2,4,6-Trichlorophenol | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2,4-Dichlorophenol | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2,4-Dimethylphenol | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2,4-Dinitrophenol | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2,4-Dinitrotoluene | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2,6-Dinitrotoluene | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2-Chloronaphthalene | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2-Chlorophenol | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2-Methylnaphthalene | 2,000 | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2-Methylphenol | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2-Nitroaniline | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 2-Nitrophenol | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 3&4-Methylphenol | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 3,3'-Dichlorobenzidine | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 3-Nitroaniline | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |
| 4,6-Dinitro-2-methylphenol | ND | | | 170 µg/Kg | 1 | 12/13/2009 12:27 AM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 17-Dec-09

Client: Holly Energy Partners

Project: South Plant

Work Order: 0912072

Sample ID: Drum 2 of 9

Lab ID: 0912072-02

Collection Date: 12/2/2009 10:15 AM

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|-----------------------------|--------|------|--------------|-------|-----------------|---------------------|
| 4-Bromophenyl phenyl ether | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| 4-Chloro-3-methylphenol | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| 4-Chloroaniline | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| 4-Chlorophenyl phenyl ether | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| 4-Nitroaniline | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| 4-Nitrophenol | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Acenaphthene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Acenaphthylene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Anthracene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Benz(a)anthracene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Benzo(a)pyrene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Benzo(b)fluoranthene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Benzo(g,h,i)perylene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Benzo(k)fluoranthene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Bis(2-chloroethoxy)methane | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Bis(2-chloroethyl)ether | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Bis(2-chloroisopropyl)ether | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Bis(2-ethylhexyl)phthalate | 3,000 | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Butyl benzyl phthalate | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Carbazole | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Chrysene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Di-n-butyl phthalate | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Di-n-octyl phthalate | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Dibenz(a,h)anthracene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Dibenzofuran | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Diethyl phthalate | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Dimethyl phthalate | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Fluoranthene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Fluorene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Hexachlorobenzene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Hexachlorobutadiene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Hexachlorocyclopentadiene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Hexachloroethane | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Indeno(1,2,3-cd)pyrene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Isophorone | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| N-Nitrosodi-n-propylamine | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| N-Nitrosodiphenylamine | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Naphthalene | 180 | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Nitrobenzene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Pentachlorophenol | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 17-Dec-09

Client: Holly Energy Partners
Project: South Plant
Sample ID: Drum 2 of 9
Collection Date: 12/2/2009 10:15 AM

Work Order: 0912072
Lab ID: 0912072-02
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|----------------------------|--------|------|---------------|---------------------|-----------------|---------------------|
| Phenanthrene | 380 | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Phenol | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Pyrene | ND | | 170 | µg/Kg | 1 | 12/13/2009 12:27 AM |
| Surr: 2,4,6-Tribromophenol | 91.3 | | 36-126 | %REC | 1 | 12/13/2009 12:27 AM |
| Surr: 2-Fluorobiphenyl | 65.5 | | 43-125 | %REC | 1 | 12/13/2009 12:27 AM |
| Surr: 2-Fluorophenol | 45.2 | | 37-125 | %REC | 1 | 12/13/2009 12:27 AM |
| Surr: 4-Terphenyl-d14 | 80.4 | | 32-125 | %REC | 1 | 12/13/2009 12:27 AM |
| Surr: Nitrobenzene-d5 | 50.3 | | 37-125 | %REC | 1 | 12/13/2009 12:27 AM |
| Surr: Phenol-d6 | 57.0 | | 40-125 | %REC | 1 | 12/13/2009 12:27 AM |
| TCL VOLATILES | | | SW8260 | Analyst: RKG | | |
| 1,1,1-Trichloroethane | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| 1,1,2,2-Tetrachloroethane | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| 1,1,2-Trichloroethane | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| 1,1-Dichloroethane | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| 1,1-Dichloroethene | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| 1,2-Dichloroethane | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| 1,2-Dichloropropane | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| 2-Butanone | 0.033 | | 0.025 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| 2-Hexanone | ND | | 0.025 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| 4-Methyl-2-pentanone | ND | | 0.025 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Acetone | ND | | 0.062 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Benzene | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Bromodichloromethane | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Bromoform | ND | | 0.025 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Bromomethane | ND | | 0.025 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Carbon disulfide | ND | | 0.025 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Carbon tetrachloride | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Chlorobenzene | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Chloroethane | ND | | 0.025 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Chloroform | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Chloromethane | ND | | 0.025 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| cis-1,2-Dichloroethene | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| cis-1,3-Dichloropropene | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Dibromochloromethane | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Dichloromethane | ND | | 0.025 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Ethylbenzene | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Methyl tert-butyl ether | ND | | | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Styrene | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Tetrachloroethene | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Toluene | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 17-Dec-09

Client: Holly Energy Partners
Project: South Plant
Sample ID: Drum 2 of 9
Collection Date: 12/2/2009 10:15 AM

