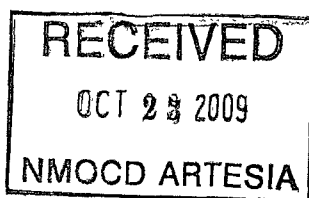




**TETRA TECH**



October 6, 2009

Mr. Mike Bratcher  
Environmental Engineer Specialist  
Oil Conservation Division, District 2  
1301 West Grand Avenue  
Artesia, NM 88210

**Re: Work Plan for the COG Operating LLC., RJU Unit #119, Injection line leak, Unit P, Section 27, Township 17 South, Range 29 East, Eddy County, New Mexico.**

Mr. Bratcher:

Tetra Tech Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill from the RJU #119 located in Unit P, Section 27, Township 17 South, Range 29 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.80042°, W 104.05663°. The site location is shown on Figures 1 and 2.

### **Background**

According to the State of New Mexico C-141 Initial Report, the leak was discovered on May 30, 2009. Approximately 200 barrels of produced water was released from a hole on a 2-inch injection line. The 2 inch poly line was repaired with new connections. Vacuum trucks were utilized to recover 150 barrels of standing fluids. The initial C-141 is enclosed in Appendix A.

### **Groundwater**

No water wells were listed within Section 27. An abandoned water well was located in Section 35 and measured a total depth of 153' (dry). According to the Geology and Groundwater Resources of Eddy County, New Mexico (Report 3), one well is located in Section 22 (Bear Grass Draw) with a depth to water of 79.0' below surface. In addition, a well located in Section 29 was reported at 210 below surface. According to the NMOCD groundwater map the average depth to groundwater in this area is approximately 150' below surface. The Geology and Groundwater Resources of Eddy County, New Mexico (Report 3) well report data is shown in Appendix B.

**Tetra Tech**

1910 North Big Spring Midland, TX 79705

Tel 432 682 4559 Fax 432 682 3946 www.tetrattech.com



## **Regulatory**

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

## **Soil Assessment and Results**

On June 4, 2009, Tetra Tech personnel inspected the spill area, which measured approximately 40' x 205' and 10' x 100', located west of the County Road. Prior to sampling, COG excavated 1.0' to 2.0' of impacted soil and hauled to proper disposal. A total of seven (7) auger holes (AH-1 through AH-7) were installed using a stainless steel hand auger to assess the impacted soils. Select samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 1.

Referring to Table 1, AH-1 and AH-2 samples exceeded the TPH RRAL to a depth of 2.0' below surface. In addition, the total BTEX exceeded the RRAL in AH-1 and AH-2. Elevated chloride concentrations were detected in all of the auger holes, with no chlorides delineated in any of the auger holes.

In order to complete delineation of the chlorides at the sites, on June 30, 2009, Tetra Tech personnel were onsite to install ten (10) boreholes (SB-1 through SB-10) utilizing an air rotary rig. Some of the borings were installed in the vicinity of the previous auger holes. The boreholes were extended to a maximum depth of 15 to 35 feet bgs with samples collected at 2 to 3 foot intervals for the first 15 feet and 5 foot intervals thereafter and submitted to the laboratory for analysis of chlorides and selected samples for BTEX.

Analytical results indicate the maximum extent of chloride impact greater than 1,000 mg/kg extended from 11 feet (SB-2) to 30 feet (SB-1) bgs. All samples had chloride concentrations that decreased with depth. Borehole logs are included in Appendix C. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 1. The borehole and auger hole locations are shown on Figure 3.

## **Work Plan**

Based upon the corrective action discussion with the NMOCD on July 27, 2009, Tetra Tech personnel will supervise the removal of impacted soils for proper disposal. In addition, selected excavated areas will be capped (lined) with a 40 mil plastic liner.



**TETRA TECH**

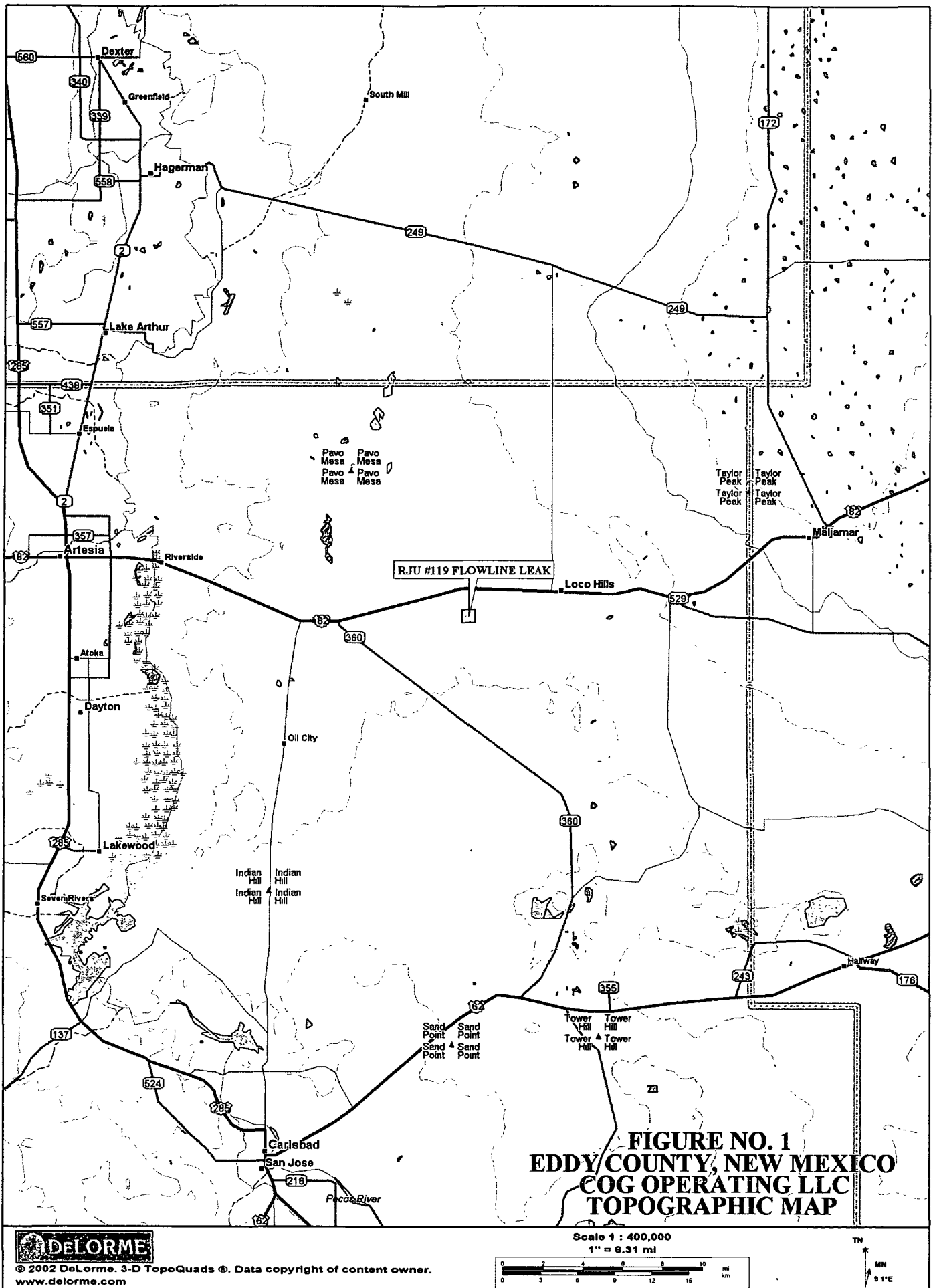
Once the areas are excavated to the appropriate depths, the excavation will be backfilled with clean soil. The liner will be installed at a depth of 4.0' below surface. The depths of the excavations and liner installation areas are shown on Figure 4. Two lines are located in the area of spill/excavation. The active line (Conoco) is running east and west through the center of the spill area and an abandoned line (DCP) runs north and south through the spill. These areas will need to be cleared prior to excavating around the lines.

If you require any additional information or have any questions or comments concerning this report, please call at (432) 682-4559.

Respectfully submitted,  
TETRA TECH

Ike Tavaréz, P.G.  
Senior Project Manager

cc: Pat Ellis – COG



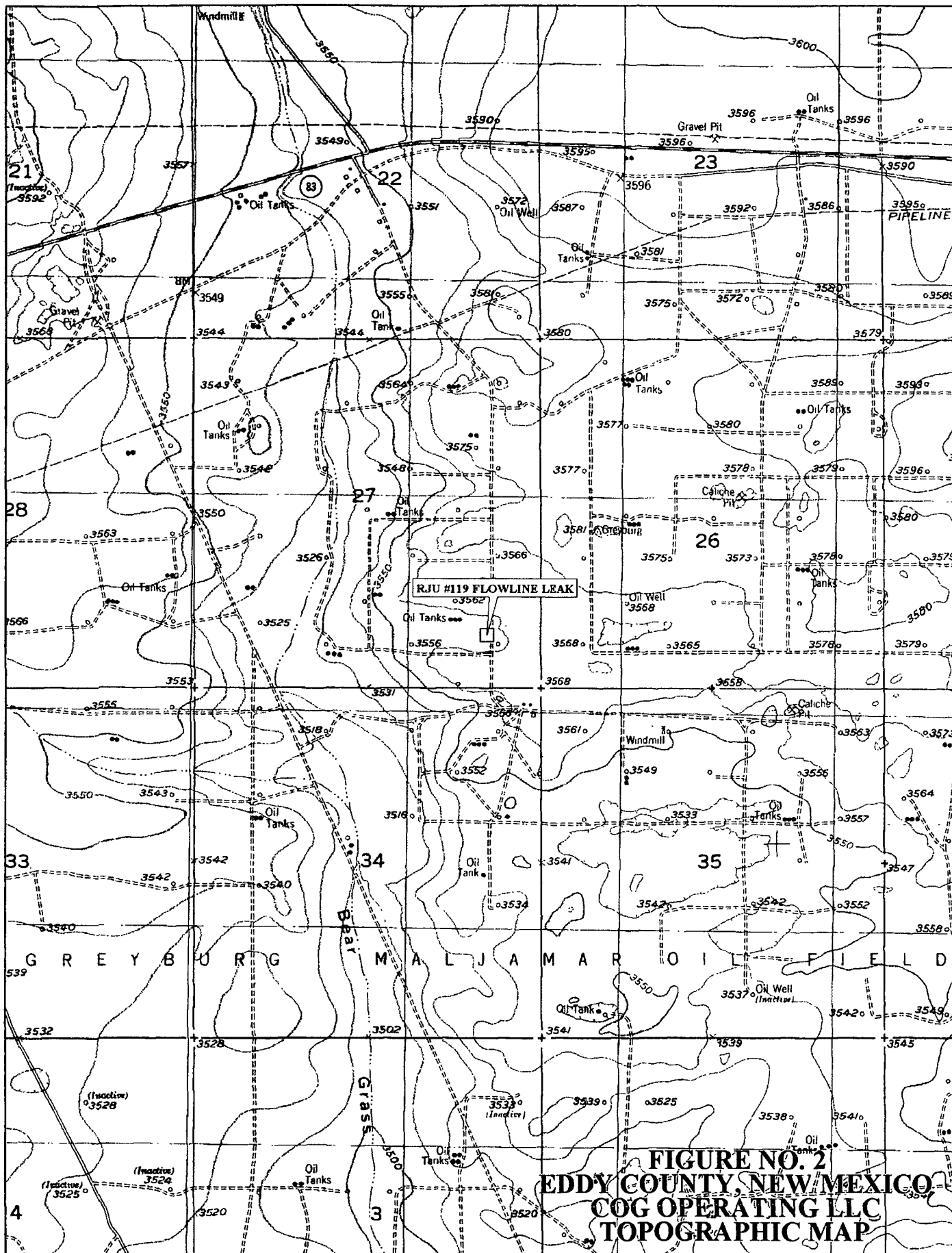
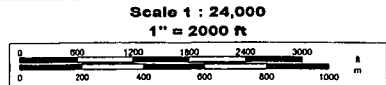
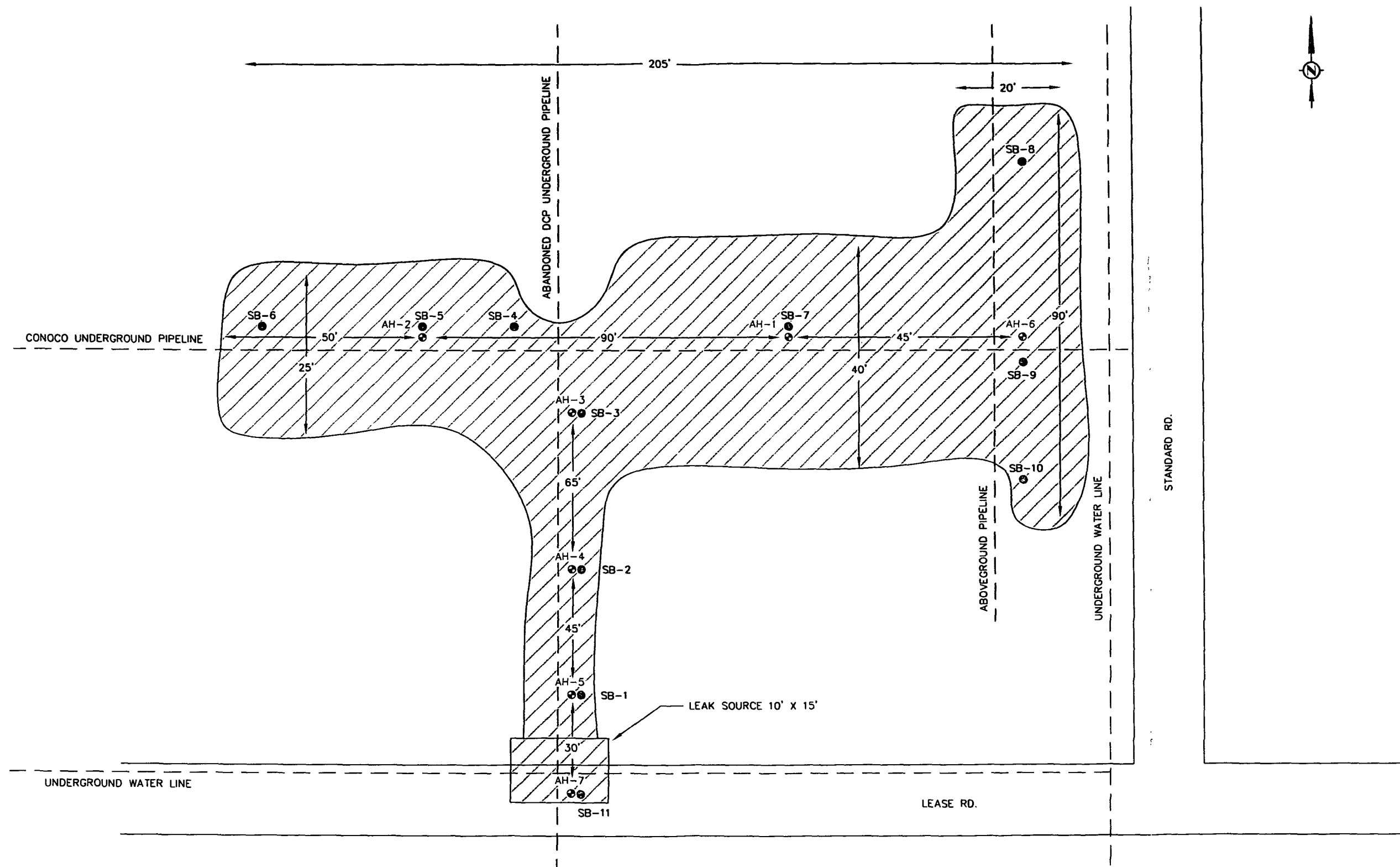


FIGURE NO. 2  
EDDY COUNTY, NEW MEXICO  
COG OPERATING LLC  
TOPOGRAPHIC MAP



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www.delorme.com





- SPILL AREA
- SAMPLE LOCATIONS
- SOIL BORING LOCATIONS

NOT TO SCALE

DATE:  
6/12/09  
DWN. BY:  
JJ  
FILE:  
H:\COG\6400210  
RJU #119 FLOWLINE

FIGURE NO. 3

EDDY COUNTY, NEW MEXICO

COG OPERATING LLC

RJU #119 FLOWLINE LEAK

TETRA TECH, INC.  
MIDLAND, TEXAS



NOT TO SCALE

**TETRA TECH, INC.**  
**MIDLAND, TEXAS**

DATE:  
6/12/09

DWN. BY:  
JJ

FILE:  
H:\COG\6400210  
RAJ /119 FLOWLINE

## TABLES

**Table 1**  
**COG Operating LLC**  
**RJU #119 Flowline Spill**  
**Eddy County, New Mexico**

| Area         | Sample ID | Date Sampled | Sample Depth (ft) | Soil Status |         | TPH (mg/kg) |      |        | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Chloride (mg/kg) |
|--------------|-----------|--------------|-------------------|-------------|---------|-------------|------|--------|-----------------|-----------------|----------------------|----------------|------------------|
|              |           |              |                   | In-Situ     | Removed | DRO         | GRO  | Total  |                 |                 |                      |                |                  |
| Area of SB-1 | AH-5      | 6/4/2009     | 0-1               | X           |         | 3200        | 19.9 | 3219.9 | -               | -               | -                    | -              | 1170             |
|              |           | 6/4/2009     | 1-1.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 412              |
|              |           | 6/4/2009     | 2-2.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 535              |
|              |           | 6/4/2009     | 3-3.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 638              |
|              |           | 6/4/2009     | 4-4.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 1160             |
|              |           | 6/4/2009     | 5-5.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 937              |
|              |           | 6/4/2009     | 6-6.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 927              |
|              |           | 6/4/2009     | 7-7.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 1380             |
|              |           | 6/4/2009     | 8-8.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 1100             |
|              |           |              |                   |             |         |             |      |        |                 |                 |                      |                |                  |
|              | SB-1      | 6/30/2009    | 5-6               | X           |         | -           | -    | -      | -               | -               | -                    | -              | 1,190            |
|              |           | 6/30/2009    | 8-9               | X           |         | -           | -    | -      | -               | -               | -                    | -              | 1,630            |
| liner        |           | 6/30/2009    | 11-12             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 6,240            |
|              |           | 6/30/2009    | 13-14             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 2,760            |
|              |           | 6/30/2009    | 15-16             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 4,210            |
|              |           | 6/30/2009    | 20-21             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 1,870            |
|              |           | 6/30/2009    | 25-26             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 1,290            |
|              |           | 6/30/2009    | 30-31             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 706              |
|              |           | 6/30/2009    | 35-36             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 406              |
|              |           |              |                   |             |         |             |      |        |                 |                 |                      |                |                  |
| Area of SB-2 | AH-4      | 6/4/2009     | 0-1               | X           |         | <50.0       | 18.1 | 18.1   | -               | -               | -                    | -              | 5390             |
|              |           | 6/4/2009     | 1-1.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 5570             |
|              |           | 6/4/2009     | 2-2.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 8120             |
|              |           | 6/4/2009     | 3-3.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 3280             |
|              |           | 6/4/2009     | 4-4.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 2740             |
|              |           | 6/4/2009     | 5-5.5             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 2710             |
|              |           |              |                   |             |         |             |      |        |                 |                 |                      |                |                  |
|              |           |              |                   |             |         |             |      |        |                 |                 |                      |                |                  |
|              |           |              |                   |             |         |             |      |        |                 |                 |                      |                |                  |
|              |           |              |                   |             |         |             |      |        |                 |                 |                      |                |                  |
|              | SB-2      | 6/30/2009    | 5-6               | X           |         | -           | -    | -      | -               | -               | -                    | -              | 3,990            |
|              |           | 6/30/2009    | 8-9               | X           |         | -           | -    | -      | -               | -               | -                    | -              | 3,290            |
|              |           | 6/30/2009    | 11-12             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 590              |
|              |           | 6/30/2009    | 13-14             | X           |         | -           | -    | -      | -               | -               | -                    | -              | 207              |
|              |           | 6/30/2009    | 15-16             | X           |         | -           | -    | -      | -               | -               | -                    | -              | <200             |

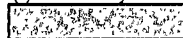
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Proposed Excavation Depths  
 Liner

**Table 1**  
**COG Operating LLC**  
**RJU #119 Flowline Spill**  
**Eddy County, New Mexico**

| Area         | Sample ID | Date Sampled | Sample Depth (ft) | Soil Status |         | TPH (mg/kg) |      |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylene (mg/kg) | Chloride (mg/kg) |
|--------------|-----------|--------------|-------------------|-------------|---------|-------------|------|-------|-----------------|-----------------|----------------------|----------------|------------------|
|              |           |              |                   | In-Situ     | Removed | DRO         | GRO  | Total |                 |                 |                      |                |                  |
| Area of SB-3 | AH-3      | 6/4/2009     | 0-1               | X           |         | <50.0       | 31.6 | 31.6  |                 |                 |                      |                | 2330             |
|              |           | 6/4/2009     | 1-1.5             | X           |         |             |      |       |                 |                 |                      |                | 799              |
|              |           | 6/4/2009     | 2-2.5             | X           |         |             |      |       |                 |                 |                      |                | 468              |
|              |           | 6/4/2009     | 3-3.5             | X           |         |             |      |       |                 |                 |                      |                | 1350             |
|              |           | 6/4/2009     | 4-4.5             | X           |         |             |      |       |                 |                 |                      |                | 2490             |
|              |           | 6/4/2009     | 5-5.5             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 3540             |
|              |           | 6/4/2009     | 6-6.5             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 4080             |
|              |           |              |                   |             |         |             |      |       |                 |                 |                      |                |                  |
|              | SB-3      |              | 5-6               | X           |         | -           | -    | -     | -               | -               | -                    | -              | 1,430            |
|              |           | 6/30/2009    | 8-9               | X           |         | -           | -    | -     | -               | -               | -                    | -              | 2,880            |
|              |           | 6/30/2009    | 11-12             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 2,820            |
|              |           | 6/30/2009    | 13-14             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 2,250            |
|              |           | 6/30/2009    | 15-16             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 1,980            |
|              |           | 6/30/2009    | 20-21             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 993              |
|              |           | 6/30/2009    | 25-26             | X           |         | -           | -    | -     | -               | -               | -                    | -              | <200             |
|              |           |              |                   |             |         |             |      |       |                 |                 |                      |                |                  |
| Area of SB-4 | SB-4      | 6/30/2009    | 0-1               | X           |         | 1160        | 736  | 1896  | <0.0500         | 7.52            | 19.5                 | 43.0           | 1,070            |
|              |           | 6/30/2009    | 2-3               | X           |         | 691         | 817  | 1508  | <0.100          | 7.19            | 20.1                 | 37.2           | 1,520            |
|              |           | 6/30/2009    | 5-6               | X           |         |             |      |       | <0.0500         | 6.06            | 23.2                 | 34.0           | 1,390            |
|              |           | 6/30/2009    | 8-9               | X           |         | -           | -    | -     | <0.0100         | <0.0100         | <0.0100              | <0.0100        | 1,860            |
|              |           | 6/30/2009    | 11-12             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 1,790            |
|              |           | 6/30/2009    | 13-14             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 966              |
|              |           | 6/30/2009    | 15-16             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 518              |
|              |           | 6/30/2009    | 20-21             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 510              |
|              |           | 6/30/2009    | 25-26             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 336              |
|              |           |              |                   |             |         |             |      |       |                 |                 |                      |                |                  |

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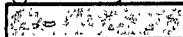
 Proposed Excavation Depths

 Liner

**Table 1**  
**COG Operating LLC**  
**RJU #119 Flowline Spill**  
**Eddy County, New Mexico**

| Area         | Sample ID | Date Sampled | Sample Depth (ft) | Soil Status |         | TPH (mg/kg) |      |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylene (mg/kg) | Chloride (mg/kg) |
|--------------|-----------|--------------|-------------------|-------------|---------|-------------|------|-------|-----------------|-----------------|----------------------|----------------|------------------|
|              |           |              |                   | In-Situ     | Removed | DRO         | GRO  | Total |                 |                 |                      |                |                  |
| Area of SB-5 | AH-2      | 6/4/2009     | 0-1               | X           |         | 3570        | 2330 | 5900  | 7.55            | 74.1            | 72.5                 | 101            | 1250             |
|              |           | 6/4/2009     | 1-1.5             | X           |         | 4320        | 2830 | 7150  | 9.86            | 112             | 105                  | 129            | 1670             |
|              |           | 6/4/2009     | 2-2.5             | X           |         | 1120        | 2370 | 3490  | 4.78            | 94.4            | 93.5                 | 118            | 3250             |
|              |           | 6/4/2009     | 3-3.5             | X           |         |             |      |       |                 |                 |                      |                | 4760             |
|              |           | 6/4/2009     | 4-4.5             | X           |         |             |      |       |                 |                 |                      |                | 5240             |
|              |           | 6/4/2009     | 5-5.5             | X           |         |             |      |       |                 |                 |                      |                | 5740             |
|              |           | 6/4/2009     | 6-6.5             | X           |         |             |      |       |                 |                 |                      |                | 5270             |
| liner        | SB-5      | 6/30/2009    | 3-4               | X           |         |             |      |       | <0.0100         | <0.0100         | <0.0100              | <0.0100        | 2,670            |
|              |           | 6/30/2009    | 5-6               | X           |         |             |      |       |                 |                 |                      |                | 1,790            |
|              |           | 6/30/2009    | 8-9               | X           |         |             |      |       |                 |                 |                      |                | 2,950            |
|              |           | 6/30/2009    | 11-12             | X           |         |             |      |       |                 |                 |                      |                | 3,660            |
|              |           | 6/30/2009    | 13-14             | X           |         |             |      |       |                 |                 |                      |                | 5,090            |
|              |           | 6/30/2009    | 15-16             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 5,090            |
|              |           | 6/30/2009    | 20-21             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 2,600            |
| Area of SB-6 | SB-6      | 6/30/2009    | 25-26             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 386              |
|              |           | 6/30/2009    | 0-1               | X           |         |             |      |       |                 |                 |                      |                | 1,380            |
|              |           | 6/30/2009    | 2-3               | X           |         |             |      |       |                 |                 |                      |                | 10,200           |
|              |           | 6/30/2009    | 5-6               | X           |         |             |      |       |                 |                 |                      |                | 5,910            |
|              |           | 6/30/2009    | 8-9               | X           |         |             |      |       |                 |                 |                      |                | 6,300            |
|              |           | 6/30/2009    | 11-12             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 2,430            |
|              |           | 6/30/2009    | 13-14             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 1,850            |
|              |           | 6/30/2009    | 15-16             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 436              |
|              |           | 6/30/2009    | 20-21             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 421              |
|              |           | 6/30/2009    | 25-26             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 389              |
|              |           | 6/30/2009    | 30-31             | X           |         | -           | -    | -     | -               | -               | -                    | -              | <200             |

(-) Not Analyzed



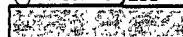
Proposed Excavation Depths

Liner

Table 1  
COG Operating LLC  
RJU #119 Flowline Spill  
Eddy County, New Mexico

| Area         | Sample ID | Date Sampled | Sample Depth (ft) | Soil Status |         | TPH (mg/kg) |      |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylene (mg/kg) | Chloride (mg/kg) |
|--------------|-----------|--------------|-------------------|-------------|---------|-------------|------|-------|-----------------|-----------------|----------------------|----------------|------------------|
|              |           |              |                   | In-Situ     | Removed | DRO         | GRO  | Total |                 |                 |                      |                |                  |
| Area of SB-7 | AH-1      | 6/4/2009     | 0-1               | X           |         | 6910        | 766  | 7676  | <0.0500         | 2.80            | 22.2                 | 34.9           | 1520             |
|              |           | 6/4/2009     | 1-1.5             | X           |         | 4140        | 1130 | 5270  | -               | -               | -                    | -              | 1690             |
|              |           | 6/4/2009     | 2-2.5             | X           |         | <50.0       | 21.0 | 21.0  | -               | -               | -                    | -              | 675              |
|              |           | 6/4/2009     | 3-3.5             | X           |         |             |      |       | -               | -               | -                    | -              | 1280             |
|              |           | 6/4/2009     | 4-4.5             | X           |         |             |      |       | -               | -               | -                    | -              | 1440             |
|              |           | 6/4/2009     | 5-5.5             | X           |         |             |      |       | -               | -               | -                    | -              | 1450             |
|              |           | 6/4/2009     | 6-6.5             | X           |         |             |      |       | -               | -               | -                    | -              | 994              |
|              |           |              |                   |             |         |             |      |       | -               | -               | -                    | -              |                  |
| liner        | SB-7      | 6/30/2009    | 5-6               | X           |         |             |      |       | -               | -               | -                    | -              | 6,230            |
|              |           | 6/30/2009    | 8-9               | X           |         | -           | -    | -     | -               | -               | -                    | -              | 4,100            |
|              |           | 6/30/2009    | 11-12             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 3,180            |
|              |           | 6/30/2009    | 13-14             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 1,820            |
|              |           | 6/30/2009    | 15-16             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 1,590            |
|              |           | 6/30/2009    | 20-21             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 1,180            |
|              |           | 6/30/2009    | 25-26             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 952              |
|              |           | 6/30/2009    | 30-31             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 309              |
|              |           |              |                   |             |         |             |      |       | -               | -               | -                    | -              |                  |
|              |           |              |                   |             |         |             |      |       | -               | -               | -                    | -              |                  |
| Area of SB-8 | SB-8      | 6/30/2009    | 0-1               | X           |         |             |      |       | -               | -               | -                    | -              | 10,700           |
|              |           | 6/30/2009    | 2-3               | X           |         |             |      |       | -               | -               | -                    | -              | 3,980            |
| liner        |           | 6/30/2009    | 5-6               | X           |         |             |      |       | -               | -               | -                    | -              | 3,120            |
|              |           | 6/30/2009    | 8-9               | X           |         | -           | -    | -     | -               | -               | -                    | -              | 3,390            |
|              |           | 6/30/2009    | 11-12             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 3,130            |
|              |           | 6/30/2009    | 13-14             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 4,020            |
|              |           | 6/30/2009    | 15-16             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 5,120            |
|              |           | 6/30/2009    | 20-21             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 4,480            |
|              |           | 6/30/2009    | 25-26             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 275              |
|              |           | 6/30/2009    | 30-31             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 310              |
|              |           |              |                   |             |         |             |      |       | -               | -               | -                    | -              |                  |

(-) Not Analyzed

 Proposed Excavation Depths

 Liner

Table 1  
COG Operating LLC  
RJU #119 Flowline Spill  
Eddy County, New Mexico

| Area          | Sample ID | Date Sampled | Sample Depth (ft) | Soil Status |         | TPH (mg/kg) |       |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Chloride (mg/kg) |
|---------------|-----------|--------------|-------------------|-------------|---------|-------------|-------|-------|-----------------|-----------------|----------------------|----------------|------------------|
|               |           |              |                   | In-Situ     | Removed | DRO         | GRO   | Total |                 |                 |                      |                |                  |
| Area of SB-9  | AH-6      | 6/4/2009     | 0-1               | X           |         | <50.0       | <1.00 | <50.0 | -               | -               | -                    | -              | 6750             |
|               |           | 6/4/2009     | 1-1.5             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 8750             |
|               |           | 6/4/2009     | 2-2.5             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 1180             |
|               |           | 6/4/2009     | 3-3.5             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 1120             |
|               |           | 6/4/2009     | 4-4.5             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 3710             |
|               | liner     | 6/4/2009     | 5-5.5             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 2850             |
|               |           | 6/4/2009     | 6-6.5             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 2540             |
|               |           |              |                   |             |         |             |       |       |                 |                 |                      |                |                  |
|               |           | 6/30/2009    | 5-6               | X           |         | -           | -     | -     | -               | -               | -                    | -              | 2,080            |
|               |           | 6/30/2009    | 8-9               | X           |         | -           | -     | -     | -               | -               | -                    | -              | 3,030            |
|               | SB-9      | 6/30/2009    | 11-12             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 3,150            |
|               |           | 6/30/2009    | 13-14             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 2,370            |
|               |           | 6/30/2009    | 15-16             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 2,260            |
|               |           | 6/30/2009    | 20-21             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 5,250            |
|               |           | 6/30/2009    | 25-26             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 838              |
|               |           | 6/30/2009    | 30-31             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 486              |
|               |           |              |                   |             |         |             |       |       |                 |                 |                      |                |                  |
|               |           |              |                   |             |         |             |       |       |                 |                 |                      |                |                  |
|               |           |              |                   |             |         |             |       |       |                 |                 |                      |                |                  |
|               |           |              |                   |             |         |             |       |       |                 |                 |                      |                |                  |
| Area of SB-10 | SB-10     | 6/30/2009    | 0-1               | X           |         | -           | -     | -     | -               | -               | -                    | -              | <200             |
|               |           | 6/30/2009    | 2-3               | X           |         | -           | -     | -     | -               | -               | -                    | -              | 527              |
|               |           | 6/30/2009    | 5-6               | X           |         | -           | -     | -     | -               | -               | -                    | -              | 1,150            |
|               |           | 6/30/2009    | 8-9               | X           |         | -           | -     | -     | -               | -               | -                    | -              | 2,360            |
|               |           | 6/30/2009    | 11-12             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 9,190            |
|               | liner     | 6/30/2009    | 13-14             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 7,050            |
|               |           | 6/30/2009    | 15-16             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 4,920            |
|               |           | 6/30/2009    | 20-21             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 3,620            |
|               |           | 6/30/2009    | 25-26             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 2,140            |
|               |           | 6/30/2009    | 30-31             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 709              |
|               |           | 6/30/2009    | 35-36             | X           |         | -           | -     | -     | -               | -               | -                    | -              | 274              |
|               |           |              |                   |             |         |             |       |       |                 |                 |                      |                |                  |
|               |           |              |                   |             |         |             |       |       |                 |                 |                      |                |                  |

(-) Not Analyzed

Proposed Excavation Depths  
Liner

**Table 1**  
**COG Operating LLC**  
**RJU #119 Flowline Spill**  
**Eddy County, New Mexico**

| Area          | Sample ID | Date Sampled | Sample Depth (ft) | Soil Status |         | TPH (mg/kg) |      |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylene (mg/kg) | Chloride (mg/kg) |
|---------------|-----------|--------------|-------------------|-------------|---------|-------------|------|-------|-----------------|-----------------|----------------------|----------------|------------------|
|               |           |              |                   | In-Situ     | Removed | DRO         | GRO  | Total |                 |                 |                      |                |                  |
| Area of SB-11 | AH-7      | 6/4/2009     | 0-1               | X           |         | <50.0       | 6.14 | 6.14  | -               | -               | -                    | -              | 8240             |
|               |           | 6/4/2009     | 1-1.5             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 6460             |
|               |           | 6/4/2009     | 2-2.5             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 9000             |
|               |           | 6/4/2009     | 3-3.5             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 9310             |
|               |           |              |                   |             |         |             |      |       |                 |                 |                      |                |                  |
|               | SB-11     | 6/30/2009    | 5-6               | X           |         | -           | -    | -     | -               | -               | -                    | -              | 3,820            |
|               |           | 6/30/2009    | 8-9               | X           |         | -           | -    | -     | -               | -               | -                    | -              | 4,030            |
|               |           | 6/30/2009    | 11-12             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 9,070            |
|               |           | 6/30/2009    | 13-14             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 4,930            |
|               |           | 6/30/2009    | 15-16             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 3,750            |
|               |           | 6/30/2009    | 20-21             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 1,330            |
|               |           | 6/30/2009    | 25-26             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 310              |
|               |           | 6/30/2009    | 30-31             | X           |         | -           | -    | -     | -               | -               | -                    | -              | 284              |

(-) Not Analyzed

Proposed Excavation Depths  
Liner

## APPENDIX A

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-14  
Revised October 10, 200

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 | COG OPERATING LLC                          | Contact       | Kanicia Carrillo |
| Address         | 550 W. Texas, Suite 1300 Midland, TX 79701 | Telephone No. | 432-685-4332     |
| Facility Name   | RJ Unit #119                               | Facility Type | Injection Well   |

|               |               |           |              |
|---------------|---------------|-----------|--------------|
| Surface Owner | Mineral Owner | Lease No. | 30-015-03146 |
|---------------|---------------|-----------|--------------|

LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| O           | 27      | 17S      | 29E   | 660           | South            | 1980          | East           | Eddy   |

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

NATURE OF RELEASE

|                                                                                                                                          |                                                    |                                               |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------|
| Type of Release-Produced Water                                                                                                           | Volume of Release-200bbbls                         | Volume Recovered- 150bbbls                    |
| Source of Release- Hole in 2" injection line                                                                                             | Date and Hour of Occurrence-<br>5/30/09- 12:00 pm  | Date and Hour of Discovery<br>5/30/09-12:00pm |
| Was Immediate Notice Given?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom?<br>Mike Bratcher NMOCD District 2 |                                               |
| By Whom? Kent Greenway                                                                                                                   | Date and Hour 6/1/09- 9:30 am                      |                                               |
| Was a Watercourse Reached?<br><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.\*  
Hole in a 2" steel injection line. Injection was shut in at this location and the line will be replaced.

Describe Area Affected and Cleanup Action Taken.\*  
Approximately 50' X 100' area in pasture was affected. All liquid was vacuumed up. The area is being dug out to a 1' depth for testing.  
Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD/BLM for your approval prior to any significant remediation work.

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: Kanicia Carrillo                                                                 | Approved by District Supervisor: |                  |                                   |
| Title: Regulatory Analyst                                                                      | Approval Date:                   | Expiration Date: |                                   |
| E-mail Address: kcarrillo@conchoresources.com                                                  | Conditions of Approval:          |                  | Attached <input type="checkbox"/> |
| Date: 6/3/09                                                                                   | Phone: 432-685-4332              |                  |                                   |

\* Attach Additional Sheets If Necessary

## APPENDIX B

**Water Well Data**  
**Average Depth to Groundwater (ft)**  
**COG - RJU Unit #119**  
**Eddy County, New Mexico**

| 16 South |    |    | 28 East |    |    |
|----------|----|----|---------|----|----|
| 6        | 5  | 4  | 3       | 2  | 1  |
| 7        | 8  | 9  | 10      | 11 | 12 |
| 18       | 17 | 16 | 15      | 14 | 13 |
| 19       | 20 | 21 | 22      | 23 | 24 |
| 30       | 29 | 28 | 27      | 26 | 25 |
| 31       | 32 | 33 | 34      | 35 | 36 |

| 16 South |    |    | 29 East |    |    |
|----------|----|----|---------|----|----|
| 6        | 5  | 4  | 3       | 2  | 1  |
| 7        | 8  | 9  | 10      | 11 | 12 |
| 18       | 17 | 16 | 15      | 14 | 13 |
| 19       | 20 | 21 | 22      | 23 | 24 |
| 30       | 29 | 28 | 27      | 26 | 25 |
| 31       | 32 | 33 | 34      | 35 | 36 |

| 16 South |    |    | 30 East |    |    |
|----------|----|----|---------|----|----|
| 6        | 5  | 4  | 3       | 2  | 1  |
| 7        | 8  | 9  | 10      | 11 | 12 |
| 18       | 17 | 16 | 15      | 14 | 13 |
| 19       | 20 | 21 | 22      | 23 | 24 |
| 30       | 29 | 28 | 27      | 26 | 25 |
| 31       | 32 | 33 | 34      | 35 | 36 |

| 17 South |    |    | 28 East |    |    |
|----------|----|----|---------|----|----|
| 6        | 5  | 4  | 3       | 2  | 1  |
| 7        | 8  | 9  | 10      | 11 | 12 |
| 18       | 17 | 16 | 15      | 14 | 13 |
| 19       | 20 | 21 | 22      | 23 | 24 |
| 30       | 29 | 28 | 27      | 26 | 25 |
| 31       | 32 | 33 | 34      | 35 | 36 |

| 17 South |    |     | 29 East |    |    |
|----------|----|-----|---------|----|----|
| 6        | 5  | 4   | 3       | 2  | 1  |
| 7        | 8  | 9   | 10      | 11 | 12 |
| 18       | 17 | 16  | 15      | 14 | 13 |
| 19       | 20 | 21  | 22      | 23 | 24 |
| 30       | 29 | 210 | 28      | 27 | 25 |
| 31       | 32 | 33  | 34      | 35 | 36 |

| 17 South |    |    | 30 East |    |    |
|----------|----|----|---------|----|----|
| 6        | 5  | 4  | 3       | 2  | 1  |
| 7        | 8  | 9  | 10      | 11 | 12 |
| 18       | 17 | 16 | 15      | 14 | 13 |
| 19       | 20 | 21 | 22      | 23 | 24 |
| 30       | 29 | 28 | 27      | 26 | 25 |
| 31       | 32 | 33 | 34      | 35 | 36 |

| 18 South |    |    | 28 East |    |    |
|----------|----|----|---------|----|----|
| 6        | 5  | 4  | 3       | 2  | 1  |
| 7        | 8  | 9  | 10      | 11 | 12 |
| 18       | 17 | 16 | 15      | 14 | 13 |
| 19       | 20 | 21 | 22      | 23 | 24 |
| 30       | 29 | 28 | 27      | 26 | 25 |
| 31       | 32 | 33 | 34      | 35 | 36 |

| 18 South |    |    | 29 East |    |    |
|----------|----|----|---------|----|----|
| 6        | 5  | 4  | 3       | 2  | 1  |
| 7        | 8  | 9  | 10      | 11 | 12 |
| 18       | 17 | 16 | 15      | 14 | 13 |
| 19       | 20 | 21 | 22      | 23 | 24 |
| 30       | 29 | 28 | 27      | 26 | 25 |
| 31       | 32 | 33 | 34      | 35 | 36 |

| 18 South |    |    | 30 East |    |    |
|----------|----|----|---------|----|----|
| 6        | 5  | 4  | 3       | 2  | 1  |
| 7        | 8  | 9  | 10      | 11 | 12 |
| 18       | 17 | 16 | 15      | 14 | 13 |
| 19       | 20 | 21 | 22      | 23 | 24 |
| 30       | 29 | 28 | 27      | 26 | 25 |
| 31       | 32 | 33 | 34      | 35 | 36 |