Work Order: 0912072
Lab ID: 0912072-02
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|-----------------------------|-------------|------|----------------|--------------|-----------------|---------------------|
| trans-1,2-Dichloroethene | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| trans-1,3-Dichloropropene | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Trichloroethene | ND | | 0.012 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Vinyl chloride | ND | | 0.0050 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Xylenes, Total | 0.27 | | 0.038 | mg/Kg | 2.5 | 12/11/2009 08:38 PM |
| Surr: 1,2-Dichloroethane-d4 | 104 | | 70-128 | %REC | 2.5 | 12/11/2009 08:38 PM |
| Surr: 4-Bromofluorobenzene | 95.1 | | 73-126 | %REC | 2.5 | 12/11/2009 08:38 PM |
| Surr: Dibromofluoromethane | 95.3 | | 71-128 | %REC | 2.5 | 12/11/2009 08:38 PM |
| Surr: Toluene-d8 | 104 | | 73-127 | %REC | 2.5 | 12/11/2009 08:38 PM |
| REACTIVE CYANIDE | | | SW-846 | | | Analyst: HN |
| Reactive Cyanide | ND | | 40.0 | mg/Kg | 1 | 12/4/2009 11:45 AM |
| REACTIVE SULFIDE | | | SW-846 | | | Analyst: HN |
| Reactive Sulfide | ND | | 40.0 | mg/Kg | 1 | 12/4/2009 11:45 AM |
| IGNITABILITY | | | SW1030 | | | Analyst: TDW |
| Ignitability, Solid | Negative | | | no unit | 1 | 12/4/2009 10:00 AM |
| PH | | | SW9045B | | | Analyst: TDW |
| pH | 7.98 | | 0.100 | pH Units | 1 | 12/10/2009 11:00 AM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 17-Dec-09

Client: Holly Energy Partners

Project: South Plant

Work Order: 0912072

Sample ID: Drum 9 of 9

Lab ID: 0912072-03

Collection Date: 12/2/2009 10:30 AM

Matrix: WATER

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------|---------|------|--------------|---------------|-----------------|--|
| TPH DRO/ORO | | | | | | |
| TPH (Diesel Range) | 1.4 | | SW8015M | 0.050 mg/L | 1 | Analyst: KMB 12/7/2009 02:47 PM |
| Surr: 2-Fluorobiphenyl | 115 | | 70-130 %REC | | 1 | 12/7/2009 02:47 PM |
| GASOLINE RANGE ORGANICS | | | | | | |
| Gasoline Range Organics | ND | | SW8015 | 0.500 mg/L | 10 | Analyst: RKG 12/9/2009 02:47 PM |
| Surr: 4-Bromofluorobenzene | 90.3 | | 70-130 %REC | | 10 | 12/9/2009 02:47 PM |
| MERCURY | | | | | | |
| Mercury | 0.00303 | | SW7470 | 0.000200 mg/L | 1 | Prep Date: 12/8/2009 Analyst: JCJ 12/8/2009 03:29 PM |
| METALS | | | | | | |
| Arsenic | ND | | SW6020 | 0.00500 mg/L | 1 | Prep Date: 12/4/2009 Analyst: ALR 12/4/2009 09:57 PM |
| Barium | ND | | | 0.00500 mg/L | 1 | 12/4/2009 09:57 PM |
| Cadmium | ND | | | 0.00200 mg/L | 1 | 12/4/2009 09:57 PM |
| Chromium | ND | | | 0.00500 mg/L | 1 | 12/4/2009 09:57 PM |
| Lead | 0.0101 | | | 0.00500 mg/L | 1 | 12/4/2009 09:57 PM |
| Selenium | ND | | | 0.00500 mg/L | 1 | 12/4/2009 09:57 PM |
| Silver | ND | | | 0.00500 mg/L | 1 | 12/4/2009 09:57 PM |
| SEMIVOLATILES | | | | | | |
| 1,2,4-Trichlorobenzene | ND | | SW8270 | 0.0050 mg/L | 1 | Prep Date: 12/8/2009 Analyst: ACN 12/8/2009 10:23 PM |
| 1,2-Dichlorobenzene | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 1,3-Dichlorobenzene | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 1,4-Dichlorobenzene | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2,4,5-Trichlorophenol | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2,4,6-Trichlorophenol | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2,4-Dichlorophenol | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2,4-Dimethylphenol | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2,4-Dinitrophenol | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2,4-Dinitrotoluene | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2,6-Dinitrotoluene | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2-Chloronaphthalene | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2-Chlorophenol | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2-Methylnaphthalene | 0.013 | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2-Methylphenol | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2-Nitroaniline | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 2-Nitrophenol | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 3&4-Methylphenol | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 3,3'-Dichlorobenzidine | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 3-Nitroaniline | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |
| 4,6-Dinitro-2-methylphenol | ND | | | 0.0050 mg/L | 1 | 12/8/2009 10:23 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 17-Dec-09