- 88 New Mexico State Engineers Well Reports
- 105 USGS Well Reports
- 90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
- Geology and Groundwater Resources of Eddy County, NM (Report 3)
- 34 NMOCD - Groundwater Data
- 123 Field water level
- 143 NMOCD Groundwater map well location

|   |     |         |         |        |
|---|-----|---------|---------|--------|
| 0 | 10' | 104°00' | 103°50' | 33°00' |
| U |     |         |         |        |
| N |     |         |         |        |
| T |     |         |         |        |
| Y |     |         |         |        |

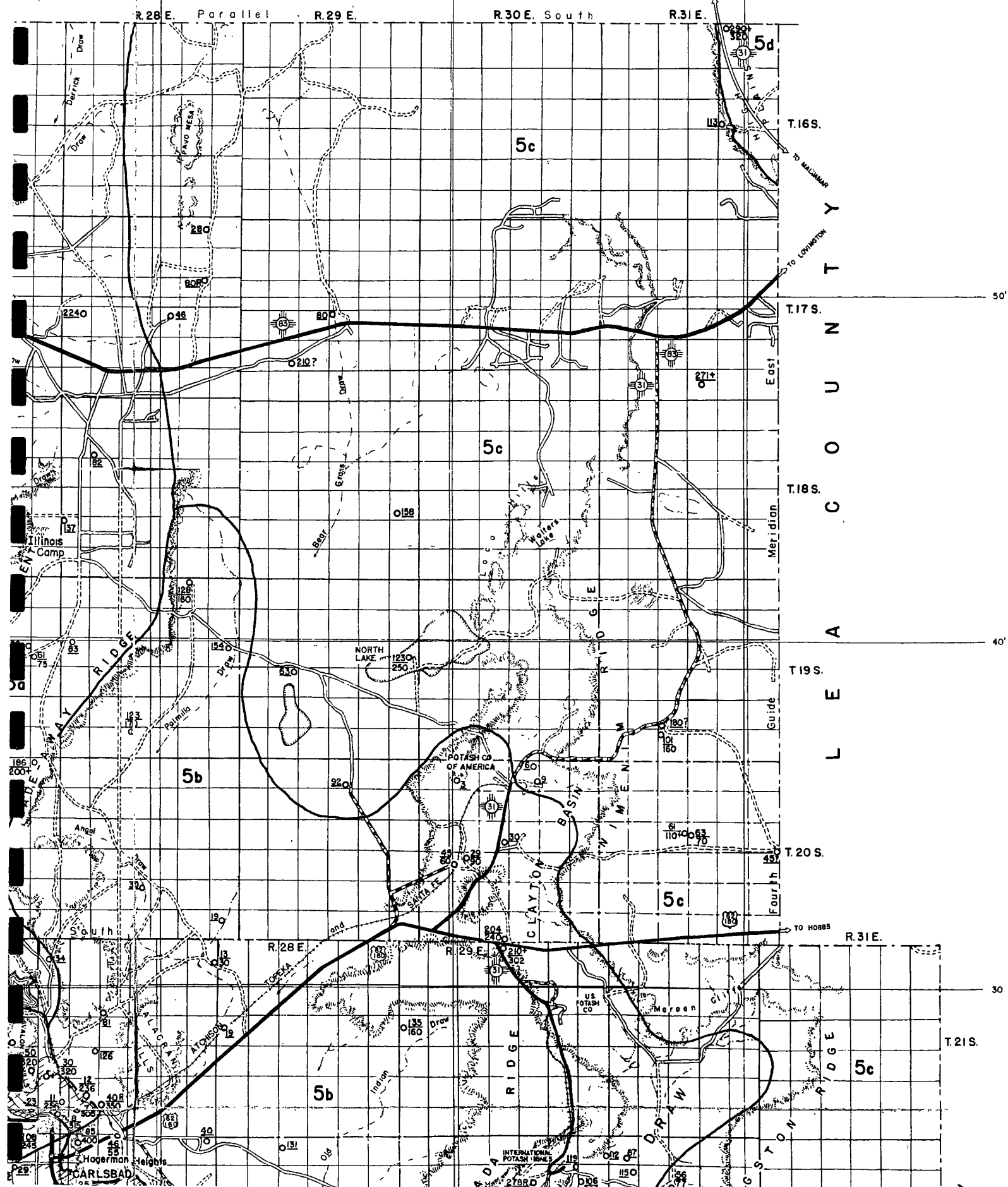


TABLE 1. RECORDS OF WELLS IN EDDY COUNTY, NEW MEXICO. (Continued)

| LOCATION<br>NUMBER | OWNER<br>OR<br>NAME | DATE<br>COM-<br>PLETED | TOPOGRAPHIC<br>SITUATION | ALTITUDE<br>ABOVE SEA<br>LEVEL<br>(feet) | DEPTH<br>OF<br>WELL<br>(feet) | DIAMETER<br>OF WELL<br>(inches) | PRINCIPAL WATER-BEARING BED |                           |
|--------------------|---------------------|------------------------|--------------------------|------------------------------------------|-------------------------------|---------------------------------|-----------------------------|---------------------------|
|                    |                     |                        |                          |                                          |                               |                                 | CHARACTER<br>OF MATERIAL    | GEOLOGIC<br>UNIT          |
| 17.28.2.240        | Hal Bogle           | -                      | Flat between<br>mesas    | -                                        | -                             | 6 (?)                           | Redbeds (?)                 | Dockum (?)                |
| 14.220             | do.                 | -                      | Rolling                  | -                                        | -                             | 7                               | do.                         | do.                       |
| 19.200             | do.                 | -                      | do.                      | -                                        | -                             | 8                               | Redbeds,<br>gypsum (?)      | Chalk Bluff or<br>Rustler |
| 22.230             | -                   | -                      | Flat between<br>mesas    | -                                        | -                             | 6                               | Redbeds (?)                 | Rustler or<br>Dockum (?)  |
| 17.29.22.110       | -                   | -                      | Bear Grass<br>draw       | 3,550                                    | -                             | 6                               | do.                         | Dockum (?)                |
| 29.400             | Bishop (?)          | -                      | Flat                     | -                                        | -                             | 7                               | do.                         | do.                       |
| 17.31.34.000       | -                   | -                      | Rolling                  | -                                        | -                             | 6 (?)                           | Redbeds                     | Dockum                    |
| 18.21.13.310       | Andy Teel           | 1915                   | -                        | 4,100                                    | 520                           | 8                               | Limestone                   | San Andres                |
| 27.440             | do.                 | 1947                   | Broad valley             | 4,200                                    | 667                           | 10                              | do.                         | do.                       |
| 32.430             | George Teel         | 1946                   | Rolling                  | 4,300                                    | 815                           | 6                               | do.                         | do.                       |
| 18.23.6.140        | Couhape Bros.       | 1941                   | S. of Rio<br>Penasco     | 4,060                                    | 500                           | 10                              | do.                         | do.                       |
| 18.25.23.111       | G. M. Phelps        | -                      | Blackdom<br>Terrace      | -                                        | -                             | -                               | Alluvium (?)                | Quaternary (?)            |

See explanation at beginning of table.

| WATER LEVEL        |                                    |                        |                   |                      |                    |                                                                                  |
|--------------------|------------------------------------|------------------------|-------------------|----------------------|--------------------|----------------------------------------------------------------------------------|
| LOCATION<br>NUMBER | BELOW<br>LAND<br>SURFACE<br>(feet) | DATE OF<br>MEASUREMENT | YIELD<br>(g.p.m.) | METHOD<br>OF<br>LIFT | USE<br>OF<br>WATER | REMARKS                                                                          |
| 17.28.2.240        | 27.6                               | Dec. 1, 1948           | 3                 | W                    | S                  | Depth to water measured while pump-<br>ing.                                      |
| 14.220             | 80                                 | -                      | 61                | W                    | S & D              | Driller: Cy Hinshaw. See analysis, Table<br>3.                                   |
| 19.200             | 224.3                              | Dec. 2, 1948           | 1.2               | W                    | S                  | Depth to water measured while pump-<br>ing.                                      |
| 22.230             | 45.5                               | Dec. 1, 1948           | -                 | N                    | N                  | Abandoned stock well.                                                            |
| 17.29.22.110       | 79.7                               | Nov. 29, 1948          | 3 E.              | W                    | S                  | Depth to water measured while pump-<br>ing.                                      |
| 29.400             | 210                                | Dec. 3, 1948           | 1.1               | W                    | S                  | do.                                                                              |
| 17.31.34.000       | 271+                               | Dec. 6, 1948           | 3.5               | W                    | S                  | do. See analysis, Table 3.                                                       |
| 18.21.13.310       | 505                                | -                      | 10 R.             | W                    | S & D              | Formerly C.C.C. well. Cased to 30 ft.                                            |
| 27.440             | 530                                | -                      | -                 | W                    | S                  | Cased to 120 ft.                                                                 |
| 32.430             | 800 (?)                            | -                      | 12 R.             | W                    | S & D              | Lowered cylinder 5 ft. in 1948 because<br>water level declined. Cased to 380 ft. |
| 18.23.6.140        | 440                                | Jan. 12, 1950          | -                 | W                    | S & D              |                                                                                  |
| 18.25.23.111       | 117.8                              | Jan. 1950              | -                 | W                    | S                  |                                                                                  |

See explanation at beginning of table.

1 Measured Dec. 3, 1948.



USGS Home  
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## National Water Information System: Web Interface

USGS Water Resources

Data Category:

Ground Water

Geographic Area:

New Mexico

GO

News New Mapper and Experimental Real-Time Web Service - updated August 2009

## Ground-water levels for New Mexico

### Search Results -- 1 sites found

Search Criteria

site\_no list = 324855104093101  
Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

### USGS 324855104093101 17S.28E.22.34242

Available data for this site

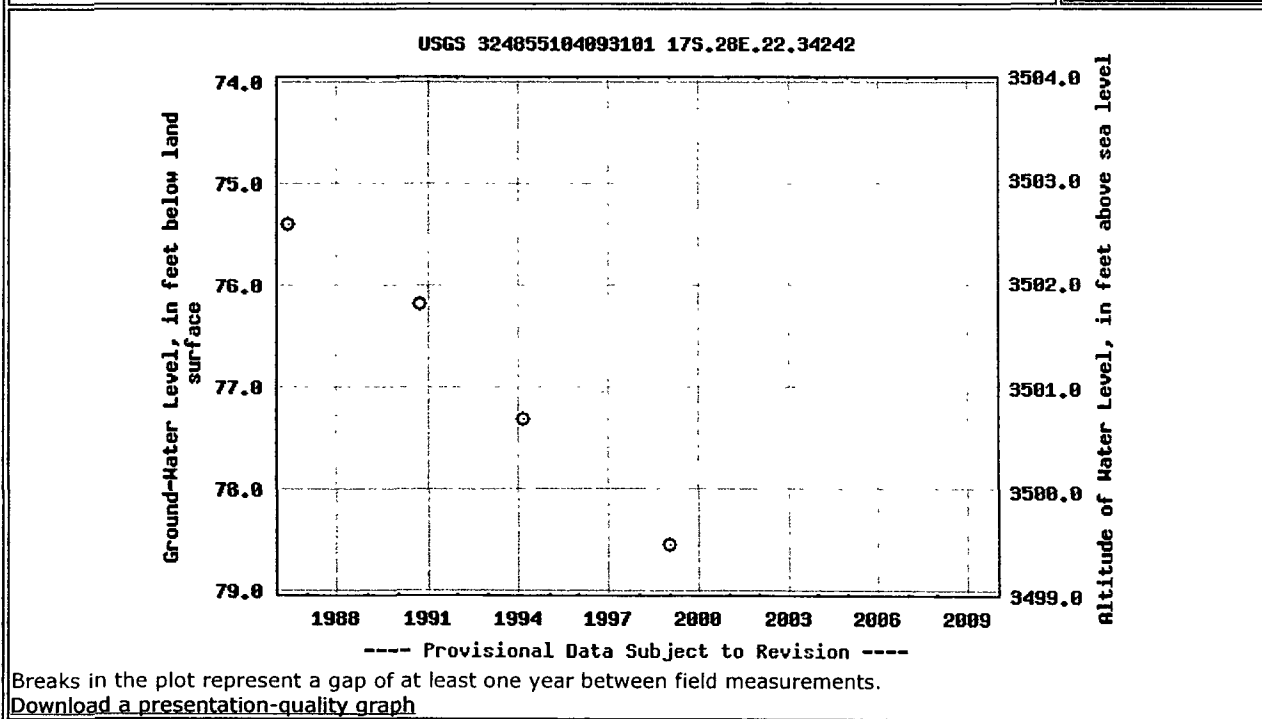
Ground-water: Field measurements

GO

Eddy County, New Mexico  
Hydrologic Unit Code 13060011  
Latitude 32°48'55", Longitude 104°09'31" NAD27  
Land-surface elevation 3,578 feet above sea level NGVD29  
The depth of the well is 95.00 feet below land surface.  
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

#### Output formats

[Table of data](#)  
[Tab-separated data](#)  
[Graph of data](#)  
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## SAMPLE LOG

Boring/Well: SB-1  
Project Number: 114-6400210  
Client: Concho Oil and Gas  
Site Location: RJU Unit #119  
Location: Eddy County, New Mexico  
Total Depth: 36  
Date Drilled: 06/30/09

| DEPTH (Ft) | OVM | SAMPLE DESCRIPTION                                  |
|------------|-----|-----------------------------------------------------|
| 5-6        | --  | Reddish tan fine grain sand (salty)                 |
| 8-9        | --  | Red to tan sandy clay (salty)                       |
| 11-12      | --  | Tan sandy clay (salty)                              |
| 13-14      | --  | Tan to brown clayey sandy (salty)                   |
| 15-16      | --  | Tan sandy clay (salty)                              |
| 20-21      | --  | Dry red clay of high plasticity (red bed) (salty)   |
| 25-26      | --  | Dry red clay of high plasticity (red bed) (salty)   |
| 30-31      | --  | Dry red clay of high plasticity (red bed) (no salt) |
| 35-36      | --  | Dry red clay of high plasticity (red bed) (no salt) |

Total Depth is 36 feet

No groundwater encountered during drilling activities.

## SAMPLE LOG

Boring/Well: SB-2  
Project Number: 114-6400210  
Client: Concho Oil and Gas  
Site Location: RJU Unit #119  
Location: Eddy County, New Mexico  
Total Depth: 16  
Date Drilled: 06/30/09

| DEPTH (Ft) | OVM | SAMPLE DESCRIPTION                        |
|------------|-----|-------------------------------------------|
| 5-6        | --  | Brown to tan fine grain sand (salty)      |
| 8-9        | --  | Red clay of high plasticity (salty)       |
| 11-12      | --  | Dry red clay of high plasticity (No salt) |
| 13-14      | --  | Dry red clay of high plasticity (No salt) |
| 15-16      | --  | Dry red clay of high plasticity (No salt) |

Total Depth is 16 feet      No groundwater encountered during drilling activities.

## SAMPLE LOG

Boring/Well: SB-3  
Project Number: 114-6400210  
Client: Concho Oil and Gas  
Site Location: RJU Unit #119  
Location: Eddy County, New Mexico  
Total Depth: 26  
Date Drilled: 06/30/09

| DEPTH (Ft) | OVM | SAMPLE DESCRIPTION                        |
|------------|-----|-------------------------------------------|
| 5-6        | --  | Brown to tan fine grain sand (salty)      |
| 8-9        | --  | Tan to brown sandy clay (salty)           |
| 11-12      | --  | Dry red clay of high plasticity (Salty)   |
| 13-14      | --  | Dry red clay of high plasticity (Salty)   |
| 15-16      | --  | Dry red clay of high plasticity (Salty)   |
| 20-21      | --  | Dry red clay of high plasticity (No salt) |
| 25-26      | --  | Dry red clay of high plasticity (No salt) |

Total Depth is 26 feet

No groundwater encountered during drilling activities.

## SAMPLE LOG

Boring/Well: SB-4  
Project Number: 114-6400210  
Client: Concho Oil and Gas  
Site Location: RJU Unit #119  
Location: Eddy County, New Mexico  
Total Depth: 26  
Date Drilled: 06/30/09

| DEPTH (Ft) | OVM  | SAMPLE DESCRIPTION                                              |
|------------|------|-----------------------------------------------------------------|
| 0-1        | 1645 | Tan fine grain sand (strong hydrocarbon odor)                   |
| 2-3        | 824  | Tan fine grain sand intermixed with red clay (hydrocarbon odor) |
| 5-6        | 1831 | Tan clay of high plasticity (hydrocarbon odor)                  |
| 8-9        | 387  | Red clay of high plasticity (slight hydrocarbo odor)            |
| 11-12      | 125  | Red clay of high plasticity (slight hydrocarbo odor)            |
| 13-14      | 100  | Red clay of high plasticity (hydrocarbon odor)                  |
| 15-16      | 76   | Red clay of high plasticity (slight hydrocarbo odor)            |
| 20-21      | 12   | Red clay of high plasticity (No hydrocarbon odor/no salt)       |
| 25-26      | 4    | Red clay of high plasticity (No hydrocarbon odor/no salt)       |

Total Depth is 26 feet

No groundwater encountered during drilling activities.

## SAMPLE LOG

Boring/Well: SB-5  
Project Number: 114-6400210  
Client: Concho Oil and Gas  
Site Location: RJU Unit #119  
Location: Eddy County, New Mexico  
Total Depth: 26  
Date Drilled: 06/30/09

| DEPTH (Ft) | OVM | SAMPLE DESCRIPTION                                   |
|------------|-----|------------------------------------------------------|
| 3-4        | 0   | Tan fine grain sandy clay (salty)                    |
| 5-6        | 4   | Tan fine grain sandy clay (salty)                    |
| 8-9        | 0   | Red to tan clay of high plasticity (salty)           |
| 11-12      | 4   | Red clay of high plasticity (salty)                  |
| 13-14      | 0   | Red clay of high plasticity (salty)                  |
| 15-16      | 0   | Red clay of high plasticity (salty)                  |
| 15-16      | 76  | Red clay of high plasticity (slight hydrocarbo odor) |
| 20-21      | --  | Red clay of high plasticity (No salt)                |
| 25-26      | --  | Red clay of high plasticity (No salt)                |

Total Depth is 26 feet

No groundwater encountered during drilling activities.

## SAMPLE LOG

Boring/Well: SB-6  
Project Number: 114-6400210  
Client: Concho Oil and Gas  
Site Location: RJU Unit #119  
Location: Eddy County, New Mexico  
Total Depth: 31  
Date Drilled: 06/30/09

| DEPTH (Ft) | OVM | SAMPLE DESCRIPTION                        |
|------------|-----|-------------------------------------------|
| 0-1        | --  | Brown fine grain sand (salty)             |
| 2-3        | --  | Brown silty clay (salty)                  |
| 5-6        | --  | Tan clay of high plasticity (moist) salty |
| 8-9        | --  | Tan clay of high plasticity (moist) salty |
| 11-12      | --  | Tan clay of high plasticity (moist) salty |
| 13-14      | --  | Red clay of high plasticity (salty)       |
| 15-16      | --  | Red clay of high plasticity (slight salt) |
| 20-21      | --  | Red clay of high plasticity (no salt)     |
| 25-26      | --  | Red clay of high plasticity (slight salt) |
| 30-31      | --  | Red clay of high plasticity (No salt)     |

Total Depth is 26 feet

No groundwater encountered during drilling activities.

## SAMPLE LOG

Boring/Well: SB-7  
Project Number: 114-6400210  
Client: Concho Oil and Gas  
Site Location: RJU Unit #119  
Location: Eddy County, New Mexico  
Total Depth: 31  
Date Drilled: 07/01/09

| DEPTH (Ft) | OVM | SAMPLE DESCRIPTION                                 |
|------------|-----|----------------------------------------------------|
| 5-6        | --  | Tan sandy clay (moist) salty                       |
| 8-9        | --  | Tan brown clay (moist) salty                       |
| 11-12      | --  | Red clay of high plasticity (dry) salty            |
| 13-14      | --  | Tan to red clay of high plasticity (moist) salty   |
| 15-16      | --  | Red clay of high plasticity (moist) slightly salty |
| 20-21      | --  | Red clay of high plasticity (dry) slightly salty   |
| 25-26      | --  | Red clay of high plasticity (dry) no salt          |
| 30-31      | --  | Red clay of high plasticity (dry) no salt          |

Total Depth is 31 feet

No groundwater encountered during drilling activities.

## SAMPLE LOG

Boring/Well: SB-8  
Project Number: 114-6400210  
Client: Concho Oil and Gas  
Site Location: RJU Unit #119  
Location: Eddy County, New Mexico  
Total Depth: 31  
Date Drilled: 07/01/09

| DEPTH (Ft) | OVM | SAMPLE DESCRIPTION                        |
|------------|-----|-------------------------------------------|
| 0-1        | --  | Brown fine grain moist sand (salty)       |
| 2-3        | --  | Brown clayey moist sand (salty)           |
| 5-6        | --  | Tan calcareous moist clay (salty)         |
| 8-9        | --  | Tan sandy clay (moist) salty              |
| 11-12      | --  | Red clay of high plasticity (moist) salty |
| 13-14      | --  | Red sandy clay (moist) salty              |
| 15-16      | --  | Red clay of high plasticity (dry) salty   |
| 20-21      | --  | Red clay of high plasticity (dry) salty   |
| 25-26      | --  | Red clay of high plasticity (dry) no salt |
| 30-31      | --  | Red clay of high plasticity (dry) no salt |

Total Depth is 31 feet

No groundwater encountered during drilling activities.

## SAMPLE LOG

Boring/Well: SB-9  
Project Number: 114-6400210  
Client: Concho Oil and Gas  
Site Location: RJU Unit #119  
Location: Eddy County, New Mexico  
Total Depth: 31  
Date Drilled: 07/01/09

| DEPTH (Ft) | OVM | SAMPLE DESCRIPTION                           |
|------------|-----|----------------------------------------------|
| 5-6        | --  | Brown fine grain sand (moist) salty          |
| 8-9        | --  | Tan to buff calcareous clay (moist) salty    |
| 11-12      | --  | Red sandy clay (moist) salty                 |
| 13-14      | --  | Red sandy clay (salty)                       |
| 15-16      | --  | Red clay of high plasticity (slightly salty) |
| 20-21      | --  | Red clay of high plasticity (slightly salty) |
| 25-26      | --  | Red clay of high plasticity (no salt)        |
| 30-31      | --  | Red clay of high plasticity (no salt)        |

Total Depth is 31 feet

No groundwater encountered during drilling activities.

## SAMPLE LOG

Boring/Well: SB-10  
Project Number: 114-6400210  
Client: Concho Oil and Gas  
Site Location: RJU Unit #119  
Location: Eddy County, New Mexico  
Total Depth: 36  
Date Drilled: 07/01/09

| DEPTH (Ft) | OVM | SAMPLE DESCRIPTION                         |
|------------|-----|--------------------------------------------|
| 5-6        | --  | Tan sandy clay (moist)                     |
| 8-9        | --  | Tan brown clay (moist)                     |
| 11-12      | --  | Red clay of high plasticity (dry)          |
| 13-14      | --  | Tan to red clay of high plasticity (moist) |
| 15-16      | --  | Red clay of high plasticity (moist)        |
| 20-21      | --  | Red clay of high plasticity (dry)          |
| 25-26      | --  | Red clay of high plasticity (dry)          |
| 30-31      | --  | Red clay of high plasticity (dry)          |
| 35-36      | --  | Red clay of high plasticity (dry)          |

Total Depth is 36 feet

No groundwater encountered during drilling activities.

## SAMPLE LOG

Boring/Well: SB-11  
Project Number: 114-6400210  
Client: Concho Oil and Gas  
Site Location: RJU Unit #119  
Location: Eddy County, New Mexico  
Total Depth: 31  
Date Drilled: 07/01/09

| DEPTH (Ft) | OVM | SAMPLE DESCRIPTION                         |
|------------|-----|--------------------------------------------|
| 5-6        | --  | Tan sandy clay (moist)                     |
| 8-9        | --  | Tan brown clay (moist)                     |
| 11-12      | --  | Red clay of high plasticity (dry)          |
| 13-14      | --  | Tan to red clay of high plasticity (moist) |
| 15-16      | --  | Red clay of high plasticity (moist)        |
| 20-21      | --  | Red clay of high plasticity (dry)          |
| 25-26      | --  | Red clay of high plasticity (dry)          |
| 30-31      | --  | Red clay of high plasticity (dry)          |

Total Depth is 31 feet

No groundwater encountered during drilling activities.

## APPENDIX D

## Summary Report

Ike Tavarez  
Tetra Tech  
1910 N. Big Spring Street  
Midland, TX 79705

Report Date: June 16, 2009

Work Order: 9060527



Project Name: COG/RJU #119 Flowline Spill  
Project Number: 114-6400210

| Sample | Description     | Matrix | Date Taken | Time Taken | Date Received |
|--------|-----------------|--------|------------|------------|---------------|
| 198009 | BG-1 0-1'       | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198010 | BG-1 2-2.5'     | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198011 | BG-1 3-3.5'     | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198012 | AH-1 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198013 | AH-1 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198014 | AH-1 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198015 | AH-1 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198016 | AH-1 4-4.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198017 | AH-1 5-5.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198018 | AH-1 6-6.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198019 | AH-2 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198020 | AH-2 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198021 | AH-2 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198022 | AH-2 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198023 | AH-2 4-4.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198024 | AH-2 5-5.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198025 | AH-2 6-6.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198026 | AH-3 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198027 | AH-3 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198028 | AH-3 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198029 | AH-3 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198030 | AH-3 4-4.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198031 | AH-3 5-5.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198032 | AH-3 6-6.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198033 | AH-4 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198034 | AH-4 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198035 | AH-4 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198036 | AH-4 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198037 | AH-4 4-4.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198038 | AH-4 5-5.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198039 | AH-5 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |

| Sample | Description     | Matrix | Date Taken | Time Taken | Date Received |
|--------|-----------------|--------|------------|------------|---------------|
| 198040 | AH-5 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198041 | AH-5 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198042 | AH-5 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198043 | AH-5 4-4.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198044 | AH-5 5-5.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198045 | AH-5 6-6.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198046 | AH-5 7-7.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198047 | AH-5 8-8.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198048 | AH-6 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198049 | AH-6 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198050 | AH-6 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198051 | AH-6 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198052 | AH-6 4-4.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198053 | AH-6 5-5.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198054 | AH-6 6-6.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198055 | AH-7 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198056 | AH-7 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198057 | AH-7 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198058 | AH-7 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |

| Sample - Field Code      | BTEX               |                    |                         |                   | TPH DRO        | TPH GRO        |
|--------------------------|--------------------|--------------------|-------------------------|-------------------|----------------|----------------|
|                          | Benzene<br>(mg/Kg) | Toluene<br>(mg/Kg) | Ethylbenzene<br>(mg/Kg) | Xylene<br>(mg/Kg) | DRO<br>(mg/Kg) | GRO<br>(mg/Kg) |
| 198012 - AH-1 0-1' BEB   | <0.0500            | 2.80               | 22.2                    | 34.9              | 6910           | 766            |
| 198013 - AH-1 1-1.5' BEB |                    |                    |                         |                   | 4140           | 1130           |
| 198014 - AH-1 2-2.5' BEB |                    |                    |                         |                   | <50.0          | 21.0           |
| 198019 - AH-2 0-1' BEB   | 7.55               | 74.1               | 72.5                    | 101               | 3570           | 2330           |
| 198020 - AH-2 1-1.5' BEB | 9.86               | 112                | 105                     | 129               | 4320           | 2830           |
| 198021 - AH-2 2-2.5' BEB | 4.78               | 94.4               | 93.5                    | 118               | 1120           | 2370           |
| 198026 - AH-3 0-1' BEB   |                    |                    |                         |                   | <50.0          | 31.6           |
| 198033 - AH-4 0-1' BEB   |                    |                    |                         |                   | <50.0          | 18.1           |
| 198039 - AH-5 0-1' BEB   |                    |                    |                         |                   | 3200           | 19.9           |
| 198048 - AH-6 0-1' BEB   |                    |                    |                         |                   | <50.0          | <1.00          |
| 198055 - AH-7 0-1' BEB   |                    |                    |                         |                   | <50.0          | 6.14           |

Sample: 198009 - BG-1 0-1'

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | <200   | mg/Kg | 4.00 |

Sample: 198010 - BG-1 2-2.5'

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | <200   | mg/Kg | 4.00 |

**Sample: 198011 - BG-1 3-3.5'**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | <200   | mg/Kg | 4.00 |

**Sample: 198012 - AH-1 0-1' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1520   | mg/Kg | 4.00 |

**Sample: 198013 - AH-1 1-1.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1690   | mg/Kg | 4.00 |

**Sample: 198014 - AH-1 2-2.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 675    | mg/Kg | 4.00 |

**Sample: 198015 - AH-1 3-3.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1280   | mg/Kg | 4.00 |

**Sample: 198016 - AH-1 4-4.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1440   | mg/Kg | 4.00 |

**Sample: 198017 - AH-1 5-5.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1450   | mg/Kg | 4.00 |

**Sample: 198018 - AH-1 6-6.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 994    | mg/Kg | 4.00 |

**Sample: 198019 - AH-2 0-1' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1250   | mg/Kg | 4.00 |

**Sample: 198020 - AH-2 1-1.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1670   | mg/Kg | 4.00 |

**Sample: 198021 - AH-2 2-2.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3250   | mg/Kg | 4.00 |

**Sample: 198022 - AH-2 3-3.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 4760   | mg/Kg | 4.00 |

**Sample: 198023 - AH-2 4-4.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 5240   | mg/Kg | 4.00 |

**Sample: 198024 - AH-2 5-5.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 5740   | mg/Kg | 4.00 |

**Sample: 198025 - AH-2 6-6.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 5270   | mg/Kg | 4.00 |

**Sample: 198026 - AH-3 0-1' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2330   | mg/Kg | 4.00 |

**Sample: 198027 - AH-3 1-1.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 799    | mg/Kg | 4.00 |

**Sample: 198028 - AH-3 2-2.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 468    | mg/Kg | 4.00 |

**Sample: 198029 - AH-3 3-3.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1350   | mg/Kg | 4.00 |

**Sample: 198030 - AH-3 4-4.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2490   | mg/Kg | 4.00 |

**Sample: 198031 - AH-3 5-5.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3540   | mg/Kg | 4.00 |

**Sample: 198032 - AH-3 6-6.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 4080   | mg/Kg | 4.00 |

**Sample: 198033 - AH-4 0-1' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 5390   | mg/Kg | 4.00 |

**Sample: 198034 - AH-4 1-1.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 5570   | mg/Kg | 4.00 |

Report Date: June 16, 2009  
114-6400210

Work Order: 9060527  
COG/RJU #119 Flowline Spill

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**Sample: 198035 - AH-4 2-2.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 8120   | mg/Kg | 4.00 |

**Sample: 198036 - AH-4 3-3.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3280   | mg/Kg | 4.00 |

**Sample: 198037 - AH-4 4-4.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2740   | mg/Kg | 4.00 |

**Sample: 198038 - AH-4 5-5.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2710   | mg/Kg | 4.00 |

**Sample: 198039 - AH-5 0-1' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1170   | mg/Kg | 4.00 |

**Sample: 198040 - AH-5 1-1.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 412    | mg/Kg | 4.00 |

**Sample: 198041 - AH-5 2-2.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 535    | mg/Kg | 4.00 |

**Sample: 198042 - AH-5 3-3.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 638    | mg/Kg | 4.00 |

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**Sample: 198043 - AH-5 4-4.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1160   | mg/Kg | 4.00 |

**Sample: 198044 - AH-5 5-5.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 937    | mg/Kg | 4.00 |

**Sample: 198045 - AH-5 6-6.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 927    | mg/Kg | 4.00 |

**Sample: 198046 - AH-5 7-7.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1380   | mg/Kg | 4.00 |

**Sample: 198047 - AH-5 8-8.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1100   | mg/Kg | 4.00 |

**Sample: 198048 - AH-6 0-1' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 6750   | mg/Kg | 4.00 |

**Sample: 198049 - AH-6 1-1.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 8750   | mg/Kg | 4.00 |

**Sample: 198050 - AH-6 2-2.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1180   | mg/Kg | 4.00 |

**Sample: 198051 - AH-6 3-3.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1120   | mg/Kg | 4.00 |

**Sample: 198052 - AH-6 4-4.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3710   | mg/Kg | 4.00 |

**Sample: 198053 - AH-6 5-5.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2850   | mg/Kg | 4.00 |

**Sample: 198054 - AH-6 6-6.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2540   | mg/Kg | 4.00 |

**Sample: 198055 - AH-7 0-1' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 8240   | mg/Kg | 4.00 |

**Sample: 198056 - AH-7 1-1.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 6460   | mg/Kg | 4.00 |

**Sample: 198057 - AH-7 2-2.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 9000   | mg/Kg | 4.00 |

**Sample: 198058 - AH-7 3-3.5' BEB**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 9310   | mg/Kg | 4.00 |



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6015 Harris Parkway, Suite 110 Ft Worth Texas 76132 817•201•5260  
E-Mail lab@traceanalysis.com

## Certifications

WBENC: 237019

HUB: 1752439743100-86536  
NCTRCA WFWB38444Y0909

DBE: VN 20657

## NELAP Certifications

Lubbock: T104704219-08-TX  
LELAP-02003  
Kansas E-10317

El Paso: T104704221-08-TX  
LELAP-02002

Midland: T104704392-08-TX

## Analytical and Quality Control Report

Ike Tavaréz  
Tetra Tech  
1910 N. Big Spring Street  
Midland, TX, 79705

Report Date: June 16, 2009

Work Order: 9060527



Project Name: COG/RJU #119 Flowline Spill  
Project Number: 114-6400210

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description     | Matrix | Date Taken | Time Taken | Date Received |
|--------|-----------------|--------|------------|------------|---------------|
| 198009 | BG-1 0-1'       | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198010 | BG-1 2-2.5'     | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198011 | BG-1 3-3.5'     | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198012 | AH-1 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198013 | AH-1 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198014 | AH-1 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198015 | AH-1 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198016 | AH-1 4-4.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198017 | AH-1 5-5.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198018 | AH-1 6-6.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198019 | AH-2 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |

| Sample | Description     | Matrix | Date Taken | Time Taken | Date Received |
|--------|-----------------|--------|------------|------------|---------------|
| 198020 | AH-2 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198021 | AH-2 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198022 | AH-2 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198023 | AH-2 4-4.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198024 | AH-2 5-5.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198025 | AH-2 6-6.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198026 | AH-3 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198027 | AH-3 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198028 | AH-3 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198029 | AH-3 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198030 | AH-3 4-4.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198031 | AH-3 5-5.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198032 | AH-3 6-6.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198033 | AH-4 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198034 | AH-4 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198035 | AH-4 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198036 | AH-4 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198037 | AH-4 4-4.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198038 | AH-4 5-5.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198039 | AH-5 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198040 | AH-5 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198041 | AH-5 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198042 | AH-5 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198043 | AH-5 4-4.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198044 | AH-5 5-5.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198045 | AH-5 6-6.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198046 | AH-5 7-7.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198047 | AH-5 8-8.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198048 | AH-6 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198049 | AH-6 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198050 | AH-6 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198051 | AH-6 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198052 | AH-6 4-4.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198053 | AH-6 5-5.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198054 | AH-6 6-6.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198055 | AH-7 0-1' BEB   | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198056 | AH-7 1-1.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198057 | AH-7 2-2.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |
| 198058 | AH-7 3-3.5' BEB | soil   | 2009-06-04 | 00:00      | 2009-06-05    |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 53 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

*Blair Leftwich*

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Dr. Blair Leftwich, Director

**Standard Flags**

B - The sample contains less than ten times the concentration found in the method blank.

## Case Narrative

Samples for project COG/RJU #119 Flowline Spill were received by TraceAnalysis, Inc. on 2009-06-05 and assigned to work order 9060527. Samples for work order 9060527 were received intact at a temperature of 13.1 deg. C.