Client: Holly Energy Partners

Project: South Plant

Work Order: 0912072

Sample ID: Drum 9 of 9

Lab ID: 0912072-03

Collection Date: 12/2/2009 10:30 AM

Matrix: WATER

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|-----------------------------|--------|------|--------------|-------|-----------------|--------------------|
| 4-Bromophenyl phenyl ether | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| 4-Chloro-3-methylphenol | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| 4-Chloroaniline | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| 4-Chlorophenyl phenyl ether | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| 4-Nitroaniline | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| 4-Nitrophenol | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Acenaphthene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Acenaphthylene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Anthracene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Benz(a)anthracene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Benzo(a)pyrene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Benzo(b)fluoranthene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Benzo(g,h,i)perylene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Benzo(k)fluoranthene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Bis(2-chloroethoxy)methane | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Bis(2-chloroethyl)ether | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Bis(2-chloroisopropyl)ether | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Bis(2-ethylhexyl)phthalate | 0.010 | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Butyl benzyl phthalate | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Carbazole | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Chrysene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Di-n-butyl phthalate | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Di-n-octyl phthalate | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Dibenz(a,h)anthracene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Dibenzofuran | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Diethyl phthalate | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Dimethyl phthalate | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Fluoranthene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Fluorene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Hexachlorobenzene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Hexachlorobutadiene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Hexachlorocyclopentadiene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Hexachloroethane | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Indeno(1,2,3-cd)pyrene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Isophorone | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| N-Nitrosodi-n-propylamine | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| N-Nitrosodiphenylamine | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Naphthalene | 0.0061 | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Nitrobenzene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Pentachlorophenol | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 17-Dec-09

Client: Holly Energy Partners

Project: South Plant

Work Order: 0912072

Sample ID: Drum 9 of 9

Lab ID: 0912072-03

Collection Date: 12/2/2009 10:30 AM

Matrix: WATER

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|----------------------------|--------|------|---------------|-------|-----------------|--------------------|
| Phenanthrene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Phenol | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Pyrene | ND | | 0.0050 | mg/L | 1 | 12/8/2009 10:23 PM |
| Surr: 2,4,6-Tribromophenol | 74.8 | | 42-124 | %REC | 1 | 12/8/2009 10:23 PM |
| Surr: 2-Fluorobiphenyl | 75.8 | | 48-120 | %REC | 1 | 12/8/2009 10:23 PM |
| Surr: 2-Fluorophenol | 67.1 | | 20-120 | %REC | 1 | 12/8/2009 10:23 PM |
| Surr: 4-Terphenyl-d14 | 74.4 | | 51-135 | %REC | 1 | 12/8/2009 10:23 PM |
| Surr: Nitrobenzene-d5 | 70.5 | | 41-120 | %REC | 1 | 12/8/2009 10:23 PM |
| Surr: Phenol-d6 | 71.0 | | 20-120 | %REC | 1 | 12/8/2009 10:23 PM |
| TCL VOLATILES | | | SW8260 | | Analyst: PC | |
| 1,1,1-Trichloroethane | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| 1,1,2,2-Tetrachloroethane | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| 1,1,2-Trichloroethane | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| 1,1-Dichloroethane | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| 1,1-Dichloroethene | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| 1,2-Dichloroethane | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| 1,2-Dichloropropane | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| 2-Butanone | ND | | 0.50 | mg/L | 50 | 12/7/2009 05:49 PM |
| 2-Hexanone | ND | | 0.50 | mg/L | 50 | 12/7/2009 05:49 PM |
| 4-Methyl-2-pentanone | ND | | 0.50 | mg/L | 50 | 12/7/2009 05:49 PM |
| Acetone | ND | | 0.50 | mg/L | 50 | 12/7/2009 05:49 PM |
| Benzene | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Bromodichloromethane | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Bromoform | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Bromomethane | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Carbon disulfide | ND | | 0.50 | mg/L | 50 | 12/7/2009 05:49 PM |
| Carbon tetrachloride | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Chlorobenzene | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Chloroethane | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Chloroform | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Chloromethane | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| cis-1,2-Dichloroethene | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| cis-1,3-Dichloropropene | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Dibromochloromethane | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Dichloromethane | ND | | 0.50 | mg/L | 50 | 12/7/2009 05:49 PM |
| Ethylbenzene | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Methyl tert-butyl ether | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Styrene | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Tetrachloroethene | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Toluene | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 17-Dec-09

Client: Holly Energy Partners

Project: South Plant

Work Order: 0912072

Sample ID: Drum 9 of 9

Lab ID: 0912072-03

Collection Date: 12/2/2009 10:30 AM

Matrix: WATER

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|-----------------------------|--------|------|-----------------|-------|--------------------|--------------------|
| trans-1,2-Dichloroethene | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| trans-1,3-Dichloropropene | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Trichloroethene | ND | | 0.25 | mg/L | 50 | 12/7/2009 05:49 PM |
| Vinyl chloride | ND | | 0.10 | mg/L | 50 | 12/7/2009 05:49 PM |
| Xylenes, Total | ND | | 0.75 | mg/L | 50 | 12/7/2009 05:49 PM |
| Surr: 1,2-Dichloroethane-d4 | 111 | | 70-125 | %REC | 50 | 12/7/2009 05:49 PM |
| Surr: 4-Bromofluorobenzene | 97.7 | | 72-125 | %REC | 50 | 12/7/2009 05:49 PM |
| Surr: Dibromofluoromethane | 95.9 | | 71-125 | %REC | 50 | 12/7/2009 05:49 PM |
| Surr: Toluene-d8 | 95.5 | | 75-125 | %REC | 50 | 12/7/2009 05:49 PM |

Note: See Qualifiers Page for a list of qualifiers and their explanation.