Samples were analyzed for the following tests using their respective methods.

| Test                 | Method       | Prep Batch | Prep Date           | QC Batch | Analysis Date       |
|----------------------|--------------|------------|---------------------|----------|---------------------|
| BTEX                 | S 8021B      | 51377      | 2009-06-08 at 10:09 | 60203    | 2009-06-08 at 10:09 |
| BTEX                 | S 8021B      | 51454      | 2009-06-10 at 09:21 | 60299    | 2009-06-10 at 09:21 |
| BTEX                 | S 8021B      | 51559      | 2009-06-15 at 10:35 | 60438    | 2009-06-15 at 10:35 |
| Chloride (Titration) | SM 4500-Cl B | 51363      | 2009-06-08 at 09:31 | 60187    | 2009-06-08 at 15:11 |
| Chloride (Titration) | SM 4500-Cl B | 51397      | 2009-06-09 at 10:14 | 60226    | 2009-06-09 at 15:17 |
| Chloride (Titration) | SM 4500-Cl B | 51398      | 2009-06-09 at 10:14 | 60227    | 2009-06-09 at 15:18 |
| Chloride (Titration) | SM 4500-Cl B | 51399      | 2009-06-09 at 10:15 | 60228    | 2009-06-09 at 15:19 |
| Chloride (Titration) | SM 4500-Cl B | 51400      | 2009-06-09 at 10:16 | 60229    | 2009-06-09 at 15:19 |
| Chloride (Titration) | SM 4500-Cl B | 51401      | 2009-06-09 at 10:16 | 60230    | 2009-06-09 at 15:20 |
| TPH DRO              | Mod. 8015B   | 51381      | 2009-06-08 at 16:00 | 60209    | 2009-06-08 at 22:22 |
| TPH DRO              | Mod. 8015B   | 51453      | 2009-06-10 at 15:00 | 60297    | 2009-06-10 at 12:21 |
| TPH DRO              | Mod. 8015B   | 51490      | 2009-06-12 at 08:30 | 60354    | 2009-06-12 at 09:16 |
| TPH GRO              | S 8015B      | 51377      | 2009-06-08 at 10:09 | 60204    | 2009-06-08 at 10:09 |
| TPH GRO              | S 8015B      | 51454      | 2009-06-10 at 09:21 | 60300    | 2009-06-10 at 09:21 |
| TPH GRO              | S 8015B      | 51482      | 2009-06-11 at 12:56 | 60339    | 2009-06-11 at 12:56 |
| TPH GRO              | S 8015B      | 51528      | 2009-06-12 at 10:15 | 60398    | 2009-06-12 at 10:15 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9060527 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

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## Analytical Report

### Sample: 198009 - BG-1 0-1'

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-08   | Analyzed By: | AR  |
| QC Batch:   | 60187                | Sample Preparation: | 2009-06-08   | Prepared By: | AR  |
| Prep Batch: | 51363                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | <200         | mg/Kg | 50       | 4.00 |

### Sample: 198010 - BG-1 2-2.5'

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60226                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51397                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | <200         | mg/Kg | 50       | 4.00 |

### Sample: 198011 - BG-1 3-3.5'

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60226                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51397                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | <200         | mg/Kg | 50       | 4.00 |

### Sample: 198012 - AH-1 0-1' BEB

|             |         |                     |            |              |        |
|-------------|---------|---------------------|------------|--------------|--------|
| Laboratory: | Midland | Analytical Method:  | S 8021B    | Prep Method: | S 5035 |
| Analysis:   | BTEX    | Date Analyzed:      | 2009-06-08 | Analyzed By: | ME     |
| QC Batch:   | 60203   | Sample Preparation: | 2009-06-08 | Prepared By: | ME     |
| Prep Batch: | 51377   |                     |            |              |        |

*continued ...*

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sample 198012 continued ...

| Parameter    | Flag | RL<br>Result | Units | Dilution | RL     |
|--------------|------|--------------|-------|----------|--------|
| Parameter    | Flag | RL<br>Result | Units | Dilution | RL     |
| Benzene      |      | <0.0500      | mg/Kg | 5        | 0.0100 |
| Toluene      |      | 2.80         | mg/Kg | 5        | 0.0100 |
| Ethylbenzene |      | 22.2         | mg/Kg | 5        | 0.0100 |
| Xylene       |      | 34.9         | mg/Kg | 5        | 0.0100 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 9.95   | mg/Kg | 5        | 10.0            | 100                 | 49 - 129.7         |
| 4-Bromofluorobenzene (4-BFB) |      | 14.1   | mg/Kg | 5        | 10.0            | 141                 | 45.2 - 144.3       |

**Sample: 198012 - AH-1 0-1' BEB**

|                                |                                 |                  |
|--------------------------------|---------------------------------|------------------|
| Laboratory: Midland            | Analytical Method: SM 4500-Cl B | Prep Method: N/A |
| Analysis: Chloride (Titration) | Date Analyzed: 2009-06-09       | Analyzed By: AR  |
| QC Batch: 60226                | Sample Preparation: 2009-06-09  | Prepared By: AR  |
| Prep Batch: 51397              |                                 |                  |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1520         | mg/Kg | 50       | 4.00 |

**Sample: 198012 - AH-1 0-1' BEB**

|                     |                                |                  |
|---------------------|--------------------------------|------------------|
| Laboratory: Midland | Analytical Method: Mod. 8015B  | Prep Method: N/A |
| Analysis: TPH DRO   | Date Analyzed: 2009-06-08      | Analyzed By: AG  |
| QC Batch: 60209     | Sample Preparation: 2009-06-08 | Prepared By: AG  |
| Prep Batch: 51381   |                                |                  |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| DRO       |      | 6910         | mg/Kg | 5        | 50.0 |

| Surrogate     | Flag         | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|---------------|--------------|--------|-------|----------|-----------------|---------------------|--------------------|
| n-Triacontane | <sup>1</sup> | 552    | mg/Kg | 5        | 100             | 552                 | 13.2 - 219.3       |

<sup>1</sup>High surrogate recovery due to peak interference.

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**Sample: 198012 - AH-1 0-1' BEB**

|             |         |                     |            |              |        |
|-------------|---------|---------------------|------------|--------------|--------|
| Laboratory: | Midland | Analytical Method:  | S 8015B    | Prep Method: | S 5035 |
| Analysis:   | TPH GRO | Date Analyzed:      | 2009-06-08 | Analyzed By: | ME     |
| QC Batch:   | 60204   | Sample Preparation: | 2009-06-08 | Prepared By: | ME     |
| Prep Batch: | 51377   |                     |            |              |        |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| GRO       |      | 766          | mg/Kg | 5        | 1.00 |

| Surrogate                    | Flag         | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|--------------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |              | 10.4   | mg/Kg | 5        | 10.0            | 104                 | 68.5 - 119.4       |
| 4-Bromofluorobenzene (4-BFB) | <sup>2</sup> | 22.8   | mg/Kg | 5        | 10.0            | 228                 | 52 - 117           |

**Sample: 198013 - AH-1 1-1.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60226                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51397                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1690         | mg/Kg | 50       | 4.00 |

**Sample: 198013 - AH-1 1-1.5' BEB**

|             |         |                     |            |              |     |
|-------------|---------|---------------------|------------|--------------|-----|
| Laboratory: | Midland | Analytical Method:  | Mod. 8015B | Prep Method: | N/A |
| Analysis:   | TPH DRO | Date Analyzed:      | 2009-06-10 | Analyzed By: | AG  |
| QC Batch:   | 60297   | Sample Preparation: | 2009-06-10 | Prepared By: | AG  |
| Prep Batch: | 51453   |                     |            |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| DRO       |      | 4140         | mg/Kg | 1        | 50.0 |

| Surrogate     | Flag         | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|---------------|--------------|--------|-------|----------|-----------------|---------------------|--------------------|
| n-Triacontane | <sup>3</sup> | 315    | mg/Kg | 1        | 100             | 315                 | 13.2 - 219.3       |

<sup>2</sup>High surrogate recovery due to peak interference.

<sup>3</sup>High surrogate recovery due to peak interference.

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**Sample: 198013 - AH-1 1-1.5' BEB**

|             |         |                     |            |              |        |
|-------------|---------|---------------------|------------|--------------|--------|
| Laboratory: | Midland | Analytical Method:  | S 8015B    | Prep Method: | S 5035 |
| Analysis:   | TPH GRO | Date Analyzed:      | 2009-06-11 | Analyzed By: | ME     |
| QC Batch:   | 60339   | Sample Preparation: | 2009-06-11 | Prepared By: | ME     |
| Prep Batch: | 51482   |                     |            |              |        |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| GRO       |      | 1130         | mg/Kg | 20       | 1.00 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 41.6   | mg/Kg | 20       | 40.0            | 104                 | 68.5 - 119.4       |
| 4-Bromofluorobenzene (4-BFB) | 4    | 79.1   | mg/Kg | 20       | 40.0            | 198                 | 52 - 117           |

**Sample: 198014 - AH-1 2-2.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60226                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51397                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 675          | mg/Kg | 50       | 4.00 |

**Sample: 198014 - AH-1 2-2.5' BEB**

|             |         |                     |            |              |     |
|-------------|---------|---------------------|------------|--------------|-----|
| Laboratory: | Midland | Analytical Method:  | Mod. 8015B | Prep Method: | N/A |
| Analysis:   | TPH DRO | Date Analyzed:      | 2009-06-10 | Analyzed By: | AG  |
| QC Batch:   | 60297   | Sample Preparation: | 2009-06-10 | Prepared By: | AG  |
| Prep Batch: | 51453   |                     |            |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| DRO       |      | <50.0        | mg/Kg | 1        | 50.0 |

| Surrogate     | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|---------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| n-Triacontane |      | 100    | mg/Kg | 1        | 100             | 100                 | 13.2 - 219.3       |

<sup>4</sup>High surrogate recovery due to peak interference.

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**Sample: 198014 - AH-1 2-2.5' BEB**

|             |         |                     |            |              |        |
|-------------|---------|---------------------|------------|--------------|--------|
| Laboratory: | Midland | Analytical Method:  | S 8015B    | Prep Method: | S 5035 |
| Analysis:   | TPH GRO | Date Analyzed:      | 2009-06-10 | Analyzed By: | ME     |
| QC Batch:   | 60300   | Sample Preparation: | 2009-06-10 | Prepared By: | ME     |
| Prep Batch: | 51454   |                     |            |              |        |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| GRO       |      | 21.0         | mg/Kg | 1        | 1.00 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 2.09   | mg/Kg | 1        | 2.00            | 104                 | 68.5 - 119.4       |
| 4-Bromofluorobenzene (4-BFB) |      | 1.63   | mg/Kg | 1        | 2.00            | 82                  | 52 - 117           |

**Sample: 198015 - AH-1 3-3.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60226                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51397                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1280         | mg/Kg | 50       | 4.00 |

**Sample: 198016 - AH-1 4-4.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60226                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51397                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1440         | mg/Kg | 50       | 4.00 |

**Sample: 198017 - AH-1 5-5.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60226                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51397                |                     |              |              |     |

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| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1450         | mg/Kg | 50       | 4.00 |

**Sample: 198018 - AH-1 6-6.5' BEB**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 60226      Date Analyzed: 2009-06-09      Analyzed By: AR  
Prep Batch: 51397      Sample Preparation: 2009-06-09      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 994          | mg/Kg | 50       | 4.00 |

**Sample: 198019 - AH-2 0-1' BEB**

Laboratory: Midland  
Analysis: BTEX      Analytical Method: S 8021B      Prep Method: S 5035  
QC Batch: 60299      Date Analyzed: 2009-06-10      Analyzed By: ME  
Prep Batch: 51454      Sample Preparation: 2009-06-10      Prepared By: ME

| Parameter    | Flag | RL<br>Result | Units | Dilution | RL     |
|--------------|------|--------------|-------|----------|--------|
| Benzene      |      | 7.55         | mg/Kg | 20       | 0.0100 |
| Toluene      |      | 74.1         | mg/Kg | 20       | 0.0100 |
| Ethylbenzene |      | 72.5         | mg/Kg | 20       | 0.0100 |
| Xylene       |      | 101          | mg/Kg | 20       | 0.0100 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 39.0   | mg/Kg | 20       | 40.0            | 98                  | 49 - 129.7         |
| 4-Bromofluorobenzene (4-BFB) |      | 53.1   | mg/Kg | 20       | 40.0            | 133                 | 45.2 - 144.3       |

**Sample: 198019 - AH-2 0-1' BEB**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 60226      Date Analyzed: 2009-06-09      Analyzed By: AR  
Prep Batch: 51397      Sample Preparation: 2009-06-09      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1250         | mg/Kg | 50       | 4.00 |

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**Sample: 198019 - AH-2 0-1' BEB**

|             |         |                     |            |              |     |
|-------------|---------|---------------------|------------|--------------|-----|
| Laboratory: | Midland | Analytical Method:  | Mod. 8015B | Prep Method: | N/A |
| Analysis:   | TPH DRO | Date Analyzed:      | 2009-06-08 | Analyzed By: | AG  |
| QC Batch:   | 60209   | Sample Preparation: | 2009-06-08 | Prepared By: | AG  |
| Prep Batch: | 51381   |                     |            |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| DRO       |      | 3570         | mg/Kg | 5        | 50.0 |

| Surrogate     | Flag         | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|---------------|--------------|--------|-------|----------|-----------------|---------------------|--------------------|
| n-Triacontane | <sup>5</sup> | 349    | mg/Kg | 5        | 100             | 349                 | 13.2 - 219.3       |

**Sample: 198019 - AH-2 0-1' BEB**

|             |         |                     |            |              |        |
|-------------|---------|---------------------|------------|--------------|--------|
| Laboratory: | Midland | Analytical Method:  | S 8015B    | Prep Method: | S 5035 |
| Analysis:   | TPH GRO | Date Analyzed:      | 2009-06-10 | Analyzed By: | ME     |
| QC Batch:   | 60300   | Sample Preparation: | 2009-06-10 | Prepared By: | ME     |
| Prep Batch: | 51454   |                     |            |              |        |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| GRO       |      | 2330         | mg/Kg | 20       | 1.00 |

| Surrogate                    | Flag         | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|--------------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |              | 41.8   | mg/Kg | 20       | 40.0            | 104                 | 68.5 - 119.4       |
| 4-Bromofluorobenzene (4-BFB) | <sup>6</sup> | 84.6   | mg/Kg | 20       | 40.0            | 212                 | 52 - 117           |

**Sample: 198020 - AH-2 1-1.5' BEB**

|             |         |                     |            |              |        |
|-------------|---------|---------------------|------------|--------------|--------|
| Laboratory: | Midland | Analytical Method:  | S 8021B    | Prep Method: | S 5035 |
| Analysis:   | BTEX    | Date Analyzed:      | 2009-06-15 | Analyzed By: | ME     |
| QC Batch:   | 60438   | Sample Preparation: | 2009-06-15 | Prepared By: | ME     |
| Prep Batch: | 51559   |                     |            |              |        |

| Parameter    | Flag | RL<br>Result | Units | Dilution | RL     |
|--------------|------|--------------|-------|----------|--------|
| Benzene      |      | 9.86         | mg/Kg | 20       | 0.0100 |
| Toluene      |      | 112          | mg/Kg | 20       | 0.0100 |
| Ethylbenzene |      | 105          | mg/Kg | 20       | 0.0100 |
| Xylene       |      | 129          | mg/Kg | 20       | 0.0100 |

<sup>5</sup>High surrogate recovery due to peak interference.

<sup>6</sup>High surrogate recovery due to peak interference.

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| Surrogate                    | Flag         | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|--------------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |              | 38.2   | mg/Kg | 20       | 40.0         | 96               | 49 - 129.7      |
| 4-Bromofluorobenzene (4-BFB) | <sup>7</sup> | 58.7   | mg/Kg | 20       | 40.0         | 147              | 45.2 - 144.3    |

**Sample: 198020 - AH-2 1-1.5' BEB**

Laboratory: Midland  
Analysis: Chloride (Titration)  
QC Batch: 60227  
Prep Batch: 51398

Analytical Method: SM 4500-Cl B  
Date Analyzed: 2009-06-09  
Sample Preparation: 2009-06-09

Prep Method: N/A  
Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1670         | mg/Kg | 50       | 4.00 |

**Sample: 198020 - AH-2 1-1.5' BEB**

Laboratory: Midland  
Analysis: TPH DRO  
QC Batch: 60354  
Prep Batch: 51490

Analytical Method: Mod. 8015B  
Date Analyzed: 2009-06-12  
Sample Preparation: 2009-06-12

Prep Method: N/A  
Analyzed By: AG  
Prepared By: AG

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| DRO       |      | 4320         | mg/Kg | 5        | 50.0 |

| Surrogate     | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---------------|------|--------|-------|----------|--------------|------------------|-----------------|
| n-Triacontane |      | 536    | mg/Kg | 5        | 100          | 536              | 13.2 - 219.3    |

**Sample: 198020 - AH-2 1-1.5' BEB**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 60398  
Prep Batch: 51528

Analytical Method: S 8015B  
Date Analyzed: 2009-06-12  
Sample Preparation: 2009-06-12

Prep Method: S 5035  
Analyzed By: ME  
Prepared By: ME

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| GRO       |      | 2830         | mg/Kg | 20       | 1.00 |

<sup>7</sup>High surrogate recovery due to peak interference.

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| Surrogate                    | Flag         | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|--------------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |              | 42.7   | mg/Kg | 20       | 40.0         | 107              | 68.5 - 119.4    |
| 4-Bromofluorobenzene (4-BFB) | <sup>8</sup> | 105    | mg/Kg | 20       | 40.0         | 262              | 52 - 117        |

**Sample: 198021 - AH-2 2-2.5' BEB**

Laboratory: Midland

Analysis: BTEX

QC Batch: 60438

Prep Batch: 51559

Analytical Method: S 8021B

Date Analyzed: 2009-06-15

Sample Preparation: 2009-06-15

Prep Method: S 5035

Analyzed By: ME

Prepared By: ME

| Parameter    | Flag | RL<br>Result | Units | Dilution | RL     |
|--------------|------|--------------|-------|----------|--------|
| Benzene      |      | 4.78         | mg/Kg | 10       | 0.0100 |
| Toluene      |      | 94.4         | mg/Kg | 10       | 0.0100 |
| Ethylbenzene |      | 93.5         | mg/Kg | 10       | 0.0100 |
| Xylene       |      | 118          | mg/Kg | 10       | 0.0100 |

| Surrogate                    | Flag         | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|--------------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |              | 18.9   | mg/Kg | 10       | 20.0         | 94               | 49 - 129.7      |
| 4-Bromofluorobenzene (4-BFB) | <sup>9</sup> | 34.0   | mg/Kg | 10       | 20.0         | 170              | 45.2 - 144.3    |

**Sample: 198021 - AH-2 2-2.5' BEB**

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 60227

Prep Batch: 51398

Analytical Method: SM 4500-Cl B

Date Analyzed: 2009-06-09

Sample Preparation: 2009-06-09

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3250         | mg/Kg | 50       | 4.00 |

**Sample: 198021 - AH-2 2-2.5' BEB**

Laboratory: Midland

Analysis: TPH DRO

QC Batch: 60354

Prep Batch: 51490

Analytical Method: Mod. 8015B

Date Analyzed: 2009-06-12

Sample Preparation: 2009-06-12

Prep Method: N/A

Analyzed By: AG

Prepared By: AG

<sup>8</sup>High surrogate recovery due to peak interference.

<sup>9</sup>High surrogate recovery due to peak interference.

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| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| DRO       |      | 1120         | mg/Kg | 1        | 50.0 |

| Surrogate     | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|---------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| n-Triacontane |      | 144    | mg/Kg | 1        | 100             | 144                 | 13.2 - 219.3       |

**Sample: 198021 - AH-2 2-2.5' BEB**

Laboratory: Midland

Analysis: TPH GRO

QC Batch: 60398

Prep Batch: 51528

Analytical Method: S 8015B

Date Analyzed: 2009-06-12

Sample Preparation: 2009-06-12

Prep Method: S 5035

Analyzed By: ME

Prepared By: ME

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| GRO       |      | 2370         | mg/Kg | 10       | 1.00 |

| Surrogate                    | Flag          | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|---------------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |               | 21.3   | mg/Kg | 10       | 20.0            | 106                 | 68.5 - 119.4       |
| 4-Bromofluorobenzene (4-BFB) | <sup>10</sup> | 39.0   | mg/Kg | 10       | 20.0            | 195                 | 52 - 117           |

**Sample: 198022 - AH-2 3-3.5' BEB**

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 60227

Prep Batch: 51398

Analytical Method: SM 4500-Cl B

Date Analyzed: 2009-06-09

Sample Preparation: 2009-06-09

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 4760         | mg/Kg | 50       | 4.00 |

**Sample: 198023 - AH-2 4-4.5' BEB**

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 60227

Prep Batch: 51398

Analytical Method: SM 4500-Cl B

Date Analyzed: 2009-06-09

Sample Preparation: 2009-06-09

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

*continued ...*

<sup>10</sup>High surrogate recovery due to peak interference.