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Page 1 of 1

| Customer Information | | | | Project Information | | | | ALS Project Manager: ALS Work Order #: DA1107 | | | | | | | | | | | | | | | | |
|----------------------|--------------------|---------|------|-------------------------|-------|-----------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------|
| Purchase Order | | | | Project Name | | | | Parameter/Method Request for Analysis | | | | | | | | | | | | | | | | |
| Work Order | | | | South Plant Hg Release | | | | VOC (8260) TCL | | | | | | | | | | | | | | | | |
| Company Name | | | | Navajo Refining Company | | | | GRO (8015M) | | | | | | | | | | | | | | | | |
| Send Report To: | | | | Darrell Moore | | | | DRO (8015M) | | | | | | | | | | | | | | | | |
| Address | | | | P.O. Box 159 | | | | SVOC (8270) TCL | | | | | | | | | | | | | | | | |
| City/State/Zip | | | | Artesia, NM 88211 | | | | Total Metals (6020/7000) RCRA 8 | | | | | | | | | | | | | | | | |
| Phone | | | | (505) 748-3311 | | | | RCI Profile | | | | | | | | | | | | | | | | |
| Fax | | | | (505) 746-5421 | | | | | | | | | | | | | | | | | | | | |
| E-Mail Address | | | | dgboyer@SESI-NM.com | | | | | | | | | | | | | | | | | | | | |
| No. | Sample Description | Date | Time | Matrix | Pres. | # Bottles | Check Box | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Hold |
| 1 | Composite Drum | 12/2/09 | 1000 | Soil | | 4 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2 | Drum 2 of 9 | 12/2/09 | 1015 | Soil | | 4 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3 | Drum 9 of 9 | 12/2/09 | 1030 | H ₂ O | 1 + 2 | 11 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4 | Temp Blank | | | H ₂ O | | | | | | | | | | | | | | | | | | | | |
| 5 | Trip Blank | | | H ₂ O | 1 | 2 | | ✓ | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | |

Relinquished by: **Isaac Kincaid**

Relinquished by: **2--**

Sample(s) Please, Print & Sign

Shipment Method: **Fed Ex**

Time: **1400**

Date: **12/2/09**

Received by: **1730**

Time: **09:00**

Date: **12/2/09**

Notes: 10 Day TAI

Results Due Date: 12/16/09

QC Packages: ☒ Level II Std OC ☐ Level III Std OC ☐ Level IV SWBAT/CLP ☐ Other

Logged by (Laboratory): **1-HOI** **2-HNO₃** **3-H₂SO₄** **4-NaOH** **5-Na₂SO₄** **6-NaHSO₃** **7-Other** **8-4 TC** **9-5035**

Preservative Key: **1-HOI** **2-HNO₃** **3-H₂SO₄** **4-NaOH** **5-Na₂SO₄** **6-NaHSO₃** **7-Other** **8-4 TC** **9-5035**

Note:

- 1) Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.
- 2) Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.
- 3) The Chain of Custody is a legal document. All information must be completed accurately.

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Oil Conservation Division
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Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

| | | | |
|-----------------|-------------------------|---------------|--------------------|
| Name of Company | Navajo Refining Company | Contact | Darrell Moore |
| Address | 501 E Main Artesia, NM | Telephone No. | 575-746-5281 |
| Facility Name | Artesia Plant | Facility Type | Petroleum Refinery |

| | | |
|---------------|---------------|-----------|
| Surface Owner | Mineral Owner | Lease No. |
|---------------|---------------|-----------|

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | | | | |
|-----------------------------|---|---|--------------------------|----------------------------|--------------------------|
| Type of Release | Fire | Volume of Release | NA | Volume Recovered | NA |
| Source of Release | North Plant Flare | Date and Hour of Occurrence | January 26, 2009 1:00 am | Date and Hour of Discovery | January 26, 2009 1:00 am |
| Was Immediate Notice Given? | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? | | | |
| By Whom? | Date and Hour | | | | |
| Was a Watercourse Reached? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | | | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

North Plant Flare "burped" hydrocarbon and started a small fire just north of the flare on Navajo property. The fire was put out immediately by Navajo personnel by simply stomping on the fire. Navajo's fire department was not even mobilized.