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*sample 198023 continued ...*

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
| Chloride  |      | 5240         | mg/Kg | 50       | 4.00 |

**Sample: 198024 - AH-2 5-5.5' BEB**

|             |                      |                     |              |                  |
|-------------|----------------------|---------------------|--------------|------------------|
| Laboratory: | Midland              |                     |              |                  |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B | Prep Method: N/A |
| QC Batch:   | 60227                | Date Analyzed:      | 2009-06-09   | Analyzed By: AR  |
| Prep Batch: | 51398                | Sample Preparation: | 2009-06-09   | Prepared By: AR  |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 5740         | mg/Kg | 50       | 4.00 |

**Sample: 198025 - AH-2 6-6.5' BEB**

|             |                      |                     |              |                  |
|-------------|----------------------|---------------------|--------------|------------------|
| Laboratory: | Midland              |                     |              |                  |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B | Prep Method: N/A |
| QC Batch:   | 60227                | Date Analyzed:      | 2009-06-09   | Analyzed By: AR  |
| Prep Batch: | 51398                | Sample Preparation: | 2009-06-09   | Prepared By: AR  |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 5270         | mg/Kg | 50       | 4.00 |

**Sample: 198026 - AH-3 0-1' BEB**

|             |                      |                     |              |                  |
|-------------|----------------------|---------------------|--------------|------------------|
| Laboratory: | Midland              |                     |              |                  |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B | Prep Method: N/A |
| QC Batch:   | 60227                | Date Analyzed:      | 2009-06-09   | Analyzed By: AR  |
| Prep Batch: | 51398                | Sample Preparation: | 2009-06-09   | Prepared By: AR  |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2330         | mg/Kg | 50       | 4.00 |

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**Sample: 198026 - AH-3 0-1' BEB**

Laboratory: Midland  
Analysis: TPH DRO  
QC Batch: 60209  
Prep Batch: 51381

Analytical Method: Mod. 8015B  
Date Analyzed: 2009-06-08  
Sample Preparation: 2009-06-08

Prep Method: N/A  
Analyzed By: AG  
Prepared By: AG

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| DRO       |      | <50.0        | mg/Kg | 1        | 50.0 |

| Surrogate     | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|---------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| n-Triacontane |      | 85.7   | mg/Kg | 1        | 100             | 86                  | 13.2 - 219.3       |

**Sample: 198026 - AH-3 0-1' BEB**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 60204  
Prep Batch: 51377

Analytical Method: S 8015B  
Date Analyzed: 2009-06-08  
Sample Preparation: 2009-06-08

Prep Method: S 5035  
Analyzed By: ME  
Prepared By: ME

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| GRO       |      | 31.6         | mg/Kg | 1        | 1.00 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 2.04   | mg/Kg | 1        | 2.00            | 102                 | 68.5 - 119.4       |
| 4-Bromofluorobenzene (4-BFB) |      | 1.69   | mg/Kg | 1        | 2.00            | 84                  | 52 - 117           |

**Sample: 198027 - AH-3 1-1.5' BEB**

Laboratory: Midland  
Analysis: Chloride (Titration)  
QC Batch: 60227  
Prep Batch: 51398

Analytical Method: SM 4500-Cl B  
Date Analyzed: 2009-06-09  
Sample Preparation: 2009-06-09

Prep Method: N/A  
Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 799          | mg/Kg | 50       | 4.00 |

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**Sample: 198028 - AH-3 2-2.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60227                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51398                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 468          | mg/Kg | 50       | 4.00 |

**Sample: 198029 - AH-3 3-3.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60227                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51398                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1350         | mg/Kg | 50       | 4.00 |

**Sample: 198030 - AH-3 4-4.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60228                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51399                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2490         | mg/Kg | 50       | 4.00 |

**Sample: 198031 - AH-3 5-5.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60228                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51399                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3540         | mg/Kg | 50       | 4.00 |

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**Sample: 198032 - AH-3 6-6.5' BEB**

Laboratory: Midland  
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A  
QC Batch: 60228 Date Analyzed: 2009-06-09 Analyzed By: AR  
Prep Batch: 51399 Sample Preparation: 2009-06-09 Prepared By: AR

| Parameter | Flag | RL     | Units | Dilution | RL   |
|-----------|------|--------|-------|----------|------|
|           |      | Result |       |          |      |
| Chloride  |      | 4080   | mg/Kg | 50       | 4.00 |

**Sample: 198033 - AH-4 0-1' BEB**

Laboratory: Midland  
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A  
QC Batch: 60228 Date Analyzed: 2009-06-09 Analyzed By: AR  
Prep Batch: 51399 Sample Preparation: 2009-06-09 Prepared By: AR

| Parameter | Flag | RL     | Units | Dilution | RL   |
|-----------|------|--------|-------|----------|------|
|           |      | Result |       |          |      |
| Chloride  |      | 5390   | mg/Kg | 50       | 4.00 |

**Sample: 198033 - AH-4 0-1' BEB**

Laboratory: Midland  
Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A  
QC Batch: 60209 Date Analyzed: 2009-06-08 Analyzed By: AG  
Prep Batch: 51381 Sample Preparation: 2009-06-08 Prepared By: AG

| Parameter | Flag | RL     | Units | Dilution | RL   |
|-----------|------|--------|-------|----------|------|
|           |      | Result |       |          |      |
| DRO       |      | <50.0  | mg/Kg | 1        | 50.0 |

| Surrogate     | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---------------|------|--------|-------|----------|--------------|------------------|-----------------|
| n-Triacontane |      | 113    | mg/Kg | 1        | 100          | 113              | 13.2 - 219.3    |

**Sample: 198033 - AH-4 0-1' BEB**

Laboratory: Midland  
Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035  
QC Batch: 60204 Date Analyzed: 2009-06-08 Analyzed By: ME  
Prep Batch: 51377 Sample Preparation: 2009-06-08 Prepared By: ME

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| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| GRO       |      | 18.1         | mg/Kg | 1        | 1.00 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 1.98   | mg/Kg | 1        | 2.00            | 99                  | 68.5 - 119.4       |
| 4-Bromofluorobenzene (4-BFB) |      | 1.38   | mg/Kg | 1        | 2.00            | 69                  | 52 - 117           |

**Sample: 198034 - AH-4 1-1.5' BEB**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 60228      Date Analyzed: 2009-06-09      Analyzed By: AR  
Prep Batch: 51399      Sample Preparation: 2009-06-09      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 5570         | mg/Kg | 50       | 4.00 |

**Sample: 198035 - AH-4 2-2.5' BEB**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 60228      Date Analyzed: 2009-06-09      Analyzed By: AR  
Prep Batch: 51399      Sample Preparation: 2009-06-09      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 8120         | mg/Kg | 50       | 4.00 |

**Sample: 198036 - AH-4 3-3.5' BEB**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 60228      Date Analyzed: 2009-06-09      Analyzed By: AR  
Prep Batch: 51399      Sample Preparation: 2009-06-09      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3280         | mg/Kg | 50       | 4.00 |

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**Sample: 198037 - AH-4 4-4.5' BEB**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 60228                | Date Analyzed:      | 2009-06-09   |
| Prep Batch: | 51399                | Sample Preparation: | 2009-06-09   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2740         | mg/Kg | 50       | 4.00 |

**Sample: 198038 - AH-4 5-5.5' BEB**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 60228                | Date Analyzed:      | 2009-06-09   |
| Prep Batch: | 51399                | Sample Preparation: | 2009-06-09   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2710         | mg/Kg | 50       | 4.00 |

**Sample: 198039 - AH-5 0-1' BEB**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 60228                | Date Analyzed:      | 2009-06-09   |
| Prep Batch: | 51399                | Sample Preparation: | 2009-06-09   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1170         | mg/Kg | 50       | 4.00 |

**Sample: 198039 - AH-5 0-1' BEB**

|             |         |                     |            |
|-------------|---------|---------------------|------------|
| Laboratory: | Midland |                     |            |
| Analysis:   | TPH DRO | Analytical Method:  | Mod. 8015B |
| QC Batch:   | 60209   | Date Analyzed:      | 2009-06-08 |
| Prep Batch: | 51381   | Sample Preparation: | 2009-06-08 |
|             |         | Prep Method:        | N/A        |
|             |         | Analyzed By:        | AG         |
|             |         | Prepared By:        | AG         |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| DRO       |      | 3200         | mg/Kg | 1        | 50.0 |

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| Surrogate     | Flag          | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---------------|---------------|--------|-------|----------|--------------|------------------|-----------------|
| n-Triacontane | <sup>11</sup> | 634    | mg/Kg | 1        | 100          | 634              | 13.2 - 219.3    |

**Sample: 198039 - AH-5 0-1' BEB**

|                     |                                |                     |
|---------------------|--------------------------------|---------------------|
| Laboratory: Midland | Analytical Method: S 8015B     | Prep Method: S 5035 |
| Analysis: TPH GRO   | Date Analyzed: 2009-06-08      | Analyzed By: ME     |
| QC Batch: 60204     | Sample Preparation: 2009-06-08 | Prepared By: ME     |
| Prep Batch: 51377   |                                |                     |

| Parameter | Flag | RL Result | Units | Dilution | RL   |
|-----------|------|-----------|-------|----------|------|
| GRO       |      | 19.9      | mg/Kg | 2        | 1.00 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |      | 3.91   | mg/Kg | 2        | 4.00         | 98               | 68.5 - 119.4    |
| 4-Bromofluorobenzene (4-BFB) |      | 2.76   | mg/Kg | 2        | 4.00         | 69               | 52 - 117        |

**Sample: 198040 - AH-5 1-1.5' BEB**

|                                |                                 |                  |
|--------------------------------|---------------------------------|------------------|
| Laboratory: Midland            | Analytical Method: SM 4500-Cl B | Prep Method: N/A |
| Analysis: Chloride (Titration) | Date Analyzed: 2009-06-09       | Analyzed By: AR  |
| QC Batch: 60229                | Sample Preparation: 2009-06-09  | Prepared By: AR  |
| Prep Batch: 51400              |                                 |                  |

| Parameter | Flag | RL Result | Units | Dilution | RL   |
|-----------|------|-----------|-------|----------|------|
| Chloride  |      | 412       | mg/Kg | 50       | 4.00 |

**Sample: 198041 - AH-5 2-2.5' BEB**

|                                |                                 |                  |
|--------------------------------|---------------------------------|------------------|
| Laboratory: Midland            | Analytical Method: SM 4500-Cl B | Prep Method: N/A |
| Analysis: Chloride (Titration) | Date Analyzed: 2009-06-09       | Analyzed By: AR  |
| QC Batch: 60229                | Sample Preparation: 2009-06-09  | Prepared By: AR  |
| Prep Batch: 51400              |                                 |                  |

| Parameter | Flag | RL Result | Units | Dilution | RL   |
|-----------|------|-----------|-------|----------|------|
| Chloride  |      | 535       | mg/Kg | 50       | 4.00 |

<sup>11</sup>High surrogate recovery due to peak interference.

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**Sample: 198042 - AH-5 3-3.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60229                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51400                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 638          | mg/Kg | 50       | 4.00 |

**Sample: 198043 - AH-5 4-4.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60229                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51400                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1160         | mg/Kg | 50       | 4.00 |

**Sample: 198044 - AH-5 5-5.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60229                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51400                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 937          | mg/Kg | 50       | 4.00 |

**Sample: 198045 - AH-5 6-6.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60229                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51400                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 927          | mg/Kg | 50       | 4.00 |

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**Sample: 198046 - AH-5 7-7.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60229                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51400                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1380         | mg/Kg | 50       | 4.00 |

**Sample: 198047 - AH-5 8-8.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60229                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51400                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1100         | mg/Kg | 50       | 4.00 |

**Sample: 198048 - AH-6 0-1' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60229                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51400                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 6750         | mg/Kg | 50       | 4.00 |

**Sample: 198048 - AH-6 0-1' BEB**

|             |         |                     |            |              |     |
|-------------|---------|---------------------|------------|--------------|-----|
| Laboratory: | Midland | Analytical Method:  | Mod. 8015B | Prep Method: | N/A |
| Analysis:   | TPH DRO | Date Analyzed:      | 2009-06-08 | Analyzed By: | AG  |
| QC Batch:   | 60209   | Sample Preparation: | 2009-06-08 | Prepared By: | AG  |
| Prep Batch: | 51381   |                     |            |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| DRO       |      | <50.0        | mg/Kg | 1        | 50.0 |

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| Surrogate     | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---------------|------|--------|-------|----------|--------------|------------------|-----------------|
| n-Triacontane |      | 108    | mg/Kg | 1        | 100          | 108              | 13.2 - 219.3    |

**Sample: 198048 - AH-6 0-1' BEB**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 60204  
Prep Batch: 51377

Analytical Method: S 8015B  
Date Analyzed: 2009-06-08  
Sample Preparation: 2009-06-08

Prep Method: S 5035  
Analyzed By: ME  
Prepared By: ME

| Parameter | Flag | RL Result | Units | Dilution | RL   |
|-----------|------|-----------|-------|----------|------|
| GRO       |      | <1.00     | mg/Kg | 1        | 1.00 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |      | 2.01   | mg/Kg | 1        | 2.00         | 100              | 68.5 - 119.4    |
| 4-Bromofluorobenzene (4-BFB) |      | 1.26   | mg/Kg | 1        | 2.00         | 63               | 52 - 117        |

**Sample: 198049 - AH-6 1-1.5' BEB**

Laboratory: Midland  
Analysis: Chloride (Titration)  
QC Batch: 60229  
Prep Batch: 51400

Analytical Method: SM 4500-Cl B  
Date Analyzed: 2009-06-09  
Sample Preparation: 2009-06-09

Prep Method: N/A  
Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | RL Result | Units | Dilution | RL   |
|-----------|------|-----------|-------|----------|------|
| Chloride  |      | 8750      | mg/Kg | 50       | 4.00 |

**Sample: 198050 - AH-6 2-2.5' BEB**

Laboratory: Midland  
Analysis: Chloride (Titration)  
QC Batch: 60230  
Prep Batch: 51401

Analytical Method: SM 4500-Cl B  
Date Analyzed: 2009-06-09  
Sample Preparation: 2009-06-09

Prep Method: N/A  
Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | RL Result | Units | Dilution | RL   |
|-----------|------|-----------|-------|----------|------|
| Chloride  |      | 1180      | mg/Kg | 50       | 4.00 |

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**Sample: 198051 - AH-6 3-3.5' BEB**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 60230                | Date Analyzed:      | 2009-06-09   |
| Prep Batch: | 51401                | Sample Preparation: | 2009-06-09   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1120         | mg/Kg | 50       | 4.00 |

**Sample: 198052 - AH-6 4-4.5' BEB**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 60230                | Date Analyzed:      | 2009-06-09   |
| Prep Batch: | 51401                | Sample Preparation: | 2009-06-09   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3710         | mg/Kg | 50       | 4.00 |

**Sample: 198053 - AH-6 5-5.5' BEB**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 60230                | Date Analyzed:      | 2009-06-09   |
| Prep Batch: | 51401                | Sample Preparation: | 2009-06-09   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2850         | mg/Kg | 50       | 4.00 |

**Sample: 198054 - AH-6 6-6.5' BEB**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 60230                | Date Analyzed:      | 2009-06-09   |
| Prep Batch: | 51401                | Sample Preparation: | 2009-06-09   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2540         | mg/Kg | 50       | 4.00 |

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**Sample: 198055 - AH-7 0-1' BEB**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 60230                | Date Analyzed:      | 2009-06-09   |
| Prep Batch: | 51401                | Sample Preparation: | 2009-06-09   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 8240         | mg/Kg | 50       | 4.00 |

**Sample: 198055 - AH-7 0-1' BEB**

|             |         |                     |            |
|-------------|---------|---------------------|------------|
| Laboratory: | Midland |                     |            |
| Analysis:   | TPH DRO | Analytical Method:  | Mod. 8015B |
| QC Batch:   | 60209   | Date Analyzed:      | 2009-06-08 |
| Prep Batch: | 51381   | Sample Preparation: | 2009-06-08 |
|             |         | Prep Method:        | N/A        |
|             |         | Analyzed By:        | AG         |
|             |         | Prepared By:        | AG         |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| DRO       |      | <50.0        | mg/Kg | 1        | 50.0 |

| Surrogate     | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|---------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| n-Triacontane |      | 101    | mg/Kg | 1        | 100             | 101                 | 13.2 - 219.3       |

**Sample: 198055 - AH-7 0-1' BEB**

|             |         |                     |            |
|-------------|---------|---------------------|------------|
| Laboratory: | Midland |                     |            |
| Analysis:   | TPH GRO | Analytical Method:  | S 8015B    |
| QC Batch:   | 60204   | Date Analyzed:      | 2009-06-08 |
| Prep Batch: | 51377   | Sample Preparation: | 2009-06-08 |
|             |         | Prep Method:        | S 5035     |
|             |         | Analyzed By:        | ME         |
|             |         | Prepared By:        | ME         |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| GRO       |      | 6.14         | mg/Kg | 1        | 1.00 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 2.04   | mg/Kg | 1        | 2.00            | 102                 | 68.5 - 119.4       |
| 4-Bromofluorobenzene (4-BFB) |      | 1.28   | mg/Kg | 1        | 2.00            | 64                  | 52 - 117           |

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**Sample: 198056 - AH-7 1-1.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60230                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51401                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 6460         | mg/Kg | 50       | 4.00 |

**Sample: 198057 - AH-7 2-2.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60230                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51401                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 9000         | mg/Kg | 50       | 4.00 |

**Sample: 198058 - AH-7 3-3.5' BEB**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-06-09   | Analyzed By: | AR  |
| QC Batch:   | 60230                | Sample Preparation: | 2009-06-09   | Prepared By: | AR  |
| Prep Batch: | 51401                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 9310         | mg/Kg | 50       | 4.00 |

**Method Blank (1)      QC Batch: 60187**

|             |       |                 |            |              |    |
|-------------|-------|-----------------|------------|--------------|----|
| QC Batch:   | 60187 | Date Analyzed:  | 2009-06-08 | Analyzed By: | AR |
| Prep Batch: | 51363 | QC Preparation: | 2009-06-08 | Prepared By: | AR |

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

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Method Blank (1) QC Batch: 60203

QC Batch: 60203  
Prep Batch: 51377

Date Analyzed: 2009-06-08  
QC Preparation: 2009-06-08

Analyzed By: ME  
Prepared By: ME

| Parameter    | Flag | MDL<br>Result | Units | RL   |
|--------------|------|---------------|-------|------|
| Benzene      |      | <0.00100      | mg/Kg | 0.01 |
| Toluene      |      | <0.00100      | mg/Kg | 0.01 |
| Ethylbenzene |      | <0.00110      | mg/Kg | 0.01 |
| Xylene       |      | <0.00360      | mg/Kg | 0.01 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 1.87   | mg/Kg | 1        | 2.00            | 94                  | 65.6 - 130.6       |
| 4-Bromofluorobenzene (4-BFB) |      | 1.66   | mg/Kg | 1        | 2.00            | 83                  | 51.9 - 128.1       |

Method Blank (1) QC Batch: 60204

QC Batch: 60204  
Prep Batch: 51377

Date Analyzed: 2009-06-08  
QC Preparation: 2009-06-08

Analyzed By: ME  
Prepared By: ME

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| GRO       |      | <0.482        | mg/Kg | 1  |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 1.93   | mg/Kg | 1        | 2.00            | 96                  | 71.9 - 115         |
| 4-Bromofluorobenzene (4-BFB) |      | 1.27   | mg/Kg | 1        | 2.00            | 64                  | 45.7 - 118.9       |

Method Blank (1) QC Batch: 60209

QC Batch: 60209  
Prep Batch: 51381

Date Analyzed: 2009-06-08  
QC Preparation: 2009-06-08

Analyzed By: AG  
Prepared By: AG

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| DRO       |      | <5.86         | mg/Kg | 50 |

| Surrogate     | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|---------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| n-Triacontane |      | 176    | mg/Kg | 1        | 100             | 176                 | 13 - 178.5         |

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**Method Blank (1)**      QC Batch: 60226

QC Batch: 60226      Date Analyzed: 2009-06-09      Analyzed By: AR  
Prep Batch: 51397      QC Preparation: 2009-06-09      Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

**Method Blank (1)**      QC Batch: 60227

QC Batch: 60227      Date Analyzed: 2009-06-09      Analyzed By: AR  
Prep Batch: 51398      QC Preparation: 2009-06-09      Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

**Method Blank (1)**      QC Batch: 60228

QC Batch: 60228      Date Analyzed: 2009-06-09      Analyzed By: AR  
Prep Batch: 51399      QC Preparation: 2009-06-09      Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

**Method Blank (1)**      QC Batch: 60229

QC Batch: 60229      Date Analyzed: 2009-06-09      Analyzed By: AR  
Prep Batch: 51400      QC Preparation: 2009-06-09      Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

**Method Blank (1)**      QC Batch: 60230

QC Batch: 60230      Date Analyzed: 2009-06-09      Analyzed By: AR  
Prep Batch: 51401      QC Preparation: 2009-06-09      Prepared By: AR

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| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

Method Blank (1) QC Batch: 60297

QC Batch: 60297 Date Analyzed: 2009-06-10 Analyzed By: AG  
Prep Batch: 51453 QC Preparation: 2009-06-10 Prepared By: AG

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| DRO       |      | 7.14          | mg/Kg | 50 |

| Surrogate     | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|---------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| n-Triacontane |      | 116    | mg/Kg | 1        | 100             | 116                 | 13 - 178.5         |

Method Blank (1) QC Batch: 60299

QC Batch: 60299 Date Analyzed: 2009-06-10 Analyzed By: ME  
Prep Batch: 51454 QC Preparation: 2009-06-10 Prepared By: ME

| Parameter    | Flag | MDL<br>Result | Units | RL   |
|--------------|------|---------------|-------|------|
| Benzene      |      | <0.00100      | mg/Kg | 0.01 |
| Toluene      |      | <0.00100      | mg/Kg | 0.01 |
| Ethylbenzene |      | <0.00110      | mg/Kg | 0.01 |
| Xylene       |      | <0.00360      | mg/Kg | 0.01 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 1.94   | mg/Kg | 1        | 2.00            | 97                  | 65.6 - 130.6       |
| 4-Bromofluorobenzene (4-BFB) |      | 1.84   | mg/Kg | 1        | 2.00            | 92                  | 51.9 - 128.1       |