Describe Area Affected and Cleanup Action Taken.*

Area effected was north of Eagle Draw between Freeman Street and Eagle Draw. No clean up action was required.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|--|----------------------------------|------------------|-----------------------------------|
| Signature: <i>Darrell Moore</i> | OIL CONSERVATION DIVISION | | |
| Printed Name: Darrell Moore | Approved by District Supervisor: | | |
| Title: Environmental Manager for Water and Waste | Approval Date: | Expiration Date: | |
| E-mail Address: Darrell.moore@hollycorp.com | Conditions of Approval: | | Attached <input type="checkbox"/> |
| Date: January 26, 2009 746-5281 | Phone: 575- | | |

* Attach Additional Sheets If Necessary

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Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

| | | | |
|-----------------|---------------------------------|---------------|--------------------|
| Name of Company | Navajo Refining Co-Lea Refining | Contact | Darrell Moore |
| Address | 7406 S. Main Lovington, NM | Telephone No. | 575-746-5281 |
| Facility Name | | Facility Type | Petroleum Refinery |
| Surface Owner | Mineral Owner | Lease No. | |

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | | | | |
|---|--|-----------------------------|-----------------|----------------------------|-----------------|
| Type of Release | Fire | Volume of Release | N/A | Volume Recovered | N/A |
| Source of Release | Loose Unions | Date and Hour of Occurrence | 2/25/09 2:00 am | Date and Hour of Discovery | 2/25/09 2:00 am |
| Was Immediate Notice Given? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | | | | |
| By Whom? | If YES, To Whom? | | | | |
| Was a Watercourse Reached? | <input type="checkbox"/> Yes <input type="checkbox"/> No NA | | | | |
| If YES, Volume Impacting the Watercourse. | | | | | |

If a Watercourse was Impacted, Describe Fully.*

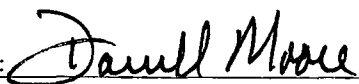
Describe Cause of Problem and Remedial Action Taken.*

The plant has been in expansion mode and turn around mode as well. When starting up the plant, two unions on a fuel gas line to the Crude Charge heater had not been tightened. The leaking gas ignited. The fire was put out immediately but some pipes were warped by the heat.

Describe Area Affected and Cleanup Action Taken.*

The area affected was the Crude Charge Heater. Pipes will be replaced.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|--|----------------------------------|------------------|-----------------------------------|
| Signature:  | OIL CONSERVATION DIVISION | | |
| Printed Name: Darrell Moore | Approved by District Supervisor: | | |
| Title: Environmental Manager for Water and Waste | Approval Date: | Expiration Date: | |
| E-mail Address: Darrell.moore@hollycorp.com | Conditions of Approval: | | Attached <input type="checkbox"/> |
| Date: 2/25/09 | Phone: 575-746-5281 | | |

* Attach Additional Sheets If Necessary

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Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

| | | | |
|-----------------|------------------------------|---------------|--------------------|
| Name of Company | NAVAJO REFINING COMPANY | Contact | DARRELL MOORE |
| Address | 501 E MAIN ARTESIA, NM 88211 | Telephone No. | 575-746-5281 |
| Facility Name | ARTESIA PLANT | Facility Type | PETROLEUM REFINERY |

| | | |
|---------------|---------------|-----------|
| Surface Owner | Mineral Owner | Lease No. |
|---------------|---------------|-----------|

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | | | | |
|-----------------------------|---|---|-------------------------|----------------------------|------|
| Type of Release | FIRE | Volume of Release | NA | Volume Recovered | NA |
| Source of Release | FIRE IN TK 409 | Date and Hour of Occurrence | 9:40 AM APRIL 21, 2009 | Date and Hour of Discovery | SAME |
| Was Immediate Notice Given? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? | BRAD JONES | | |
| By Whom? | DARRELL MOORE | Date and Hour | 10:00 AM APRIL 21, 2009 | | |
| Was a Watercourse Reached? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | | | |

If a Watercourse was Impacted, Describe Fully.*

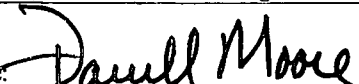
Describe Cause of Problem and Remedial Action Taken.*

While cutting a manway into Tk 409, a small fire started inside the tank on the wall. Fire watchers outside the tank tried to spray the fire with water but it ran up the wall of the tank and ignited volatiles that had accumulated in the roof of the tank. Navajo's fire team responded and extinguished the fire within minutes. As a result of this fire, Navajo will no longer use cutting torches to cut manways into tanks. Future manways will be water cut.

Describe Area Affected and Cleanup Action Taken.*

Area affected is Tk 409 in the South Plant. We are performing structural integrity tests on the tank but preliminary results suggest the tank is a total loss. There were no injuries associated with this event. Highway 82 was closed by the Artesia Police Dept. for about 30 minutes.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|--|----------------------------------|------------------|-----------------------------------|
| Signature:  | OIL CONSERVATION DIVISION | | |
| Printed Name: Darrell Moore | Approved by District Supervisor: | | |
| Title: Environmental Manager for Water and Waste | Approval Date: | Expiration Date: | |
| E-mail Address: Darrell.moore@hollycorp.com | Conditions of Approval: | | Attached <input type="checkbox"/> |
| Date: April 22, 2009 746-5281 | Phone: 575-746-5281 | | |

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Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☐ Final Report

| | | | |
|-----------------|-----------------------------|---------------|--------------------|
| Name of Company | Navajo Refining Co | Contact | Darrell Moore |
| Address | 501 E Main Artesia NM 88211 | Telephone No. | 575-746-5281 |
| Facility Name | Artesia Plant | Facility Type | Petroleum Refinery |

| | | |
|---------------|---------------|-----------|
| Surface Owner | Mineral Owner | Lease No. |
|---------------|---------------|-----------|

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | | | | |
|---|--|-----------------------------|-----------------|----------------------------|-----------------|
| Type of Release | Fire | Volume of Release | NA | Volume Recovered | NA |
| Source of Release | AGO Pump | Date and Hour of Occurrence | 5/21/09 5:30 am | Date and Hour of Discovery | 5/21/09 5:30 am |
| Was Immediate Notice Given? | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | | | | |
| By Whom? | If YES, To Whom? | | | | |
| Was a Watercourse Reached? | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | | |
| If YES, Volume Impacting the Watercourse. | | | | | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
AGO Pump in the South Crude Unit had a seal failure and the resulting loss of product ignited. There was a flash and then some scaffolding above the pump caught fire. It was immediately extinguished. The only damage was some minor charring of the scaffolding boards.

Describe Area Affected and Cleanup Action Taken.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|---|---------------------|-----------------------------------|------------------|
| Signature: <i>Darrell Moore</i> | | OIL CONSERVATION DIVISION | |
| Printed Name: Darrell Moore | | Approved by District Supervisor: | |
| Title: Env Mgr for Water and Waste | | Approval Date: | Expiration Date: |
| E-mail Address: Darrell.moore@hollycorp.com | | Conditions of Approval: | |
| Date: 5/21/09 | Phone: 575-746-5281 | Attached <input type="checkbox"/> | |

* Attach Additional Sheets If Necessary

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Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | | |
|---|-----------------------------------|-----------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange | |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 | |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery | |
| Surface Owner | Mineral Owner | Lease No. |

LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|---|---|
| Type of Release: Fire | Volume of Release: ~ 15 barrels | Volume Recovered: ~ 10 barrels |
| Source of Release: Heat Exchangers (X-515 and X-516) in FCC Unit #10 | Date and Hour of Occurrence: 7/22/09 ~ 07:43 | Date and Hour of Discovery: 7/22/09 ~ 07:46 |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? OCD (Carl Chavez) and NMED (Hope Monzeglio) | |
| By Whom? Darrell Moore | Date and Hour: 7/22/09 ~ 07:59 | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |
| If a Watercourse was Impacted, Describe Fully.* NA | | |
| Describe Cause of Problem and Remedial Action Taken.* On 7/22/09 at ~ 07:43 there was a minor fire in the FCC unit. Two heat exchangers (X-515 and X-516) started to leak Slurry Oil from the shell side of the exchangers. Several units were down due to an electrical problem causing equipment to cool down. The exchangers started to leak from around the gaskets as the metal cooled and contracted. | | |
| Describe Area Affected and Cleanup Action Taken.* The fire occurred in the FCC unit from two heat exchangers (X-515 and X-516). One temperature indicator was damaged from the fire and some of the insulation on the exchangers was removed and replaced. The fire was put out immediately and damage was very minor. No one was injured from the fire. | | |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. | | |
| Signature:  | | OIL CONSERVATION DIVISION |
| Printed Name: Aaron Strange | | Approved by District Supervisor: |
| Title: Sr. Environmental Technician | Approval Date: | Expiration Date: |
| E-mail Address: aaron.strange@hollycorp.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 7/22/09 | Phone: 575-703-5057 | |

* Attach Additional Sheets If Necessary

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St. Francis Dr., Santa Fe, NM 87505

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Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|---|-----------------------------------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery |

| | | |
|---------------|---------------|-----------|
| Surface Owner | Mineral Owner | Lease No. |
|---------------|---------------|-----------|

LOCATION OF RELEASE

| | | | | | | | |
|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|---|---|
| Type of Release: Fire | Volume of Release: NA | Volume Recovered: NA |
| Source of Release: Feed Preheater Exchanger (X-9852) head in Unit #64 (Hydrogen Plant #2) | Date and Hour of Occurrence: 8/18/09 ~ 23:28 | Date and Hour of Discovery: 8/18/09 ~ 23:30 |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? NA | |
| Whom? NA | Date and Hour: NA | |
| Is a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |

Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*


8/18/09 at ~ 23:28 there was a minor fire in Unit #64. The Feed Preheater Exchanger (X-9852) head started to leak feed gas from the shell side of the exchanger. The feed gas consists of hydrogen with some CO₂, CO, methane and steam. Maintenance repaired the leak by replacing the gasket.