Method Blank (1) QC Batch: 60300

QC Batch: 60300 Date Analyzed: 2009-06-10 Analyzed By: ME  
Prep Batch: 51454 QC Preparation: 2009-06-10 Prepared By: ME

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| GRO       |      | <0.482        | mg/Kg | 1  |

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| Surrogate                    | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |      | 2.04   | mg/Kg | 1        | 2.00         | 102              | 71.9 - 115      |
| 4-Bromofluorobenzene (4-BFB) |      | 1.43   | mg/Kg | 1        | 2.00         | 72               | 45.7 - 118.9    |

**Method Blank (1)**      QC Batch: 60339

QC Batch: 60339      Date Analyzed: 2009-06-11      Analyzed By: ME  
Prep Batch: 51482      QC Preparation: 2009-06-11      Prepared By: ME

| Parameter | Flag | MDL Result | Units | RL |
|-----------|------|------------|-------|----|
| GRO       |      | <0.482     | mg/Kg | 1  |

| Surrogate                    | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |      | 2.08   | mg/Kg | 1        | 2.00         | 104              | 71.9 - 115      |
| 4-Bromofluorobenzene (4-BFB) |      | 1.63   | mg/Kg | 1        | 2.00         | 82               | 45.7 - 118.9    |

**Method Blank (1)**      QC Batch: 60354

QC Batch: 60354      Date Analyzed: 2009-06-12      Analyzed By: AG  
Prep Batch: 51490      QC Preparation: 2009-06-12      Prepared By: AG

| Parameter | Flag | MDL Result | Units | RL |
|-----------|------|------------|-------|----|
| DRO       |      | <5.86      | mg/Kg | 50 |

| Surrogate     | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---------------|------|--------|-------|----------|--------------|------------------|-----------------|
| n-Triacontane |      | 144    | mg/Kg | 1        | 100          | 144              | 13 - 178.5      |

**Method Blank (1)**      QC Batch: 60398

QC Batch: 60398      Date Analyzed: 2009-06-12      Analyzed By: ME  
Prep Batch: 51528      QC Preparation: 2009-06-12      Prepared By: ME

| Parameter | Flag | MDL Result | Units | RL |
|-----------|------|------------|-------|----|
| GRO       |      | <0.482     | mg/Kg | 1  |

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| Surrogate                    | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |      | 2.08   | mg/Kg | 1        | 2.00         | 104              | 71.9 - 115      |
| 4-Bromofluorobenzene (4-BFB) |      | 1.61   | mg/Kg | 1        | 2.00         | 80               | 45.7 - 118.9    |

**Method Blank (1)**      QC Batch: 60438

QC Batch: 60438  
Prep Batch: 51559

Date Analyzed: 2009-06-15  
QC Preparation: 2009-06-15

Analyzed By: ME  
Prepared By: ME

| Parameter    | Flag | MDL Result | Units | RL   |
|--------------|------|------------|-------|------|
| Benzene      |      | <0.00100   | mg/Kg | 0.01 |
| Toluene      |      | <0.00100   | mg/Kg | 0.01 |
| Ethylbenzene |      | <0.00110   | mg/Kg | 0.01 |
| Xylene       |      | <0.00360   | mg/Kg | 0.01 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |      | 1.89   | mg/Kg | 1        | 2.00         | 94               | 65.6 - 130.6    |
| 4-Bromofluorobenzene (4-BFB) |      | 1.95   | mg/Kg | 1        | 2.00         | 98               | 51.9 - 128.1    |

**Laboratory Control Spike (LCS-1)**

QC Batch: 60187  
Prep Batch: 51363

Date Analyzed: 2009-06-08  
QC Preparation: 2009-06-08

Analyzed By: AR  
Prepared By: AR

| Param    | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|----------|------------|-------|------|--------------|---------------|------|------------|
| Chloride | 100        | mg/Kg | 1    | 100          | <2.18         | 100  | 85 - 115   |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|----------|-------------|-------|------|--------------|---------------|------|------------|-----|-----------|
| Chloride | 102         | mg/Kg | 1    | 100          | <2.18         | 102  | 85 - 115   | 2   | 20        |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 60203  
Prep Batch: 51377

Date Analyzed: 2009-06-08  
QC Preparation: 2009-06-08

Analyzed By: ME  
Prepared By: ME

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| Param        | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|---------------|-------|------|-----------------|------------------|------|---------------|
| Benzene      | 1.79          | mg/Kg | 1    | 2.00            | <0.00100         | 90   | 72.7 - 129.8  |
| Toluene      | 1.82          | mg/Kg | 1    | 2.00            | <0.00100         | 91   | 71.6 - 129.6  |
| Ethylbenzene | 1.79          | mg/Kg | 1    | 2.00            | <0.00110         | 90   | 70.8 - 129.7  |
| Xylene       | 5.38          | mg/Kg | 1    | 6.00            | <0.00360         | 90   | 70.9 - 129.4  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Benzene      | 1.86           | mg/Kg | 1    | 2.00            | <0.00100         | 93   | 72.7 - 129.8  | 4   | 20           |
| Toluene      | 1.90           | mg/Kg | 1    | 2.00            | <0.00100         | 95   | 71.6 - 129.6  | 4   | 20           |
| Ethylbenzene | 1.94           | mg/Kg | 1    | 2.00            | <0.00110         | 97   | 70.8 - 129.7  | 8   | 20           |
| Xylene       | 5.96           | mg/Kg | 1    | 6.00            | <0.00360         | 99   | 70.9 - 129.4  | 10  | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|------------------------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| Trifluorotoluene (TFT)       | 1.88          | 1.88           | mg/Kg | 1    | 2.00            | 94          | 94           | 65.9 - 132    |
| 4-Bromofluorobenzene (4-BFB) | 1.62          | 1.75           | mg/Kg | 1    | 2.00            | 81          | 88           | 55.2 - 128.9  |

#### Laboratory Control Spike (LCS-1)

QC Batch: 60204  
Prep Batch: 51377

Date Analyzed: 2009-06-08  
QC Preparation: 2009-06-08

Analyzed By: ME  
Prepared By: ME

| Param | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|
| GRO   | 12.7          | mg/Kg | 1    | 20.0            | <0.482           | 64   | 60.5 - 100.1  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| GRO   | 15.2           | mg/Kg | 1    | 20.0            | <0.482           | 76   | 60.5 - 100.1  | 18  | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|------------------------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| Trifluorotoluene (TFT)       | 2.02          | 2.07           | mg/Kg | 1    | 2.00            | 101         | 104          | 78.8 - 104.7  |
| 4-Bromofluorobenzene (4-BFB) | 1.38          | 1.50           | mg/Kg | 1    | 2.00            | 69          | 75           | 66.1 - 107.3  |

#### Laboratory Control Spike (LCS-1)

QC Batch: 60209  
Prep Batch: 51381

Date Analyzed: 2009-06-08  
QC Preparation: 2009-06-08

Analyzed By: AG  
Prepared By: AG

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| Param | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|
| DRO   | 227           | mg/Kg | 1    | 250             | <5.86            | 91   | 57.4 - 133.4  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| DRO   | 277            | mg/Kg | 1    | 250             | <5.86            | 111  | 57.4 - 133.4  | 20  | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate     | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|---------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| n-Triacontane | 112           | 121            | mg/Kg | 1    | 100             | 112         | 121          | 48.5 - 146.7  |

#### Laboratory Control Spike (LCS-1)

QC Batch: 60226  
Prep Batch: 51397

Date Analyzed: 2009-06-09  
QC Preparation: 2009-06-09

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 98.0          | mg/Kg | 1    | 100             | <2.18            | 98   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 99.5           | mg/Kg | 1    | 100             | <2.18            | 100  | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 60227  
Prep Batch: 51398

Date Analyzed: 2009-06-09  
QC Preparation: 2009-06-09

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 100           | mg/Kg | 1    | 100             | <2.18            | 100  | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 101            | mg/Kg | 1    | 100             | <2.18            | 101  | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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#### Laboratory Control Spike (LCS-1)

QC Batch: 60228  
Prep Batch: 51399

Date Analyzed: 2009-06-09  
QC Preparation: 2009-06-09

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 99.4          | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 100            | mg/Kg | 1    | 100             | <2.18            | 100  | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 60229  
Prep Batch: 51400

Date Analyzed: 2009-06-09  
QC Preparation: 2009-06-09

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 100           | mg/Kg | 1    | 100             | <2.18            | 100  | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 99.5           | mg/Kg | 1    | 100             | <2.18            | 100  | 85 - 115      | 0   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 60230  
Prep Batch: 51401

Date Analyzed: 2009-06-09  
QC Preparation: 2009-06-09

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 98.9          | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 99.7           | mg/Kg | 1    | 100             | <2.18            | 100  | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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#### Laboratory Control Spike (LCS-1)

QC Batch: 60297  
Prep Batch: 51453

Date Analyzed: 2009-06-10  
QC Preparation: 2009-06-10

Analyzed By: AG  
Prepared By: AG

| Param | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|
| DRO   | 271           | mg/Kg | 1    | 250             | <5.86            | 108  | 57.4 - 133.4  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| DRO   | 265            | mg/Kg | 1    | 250             | <5.86            | 106  | 57.4 - 133.4  | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate     | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|---------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| n-Triacontane | 115           | 109            | mg/Kg | 1    | 100             | 115         | 109          | 48.5 - 146.7  |

#### Laboratory Control Spike (LCS-1)

QC Batch: 60299  
Prep Batch: 51454

Date Analyzed: 2009-06-10  
QC Preparation: 2009-06-10

Analyzed By: ME  
Prepared By: ME

| Param        | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|---------------|-------|------|-----------------|------------------|------|---------------|
| Benzene      | 2.04          | mg/Kg | 1    | 2.00            | <0.00100         | 102  | 72.7 - 129.8  |
| Toluene      | 2.09          | mg/Kg | 1    | 2.00            | <0.00100         | 104  | 71.6 - 129.6  |
| Ethylbenzene | 2.04          | mg/Kg | 1    | 2.00            | <0.00110         | 102  | 70.8 - 129.7  |
| Xylene       | 6.29          | mg/Kg | 1    | 6.00            | <0.00360         | 105  | 70.9 - 129.4  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Benzene      | 2.16           | mg/Kg | 1    | 2.00            | <0.00100         | 108  | 72.7 - 129.8  | 6   | 20           |
| Toluene      | 2.25           | mg/Kg | 1    | 2.00            | <0.00100         | 112  | 71.6 - 129.6  | 7   | 20           |
| Ethylbenzene | 2.31           | mg/Kg | 1    | 2.00            | <0.00110         | 116  | 70.8 - 129.7  | 12  | 20           |
| Xylene       | 7.13           | mg/Kg | 1    | 6.00            | <0.00360         | 119  | 70.9 - 129.4  | 12  | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|------------------------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| Trifluorotoluene (TFT)       | 1.92          | 1.96           | mg/Kg | 1    | 2.00            | 96          | 98           | 65.9 - 132    |
| 4-Bromofluorobenzene (4-BFB) | 1.99          | 2.16           | mg/Kg | 1    | 2.00            | 100         | 108          | 55.2 - 128.9  |

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#### Laboratory Control Spike (LCS-1)

QC Batch: 60300  
Prep Batch: 51454

Date Analyzed: 2009-06-10  
QC Preparation: 2009-06-10

Analyzed By: ME  
Prepared By: ME

| Param | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|
| GRO   | 13.1          | mg/Kg | 1    | 20.0            | <0.482           | 66   | 60.5 - 100.1  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| GRO   | 15.5           | mg/Kg | 1    | 20.0            | <0.482           | 78   | 60.5 - 100.1  | 17  | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|------------------------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| Trifluorotoluene (TFT)       | 2.03          | 2.08           | mg/Kg | 1    | 2.00            | 102         | 104          | 78.8 - 104.7  |
| 4-Bromofluorobenzene (4-BFB) | 1.58          | 1.70           | mg/Kg | 1    | 2.00            | 79          | 85           | 66.1 - 107.3  |

#### Laboratory Control Spike (LCS-1)

QC Batch: 60339  
Prep Batch: 51482

Date Analyzed: 2009-06-11  
QC Preparation: 2009-06-11

Analyzed By: ME  
Prepared By: ME

| Param | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|
| GRO   | 15.5          | mg/Kg | 1    | 20.0            | <0.482           | 78   | 60.5 - 100.1  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| GRO   | 16.5           | mg/Kg | 1    | 20.0            | <0.482           | 82   | 60.5 - 100.1  | 6   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|------------------------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| Trifluorotoluene (TFT)       | 2.08          | 2.06           | mg/Kg | 1    | 2.00            | 104         | 103          | 78.8 - 104.7  |
| 4-Bromofluorobenzene (4-BFB) | 1.69          | 1.75           | mg/Kg | 1    | 2.00            | 84          | 88           | 66.1 - 107.3  |

#### Laboratory Control Spike (LCS-1)

QC Batch: 60354  
Prep Batch: 51490

Date Analyzed: 2009-06-12  
QC Preparation: 2009-06-12

Analyzed By: AG  
Prepared By: AG

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| Param | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|
| DRO   | 259           | mg/Kg | 1    | 250             | <5.86            | 104  | 57.4 - 133.4  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| DRO   | 253            | mg/Kg | 1    | 250             | <5.86            | 101  | 57.4 - 133.4  | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate     | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|---------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| n-Triacontane | 97.3          | 95.4           | mg/Kg | 1    | 100             | 97          | 95           | 48.5 - 146.7  |

#### Laboratory Control Spike (LCS-1)

QC Batch: 60398  
Prep Batch: 51528

Date Analyzed: 2009-06-12  
QC Preparation: 2009-06-12

Analyzed By: ME  
Prepared By: ME

| Param | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|
| GRO   | 15.8          | mg/Kg | 1    | 20.0            | <0.482           | 79   | 60.5 - 100.1  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| GRO   | 17.0           | mg/Kg | 1    | 20.0            | <0.482           | 85   | 60.5 - 100.1  | 7   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|------------------------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| Trifluorotoluene (TFT)       | 2.09          | 2.08           | mg/Kg | 1    | 2.00            | 104         | 104          | 78.8 - 104.7  |
| 4-Bromofluorobenzene (4-BFB) | 1.72          | 1.66           | mg/Kg | 1    | 2.00            | 86          | 83           | 66.1 - 107.3  |

#### Laboratory Control Spike (LCS-1)

QC Batch: 60438  
Prep Batch: 51559

Date Analyzed: 2009-06-15  
QC Preparation: 2009-06-15

Analyzed By: ME  
Prepared By: ME

| Param        | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|---------------|-------|------|-----------------|------------------|------|---------------|
| Benzene      | 1.97          | mg/Kg | 1    | 2.00            | <0.00100         | 98   | 72.7 - 129.8  |
| Toluene      | 1.99          | mg/Kg | 1    | 2.00            | <0.00100         | 100  | 71.6 - 129.6  |
| Ethylbenzene | 1.99          | mg/Kg | 1    | 2.00            | <0.00110         | 100  | 70.8 - 129.7  |

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| Param  | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------|---------------|-------|------|-----------------|------------------|------|---------------|
| Xylene | 6.10          | mg/Kg | 1    | 6.00            | <0.00360         | 102  | 70.9 - 129.4  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Benzene      | 2.02          | mg/Kg | 1    | 2.00            | <0.00100         | 101  | 72.7 - 129.8  | 2   | 20           |
| Toluene      | 2.04          | mg/Kg | 1    | 2.00            | <0.00100         | 102  | 71.6 - 129.6  | 2   | 20           |
| Ethylbenzene | 2.08          | mg/Kg | 1    | 2.00            | <0.00110         | 104  | 70.8 - 129.7  | 4   | 20           |
| Xylene       | 6.44          | mg/Kg | 1    | 6.00            | <0.00360         | 107  | 70.9 - 129.4  | 5   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | LCS<br>Result | LCS<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCS<br>Rec. | Rec.<br>Limit |
|------------------------------|---------------|---------------|-------|------|-----------------|-------------|-------------|---------------|
| Trifluorotoluene (TFT)       | 1.92          | 1.93          | mg/Kg | 1    | 2.00            | 96          | 96          | 65.9 - 132    |
| 4-Bromofluorobenzene (4-BFB) | 2.03          | 2.05          | mg/Kg | 1    | 2.00            | 102         | 102         | 55.2 - 128.9  |

Matrix Spike (MS-1) Spiked Sample: 198009

QC Batch: 60187 Date Analyzed: 2009-06-08 Analyzed By: AR  
Prep Batch: 51363 QC Preparation: 2009-06-08 Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 5000         | mg/Kg | 50   | 5000            | <109             | 100  | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 5040          | mg/Kg | 50   | 5000            | <109             | 101  | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 198073

QC Batch: 60203 Date Analyzed: 2009-06-08 Analyzed By: ME  
Prep Batch: 51377 QC Preparation: 2009-06-08 Prepared By: ME

| Param        | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|--------------|-------|------|-----------------|------------------|------|---------------|
| Benzene      | 2.07         | mg/Kg | 1    | 2.00            | <0.00100         | 104  | 58.6 - 165.2  |
| Toluene      | 2.04         | mg/Kg | 1    | 2.00            | 0.0585           | 99   | 64.2 - 153.8  |
| Ethylbenzene | 2.08         | mg/Kg | 1    | 2.00            | 0.0901           | 99   | 61.6 - 159.4  |

continued ...

matrix spikes continued ...

| Param  | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------|--------------|-------|------|-----------------|------------------|------|---------------|
| Xylene | 6.28         | mg/Kg | 1    | 6.00            | 0.1727           | 102  | 64.4 - 155.3  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        |               | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|---------------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Benzene      | <sup>12</sup> | <0.00100      | mg/Kg | 1    | 2.00            | <0.00100         | 0    | 58.6 - 165.2  | 200 | 20           |
| Toluene      | <sup>13</sup> | <0.00100      | mg/Kg | 1    | 2.00            | 0.0585           | 0    | 64.2 - 153.8  | 200 | 20           |
| Ethylbenzene | <sup>14</sup> | 0.129         | mg/Kg | 1    | 2.00            | 0.0901           | 2    | 61.6 - 159.4  | 177 | 20           |
| Xylene       | <sup>15</sup> | 0.287         | mg/Kg | 1    | 6.00            | 0.1727           | 2    | 64.4 - 155.3  | 182 | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | MS<br>Result | MSD<br>Result | Units | Dil. | Spike<br>Amount | MS<br>Rec. | MSD<br>Rec. | Rec.<br>Limit |
|------------------------------|--------------|---------------|-------|------|-----------------|------------|-------------|---------------|
| Trifluorotoluene (TFT)       | 1.87         | 1.94          | mg/Kg | 1    | 2               | 94         | 97          | 76 - 127.9    |
| 4-Bromofluorobenzene (4-BFB) | 1.76         | 1.66          | mg/Kg | 1    | 2               | 88         | 83          | 72 - 127.8    |

Matrix Spike (MS-1) Spiked Sample: 198064

QC Batch: 60204  
Prep Batch: 51377

Date Analyzed: 2009-06-08  
QC Preparation: 2009-06-08

Analyzed By: ME  
Prepared By: ME

| Param | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|--------------|-------|------|-----------------|------------------|------|---------------|
| GRO   | 23.8         | mg/Kg | 1    | 20.0            | <0.482           | 119  | 12.8 - 175.2  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| GRO   | 28.2          | mg/Kg | 1    | 20.0            | <0.482           | 141  | 12.8 - 175.2  | 17  | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | MS<br>Result | MSD<br>Result | Units | Dil. | Spike<br>Amount | MS<br>Rec. | MSD<br>Rec. | Rec.<br>Limit |
|------------------------------|--------------|---------------|-------|------|-----------------|------------|-------------|---------------|
| Trifluorotoluene (TFT)       | 2.04         | 2.16          | mg/Kg | 1    | 2               | 102        | 108         | 60.8 - 132.1  |
| 4-Bromofluorobenzene (4-BFB) | 1.37         | 1.38          | mg/Kg | 1    | 2               | 68         | 69          | 31.3 - 161.7  |

<sup>12</sup>SPECIAL - MSD was not spiked •

<sup>13</sup>SPECIAL - MSD was not spiked •

<sup>14</sup>SPECIAL - MSD was not spiked •

<sup>15</sup>SPECIAL - MSD was not spiked •

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**Matrix Spike (MS-1) Spiked Sample: 198026**