Describe Area Affected and Cleanup Action Taken.*

The fire occurred in Unit #64 from the Feed Preheater Exchanger (X-9852) head. The fire was extinguished using steam hoses and damage was very minor. Some of the insulation on the exchangers was removed and replaced. No one was injured from the fire.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

OIL CONSERVATION DIVISION

Signature: 

Printed Name: Aaron Strange

Approved by District Supervisor:

Title: Sr. Environmental Technician

Approval Date:

Expiration Date:

E-mail Address: aaron.strange@hollycorp.com

Conditions of Approval:

Attached ☐

Date: 8/20/09

Phone: 575-703-5057

Attach Additional Sheets If Necessary

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Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|---|-----------------------------------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 |
| Facility Name: Artesia Plant | Facility Type: Petroleum Refinery |

| | | |
|---------------|---------------|-----------|
| Surface Owner | Mineral Owner | Lease No. |
|---------------|---------------|-----------|

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|---|--|
| Type of Release: Fire | Volume of Release: NA | Volume Recovered: NA |
| Source of Release: Fuel gas braided hose going to the second burner on H-363 in CCR Unit #70 (Continuous Catalytic Reforming). | Date and Hour of Occurrence: 11/05/09 ~ 11:52 | Date and Hour of Discovery: 11/05/09 ~ 11:52 |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? NA | |
| By Whom? NA | Date and Hour: NA | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |

If a Watercourse was Impacted, Describe Fully.*
NA

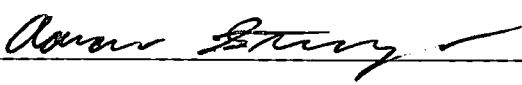
Describe Cause of Problem and Remedial Action Taken.*

On 11/05/09 at ~ 11:52 there was a minor fire in Unit #70 on a braided fuel gas hose going to the second burner on H-363. The outside operator was in the process of lighting an adjacent burner when the braided hose ignited. The number 2 burner was shut off extinguishing the small flame. A WA was written and the braided hose was changed out. The WA# was 242270

Describe Area Affected and Cleanup Action Taken.*

On 11/05/09 at ~ 11:52 there was a minor fire in Unit #70 on a braided fuel gas hose going to the second burner on H-363. The outside operator was in the process of lighting an adjacent burner when the braided hose ignited. The number 2 burner was shut off extinguishing the small flame. A WA was written and the braided hose was changed out. The WA# was 242270. No one was injured from the fire.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|--|--|-----------------------------------|------------------|
| Signature:  | | <u>OIL CONSERVATION DIVISION</u> | |
| Printed Name: Aaron Strange | | Approved by District Supervisor: | |
| Title: Sr. Environmental Technician | | Approval Date: | Expiration Date: |
| E-mail Address: aaron.strange@hollycorp.com | | Conditions of Approval: | |
| Date: 11/05/09 Phone: 575-703-5057 | | Attached <input type="checkbox"/> | |

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|---|-----------------------------------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 |
| Facility Name: Artesia Refinery | Facility Type: Petroleum Refinery |

| | | |
|---------------|---------------|-----------|
| Surface Owner | Mineral Owner | Lease No. |
|---------------|---------------|-----------|

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|---|---|
| Type of Release: Fire | Volume of Release: NA | Volume Recovered: NA |
| Source of Release: Pump seal on gas-oil pump near Tank 433. | Date and Hour of Occurrence: 12/20/09 ~ 09:00 | Date and Hour of Discovery: 12/20/09 ~ 09:00 |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? Mr. Randy Dade (OCD District Supervisor). | |
| By Whom? Doug Price | Date and Hour: 12/20/2009 at ~09:43 (left voice mail). Mr. Randy returned the call at ~09:50. | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |
| If a Watercourse was Impacted, Describe Fully.* NA | | |

Describe Cause of Problem and Remedial Action Taken.*

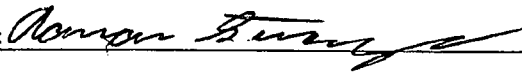
On 12/20/2009 at ~ 09:00, the fire alarm was sounded for a fire near Tank 433. A pump seal on a gas-oil pump near tank 433 caught on fire. The fire was extinguished within a few minutes. No one was injured from the event. At this time no cause has been identified. An accident investigation is being conducted to determine the cause of the fire. A final report will be sent after the accident investigation has been completed. The pump has a concrete containment with a sewer, however nothing spilled out from the pump or got on the ground.

Describe Area Affected and Cleanup Action Taken.*

The area affected was a pump seal on a gas-oil pump near tank 433. The fire was extinguished within a few minutes. In addition to the pump seal, damages included a section of metal flexible electrical conduit. The conduit prevented any damage to the wiring. No one was injured from the fire. The pump has a concrete containment with a sewer, however nothing spilled out from the pump.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

OIL CONSERVATION DIVISION

| | | | |
|--|----------------------------------|--|-----------------------------------|
| Signature:  | Approved by District Supervisor: | | |
| Printed Name: Aaron Strange | Approval Date: | | |
| Title: Sr. Environmental Technician | Expiration Date: | | Attached <input type="checkbox"/> |
| E-mail Address: aaron.strange@hollycorp.com | Conditions of Approval: | | |
| Date: 12/21/2009 | Phone: 575-703-5057 | | |

* Attach Additional Sheets If Necessary

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Oil Conservation Division
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side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | | |
|---|-----------------------------------|-----------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange | |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 | |
| Facility Name: Artesia Refinery | Facility Type: Petroleum Refinery | |
| Surface Owner | Mineral Owner | Lease No. |

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|---|---|
| Type of Release: Fire | Volume of Release: NA | Volume Recovered: NA |
| Source of Release: D-354 CCR (Unit 70) reactor #3 inlet flange. | Date and Hour of Occurrence: 12/22/09 ~ 20:45 | Date and Hour of Discovery: 12/22/09 ~ 20:45 |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? Mr. Randy Dade (OCD District Supervisor). | |
| By Whom? Doug Price | Date and Hour: 12/22/2009 at ~21:03 (left voice mail). Mr. Randy returned the call at ~21:20. | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |

If a Watercourse was Impacted, Describe Fully.*
NA


Describe Cause of Problem and Remedial Action Taken.*

On 12/22/2009 at ~ 20:45 there was a fire in the CCR (Unit # 70) on the reactor #3 inlet flange. A contractor was installing a clamp on the reactor flange and pumping it with sealant to stop a hydrogen leak when the fire occurred. The hydrogen temperature was ~900 °F so it auto ignited. The fire was extinguished within a few minutes using hand held fire extinguishers and steam. The contractor continued pumping the sealant into the flange clamp which stopped the leak. No one was injured from the event. There were no damages from the event. The fire occurred within a unit that has a concrete slab with sewers; however nothing spilled out or got onto the ground.

Describe Area Affected and Cleanup Action Taken.*

The area that was affected was in the CCR Unit #70 on the reactor #3 inlet flange. A contractor was installing a clamp on the reactor flange and pumping it with sealant to stop a hydrogen leak when the fire occurred. The hydrogen temperature was ~900 °F so it auto ignited. The fire was extinguished within a few minutes using hand held fire extinguishers and steam. The contractor continued pumping the sealant into the flange clamp which stopped the leak. No one was injured from the event. There were no damages from the event. The fire occurred within a unit that has a concrete slab with sewers; however nothing spilled out or got onto the ground.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|--|--|-----------------------------------|------------------|
| Signature:  | | OIL CONSERVATION DIVISION | |
| Printed Name: Aaron Strange | | Approved by District Supervisor: | |
| Title: Sr. Environmental Technician | | Approval Date: | Expiration Date: |
| E-mail Address: aaron.strange@hollycorp.com | | Conditions of Approval: | |
| Date: 12/23/2009 Phone: 575-703-5057 | | Attached <input type="checkbox"/> | |

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side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|---|-----------------------------------|
| Name of Company: Navajo Refining Co. LLC | Contact: Aaron Strange |
| Address: 501 E. Main Street Artesia, N.M. 88210 | Telephone No. 575-748-3311 |
| Facility Name: Artesia Refinery | Facility Type: Petroleum Refinery |

| | | |
|---------------|---------------|-----------|
| Surface Owner | Mineral Owner | Lease No. |
|---------------|---------------|-----------|

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|--|--|---|
| Type of Release: Hydrogen Fire | Volume of Release: NA | Volume Recovered: NA |
| Source of Release: CCR (Unit 70) blind flange. | Date and Hour of Occurrence: 12/31/09 ~ 09:30 | Date and Hour of Discovery: 12/31/09 ~ 09:30 |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? Left voicemail with OCD District Supervisor (575-748-1283 extension 104). | |
| By Whom? Doug Price | Date and Hour: 12/31/2009 at ~09:59 | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. NA | |

If a Watercourse was Impacted, Describe Fully.*
NA

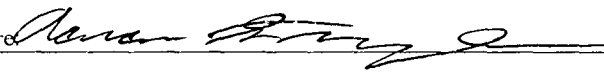
Describe Cause of Problem and Remedial Action Taken.*

On 12/23/2009 at ~ 09:30 there was a hydrogen fire in the CCR (Unit # 70). Saulcon Construction was doing some piping replacement work on a hydrogen line from the Hydrogen Plant Number 2 (Unit 64) compressors to the Naphtha Hydrotreater (Unit 13). While they were grinding, a spark ignited a hydrogen leak from a blind flange that was not completely tight. The fire was extinguished quickly with a hand-held fire extinguisher. The bolts on the blind flange have been tightened so the hydrogen leak has been stopped. No one was injured from the event. There were no damages from the event. The fire occurred within a unit that has a concrete slab with sewers; however nothing spilled out or got onto the ground.

Describe Area Affected and Cleanup Action Taken.*

The area that was affected was in the CCR Unit #70 on a blind flange. Saulcon Construction was doing some piping replacement work on a hydrogen line from the Hydrogen Plant Number 2 (Unit 64) compressors to the Naphtha Hydrotreater (Unit 13). While they were grinding, a spark ignited a hydrogen leak from a blind flange that was not completely tight. The fire was extinguished quickly with a hand-held fire extinguisher. The bolts on the blind flange have been tightened so the hydrogen leak has been stopped. The leak was in the vicinity of 70FIC090 (which will become 13PIC090 after the work is completed). No one was injured from the event. There were no damages from the event. The fire occurred within a unit that has a concrete slab with sewers; however nothing spilled out or got onto the ground.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

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| Signature:  | OIL CONSERVATION DIVISION | |
| Printed Name: Aaron Strange | Approved by District Supervisor: | |
| Title: Sr. Environmental Technician | Approval Date: | Expiration Date: |
| E-mail Address: aaron.strange@hollycorp.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 12/31/2009 | Phone: 575-703-5057 | |

* Attach Additional Sheets If Necessary