QC Batch: 60209  
Prep Batch: 51381

Date Analyzed: 2009-06-08  
QC Preparation: 2009-06-08

Analyzed By: AG  
Prepared By: AG

| Param | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|--------------|-------|------|-----------------|------------------|------|---------------|
| DRO   | 203          | mg/Kg | 1    | 250             | <5.86            | 81   | 35.2 - 167.1  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| DRO   | 197           | mg/Kg | 1    | 250             | <5.86            | 79   | 35.2 - 167.1  | 3   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate     | MS<br>Result | MSD<br>Result | Units | Dil. | Spike<br>Amount | MS<br>Rec. | MSD<br>Rec. | Rec.<br>Limit |
|---------------|--------------|---------------|-------|------|-----------------|------------|-------------|---------------|
| n-Triacontane | 93.5         | 95.6          | mg/Kg | 1    | 100             | 94         | 96          | 34.5 - 178.4  |

**Matrix Spike (MS-1) Spiked Sample: 198019**

QC Batch: 60226  
Prep Batch: 51397

Date Analyzed: 2009-06-09  
QC Preparation: 2009-06-09

Analyzed By: AR  
Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 6180         | mg/Kg | 50   | 5000            | 1250             | 99   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 6230          | mg/Kg | 50   | 5000            | 1250             | 100  | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1) Spiked Sample: 198029**

QC Batch: 60227  
Prep Batch: 51398

Date Analyzed: 2009-06-09  
QC Preparation: 2009-06-09

Analyzed By: AR  
Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 5970         | mg/Kg | 50   | 5000            | 1350             | 92   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 6060          | mg/Kg | 50   | 5000            | 1350             | 94   | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 198039

QC Batch: 60228 Date Analyzed: 2009-06-09 Analyzed By: AR  
Prep Batch: 51399 QC Preparation: 2009-06-09 Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 6000         | mg/Kg | 50   | 5000            | 1170             | 97   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 6050          | mg/Kg | 50   | 5000            | 1170             | 98   | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 198049

QC Batch: 60229 Date Analyzed: 2009-06-09 Analyzed By: AR  
Prep Batch: 51400 QC Preparation: 2009-06-09 Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 13400        | mg/Kg | 50   | 5000            | 8750             | 93   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 13600         | mg/Kg | 50   | 5000            | 8750             | 97   | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 198064

QC Batch: 60230 Date Analyzed: 2009-06-09 Analyzed By: AR  
Prep Batch: 51401 QC Preparation: 2009-06-09 Prepared By: AR

*continued ...*

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*matrix spikes continued ...*

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
| Chloride | 5190         | mg/Kg | 50   | 5000            | <109             | 104  | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 5250          | mg/Kg | 50   | 5000            | <109             | 105  | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 198007

QC Batch: 60297 Date Analyzed: 2009-06-10 Analyzed By: AG  
Prep Batch: 51453 QC Preparation: 2009-06-10 Prepared By: AG

| Param | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|--------------|-------|------|-----------------|------------------|------|---------------|
| DRO   | 201          | mg/Kg | 1    | 250             | <5.86            | 80   | 35.2 - 167.1  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| DRO   | 210           | mg/Kg | 1    | 250             | <5.86            | 84   | 35.2 - 167.1  | 4   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate     | MS<br>Result | MSD<br>Result | Units | Dil. | Spike<br>Amount | MS<br>Rec. | MSD<br>Rec. | Rec.<br>Limit |
|---------------|--------------|---------------|-------|------|-----------------|------------|-------------|---------------|
| n-Triacontane | 86.9         | 89.1          | mg/Kg | 1    | 100             | 87         | 89          | 34.5 - 178.4  |

**Matrix Spike (MS-1)** Spiked Sample: 197394

QC Batch: 60299 Date Analyzed: 2009-06-10 Analyzed By: ME  
Prep Batch: 51454 QC Preparation: 2009-06-10 Prepared By: ME

| Param        | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|--------------|-------|------|-----------------|------------------|------|---------------|
| Benzene      | 12.1         | mg/Kg | 5    | 10.0            | <0.00500         | 121  | 58.6 - 165.2  |
| Toluene      | 21.8         | mg/Kg | 5    | 10.0            | 14.0265          | 78   | 64.2 - 153.8  |
| Ethylbenzene | 20.5         | mg/Kg | 5    | 10.0            | 12.0165          | 85   | 61.6 - 159.4  |
| Xylene       | 72.4         | mg/Kg | 5    | 30.0            | 47.4302          | 83   | 64.4 - 155.3  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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| Param        | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Benzene      | 12.6          | mg/Kg | 5    | 10.0            | <0.00500         | 126  | 58.6 - 165.2  | 4   | 20           |
| Toluene      | 23.6          | mg/Kg | 5    | 10.0            | 14.0265          | 96   | 64.2 - 153.8  | 8   | 20           |
| Ethylbenzene | 22.6          | mg/Kg | 5    | 10.0            | 12.0165          | 106  | 61.6 - 159.4  | 10  | 20           |
| Xylene       | 78.7          | mg/Kg | 5    | 30.0            | 47.4302          | 104  | 64.4 - 155.3  | 8   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | MS<br>Result          | MSD<br>Result | Units | Dil. | Spike<br>Amount | MS<br>Rec. | MSD<br>Rec. | Rec.<br>Limit |
|------------------------------|-----------------------|---------------|-------|------|-----------------|------------|-------------|---------------|
| Trifluorotoluene (TFT)       | 9.89                  | 9.89          | mg/Kg | 5    | 10              | 99         | 99          | 76 - 127.9    |
| 4-Bromofluorobenzene (4-BFB) | <sup>16 17</sup> 13.1 | 14.0          | mg/Kg | 5    | 10              | 131        | 140         | 72 - 127.8    |

Matrix Spike (MS-1) Spiked Sample: 198314

QC Batch: 60300 Date Analyzed: 2009-06-10 Analyzed By: ME  
Prep Batch: 51454 QC Preparation: 2009-06-10 Prepared By: ME

| Param | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|--------------|-------|------|-----------------|------------------|------|---------------|
| GRO   | 20.4         | mg/Kg | 1    | 20.0            | 0.9449           | 97   | 12.8 - 175.2  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD<br>Result      | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|--------------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| GRO   | <sup>18</sup> 31.2 | mg/Kg | 1    | 20.0            | 0.9449           | 151  | 12.8 - 175.2  | 42  | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | MS<br>Result | MSD<br>Result | Units | Dil. | Spike<br>Amount | MS<br>Rec. | MSD<br>Rec. | Rec.<br>Limit |
|------------------------------|--------------|---------------|-------|------|-----------------|------------|-------------|---------------|
| Trifluorotoluene (TFT)       | 2.00         | 2.22          | mg/Kg | 1    | 2               | 100        | 111         | 60.8 - 132.1  |
| 4-Bromofluorobenzene (4-BFB) | 1.43         | 1.50          | mg/Kg | 1    | 2               | 72         | 75          | 31.3 - 161.7  |

Matrix Spike (MS-1) Spiked Sample: 198316

QC Batch: 60339 Date Analyzed: 2009-06-11 Analyzed By: ME  
Prep Batch: 51482 QC Preparation: 2009-06-11 Prepared By: ME

| Param | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|--------------|-------|------|-----------------|------------------|------|---------------|
| GRO   | 32.2         | mg/Kg | 1    | 20.0            | 7.6633           | 123  | 12.8 - 175.2  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

<sup>16</sup>High surrogate recovery due to peak interference.

<sup>17</sup>High surrogate recovery due to peak interference.

<sup>18</sup>MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

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| Param | MSD<br>Result      | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|--------------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| GRO   | <sup>19</sup> 23.2 | mg/Kg | 1    | 20.0            | 7.6633           | 78   | 12.8 - 175.2  | 32  | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | MS<br>Result | MSD<br>Result | Units | Dil. | Spike<br>Amount | MS<br>Rec. | MSD<br>Rec. | Rec.<br>Limit |
|------------------------------|--------------|---------------|-------|------|-----------------|------------|-------------|---------------|
| Trifluorotoluene (TFT)       | 2.20         | 2.03          | mg/Kg | 1    | 2               | 110        | 102         | 60.8 - 132.1  |
| 4-Bromofluorobenzene (4-BFB) | 1.65         | 1.45          | mg/Kg | 1    | 2               | 82         | 72          | 31.3 - 161.7  |

Matrix Spike (MS-1) Spiked Sample: 198021

QC Batch: 60354  
Prep Batch: 51490

Date Analyzed: 2009-06-12  
QC Preparation: 2009-06-12

Analyzed By: AG  
Prepared By: AG

| Param | MS<br>Result       | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|--------------------|-------|------|-----------------|------------------|------|---------------|
| DRO   | <sup>20</sup> 2250 | mg/Kg | 1    | 250             | 1120             | 452  | 35.2 - 167.1  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD<br>Result      | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|--------------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| DRO   | <sup>21</sup> 2330 | mg/Kg | 1    | 250             | 1120             | 484  | 35.2 - 167.1  | 4   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate     | MS<br>Result                    | MSD<br>Result | Units | Dil. | Spike<br>Amount | MS<br>Rec. | MSD<br>Rec. | Rec.<br>Limit |
|---------------|---------------------------------|---------------|-------|------|-----------------|------------|-------------|---------------|
| n-Triacontane | <sup>22</sup> <sup>23</sup> 182 | 180           | mg/Kg | 1    | 100             | 182        | 180         | 34.5 - 178.4  |

Matrix Spike (MS-1) Spiked Sample: 198804

QC Batch: 60438  
Prep Batch: 51559

Date Analyzed: 2009-06-15  
QC Preparation: 2009-06-15

Analyzed By: ME  
Prepared By: ME

| Param        | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|--------------|-------|------|-----------------|------------------|------|---------------|
| Benzene      | 1.93         | mg/Kg | 1    | 2.00            | <0.00100         | 96   | 58.6 - 165.2  |
| Toluene      | 1.85         | mg/Kg | 1    | 2.00            | <0.00100         | 92   | 64.2 - 153.8  |
| Ethylbenzene | 1.85         | mg/Kg | 1    | 2.00            | <0.00110         | 92   | 61.6 - 159.4  |
| Xylene       | 5.54         | mg/Kg | 1    | 6.00            | 0.1469           | 90   | 64.4 - 155.3  |

<sup>19</sup>MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

<sup>20</sup>Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

<sup>21</sup>MSD analyte out of range. MS/MSD has a RPD within limits. Therefore, MS shows extraction occurred properly.

<sup>22</sup>High surrogate recovery due to peak interference.

<sup>23</sup>High surrogate recovery due to peak interference.

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Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Benzene      | 1.86          | mg/Kg | 1    | 2.00            | <0.00100         | 93   | 58.6 - 165.2  | 4   | 20           |
| Toluene      | 1.78          | mg/Kg | 1    | 2.00            | <0.00100         | 89   | 64.2 - 153.8  | 4   | 20           |
| Ethylbenzene | 1.78          | mg/Kg | 1    | 2.00            | <0.00110         | 89   | 61.6 - 159.4  | 4   | 20           |
| Xylene       | 5.41          | mg/Kg | 1    | 6.00            | 0.1469           | 88   | 64.4 - 155.3  | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | MS<br>Result | MSD<br>Result | Units | Dil. | Spike<br>Amount | MS<br>Rec. | MSD<br>Rec. | Rec.<br>Limit |
|------------------------------|--------------|---------------|-------|------|-----------------|------------|-------------|---------------|
| Trifluorotoluene (TFT)       | 1.95         | 1.89          | mg/Kg | 1    | 2               | 98         | 94          | 76 - 127.9    |
| 4-Bromofluorobenzene (4-BFB) | 1.56         | 1.50          | mg/Kg | 1    | 2               | 78         | 75          | 72 - 127.8    |

#### Standard (ICV-1)

QC Batch: 60187

Date Analyzed: 2009-06-08

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 101                    | 101                         | 85 - 115                      | 2009-06-08       |

#### Standard (CCV-1)

QC Batch: 60187

Date Analyzed: 2009-06-08

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 99.4                   | 99                          | 85 - 115                      | 2009-06-08       |

#### Standard (CCV-1)

QC Batch: 60203

Date Analyzed: 2009-06-08

Analyzed By: ME

| Param        | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | mg/Kg | 0.100                 | 0.0982                 | 98                          | 80 - 120                      | 2009-06-08       |
| Toluene      |      | mg/Kg | 0.100                 | 0.0999                 | 100                         | 80 - 120                      | 2009-06-08       |
| Ethylbenzene |      | mg/Kg | 0.100                 | 0.102                  | 102                         | 80 - 120                      | 2009-06-08       |
| Xylene       |      | mg/Kg | 0.300                 | 0.312                  | 104                         | 80 - 120                      | 2009-06-08       |

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**Standard (CCV-2)**

QC Batch: 60203

Date Analyzed: 2009-06-08

Analyzed By: ME

| Param        | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | mg/Kg | 0.100                 | 0.106                  | 106                         | 80 - 120                      | 2009-06-08       |
| Toluene      |      | mg/Kg | 0.100                 | 0.106                  | 106                         | 80 - 120                      | 2009-06-08       |
| Ethylbenzene |      | mg/Kg | 0.100                 | 0.102                  | 102                         | 80 - 120                      | 2009-06-08       |
| Xylene       |      | mg/Kg | 0.300                 | 0.311                  | 104                         | 80 - 120                      | 2009-06-08       |

**Standard (CCV-1)**

QC Batch: 60204

Date Analyzed: 2009-06-08

Analyzed By: ME

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| GRO   |      | mg/Kg | 1.00                  | 0.870                  | 87                          | 80 - 120                      | 2009-06-08       |

**Standard (CCV-2)**

QC Batch: 60204

Date Analyzed: 2009-06-08

Analyzed By: ME

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| GRO   |      | mg/Kg | 1.00                  | 1.05                   | 105                         | 80 - 120                      | 2009-06-08       |

**Standard (CCV-1)**

QC Batch: 60209

Date Analyzed: 2009-06-08

Analyzed By: AG

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| DRO   |      | mg/Kg | 250                   | 276                    | 110                         | 80 - 120                      | 2009-06-08       |

**Standard (CCV-2)**

QC Batch: 60209

Date Analyzed: 2009-06-08

Analyzed By: AG

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| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| DRO   |      | mg/Kg | 250                   | 270                    | 108                         | 80 - 120                      | 2009-06-08       |

Standard (CCV-3)

QC Batch: 60209

Date Analyzed: 2009-06-08

Analyzed By: AG

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| DRO   |      | mg/Kg | 250                   | 265                    | 106                         | 80 - 120                      | 2009-06-08       |

Standard (ICV-1)

QC Batch: 60226

Date Analyzed: 2009-06-09

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 99.4                   | 99                          | 85 - 115                      | 2009-06-09       |

Standard (CCV-1)

QC Batch: 60226

Date Analyzed: 2009-06-09

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 101                    | 101                         | 85 - 115                      | 2009-06-09       |

Standard (ICV-1)

QC Batch: 60227

Date Analyzed: 2009-06-09

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 100                    | 100                         | 85 - 115                      | 2009-06-09       |

Standard (CCV-1)

QC Batch: 60227

Date Analyzed: 2009-06-09

Analyzed By: AR

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| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 99.9                   | 100                         | 85 - 115                      | 2009-06-09       |

Standard (ICV-1)

QC Batch: 60228

Date Analyzed: 2009-06-09

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 100                    | 100                         | 85 - 115                      | 2009-06-09       |

Standard (CCV-1)

QC Batch: 60228

Date Analyzed: 2009-06-09

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 99.8                   | 100                         | 85 - 115                      | 2009-06-09       |

Standard (ICV-1)

QC Batch: 60229

Date Analyzed: 2009-06-09

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 100                    | 100                         | 85 - 115                      | 2009-06-09       |

Standard (CCV-1)

QC Batch: 60229

Date Analyzed: 2009-06-09

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 100                    | 100                         | 85 - 115                      | 2009-06-09       |

Standard (ICV-1)

QC Batch: 60230

Date Analyzed: 2009-06-09

Analyzed By: AR

Report Date: June 16, 2009  
114-6400210

Work Order: 9060527  
COG/RJU #119 Flowline Spill

Page Number: 50 of 53

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 99.3                   | 99                          | 85 - 115                      | 2009-06-09       |

Standard (CCV-1)

QC Batch: 60230

Date Analyzed: 2009-06-09

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 101                    | 101                         | 85 - 115                      | 2009-06-09       |

Standard (CCV-1)

QC Batch: 60297

Date Analyzed: 2009-06-10

Analyzed By: AG

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| DRO   |      | mg/Kg | 250                   | 256                    | 102                         | 80 - 120                      | 2009-06-10       |

Standard (CCV-2)

QC Batch: 60297

Date Analyzed: 2009-06-10

Analyzed By: AG

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| DRO   |      | mg/Kg | 250                   | 262                    | 105                         | 80 - 120                      | 2009-06-10       |

Standard (CCV-3)

QC Batch: 60297

Date Analyzed: 2009-06-10

Analyzed By: AG

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| DRO   |      | mg/Kg | 250                   | 266                    | 106                         | 80 - 120                      | 2009-06-10       |

Standard (CCV-1)

QC Batch: 60299

Date Analyzed: 2009-06-10

Analyzed By: ME

Report Date: June 16, 2009  
114-6400210

Work Order: 9060527  
COG/RJU #119 Flowline Spill

Page Number: 51 of 53

| Param        | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | mg/Kg | 0.100                 | 0.102                  | 102                         | 80 - 120                      | 2009-06-10       |
| Toluene      |      | mg/Kg | 0.100                 | 0.104                  | 104                         | 80 - 120                      | 2009-06-10       |
| Ethylbenzene |      | mg/Kg | 0.100                 | 0.110                  | 110                         | 80 - 120                      | 2009-06-10       |
| Xylene       |      | mg/Kg | 0.300                 | 0.338                  | 113                         | 80 - 120                      | 2009-06-10       |

Standard (CCV-2)

QC Batch: 60299

Date Analyzed: 2009-06-10

Analyzed By: ME

| Param        | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | mg/Kg | 0.100                 | 0.100                  | 100                         | 80 - 120                      | 2009-06-10       |
| Toluene      |      | mg/Kg | 0.100                 | 0.106                  | 106                         | 80 - 120                      | 2009-06-10       |
| Ethylbenzene |      | mg/Kg | 0.100                 | 0.115                  | 115                         | 80 - 120                      | 2009-06-10       |
| Xylene       |      | mg/Kg | 0.300                 | 0.356                  | 119                         | 80 - 120                      | 2009-06-10       |

Standard (CCV-1)

QC Batch: 60300

Date Analyzed: 2009-06-10

Analyzed By: ME

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| GRO   |      | mg/Kg | 1.00                  | 0.940                  | 94                          | 80 - 120                      | 2009-06-10       |

Standard (CCV-2)

QC Batch: 60300

Date Analyzed: 2009-06-10

Analyzed By: ME

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| GRO   |      | mg/Kg | 1.00                  | 0.930                  | 93                          | 80 - 120                      | 2009-06-10       |

Standard (CCV-1)

QC Batch: 60339

Date Analyzed: 2009-06-11

Analyzed By: ME

Report Date: June 16, 2009  
114-6400210

Work Order: 9060527  
COG/RJU #119 Flowline Spill

Page Number: 52 of 53

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| GRO   |      | mg/Kg | 1.00                  | 1.04                   | 104                         | 80 - 120                      | 2009-06-11       |

Standard (CCV-2)

QC Batch: 60339

Date Analyzed: 2009-06-11

Analyzed By: ME

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| GRO   |      | mg/Kg | 1.00                  | 1.02                   | 102                         | 80 - 120                      | 2009-06-11       |

Standard (CCV-1)

QC Batch: 60354

Date Analyzed: 2009-06-12

Analyzed By: AG

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| DRO   |      | mg/Kg | 250                   | 254                    | 102                         | 80 - 120                      | 2009-06-12       |

Standard (CCV-2)

QC Batch: 60354

Date Analyzed: 2009-06-12

Analyzed By: AG

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| DRO   |      | mg/Kg | 250                   | 212                    | 85                          | 80 - 120                      | 2009-06-12       |

Standard (CCV-1)

QC Batch: 60398

Date Analyzed: 2009-06-12

Analyzed By: ME

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| GRO   |      | mg/Kg | 1.00                  | 1.19                   | 119                         | 80 - 120                      | 2009-06-12       |

Standard (CCV-2)

QC Batch: 60398

Date Analyzed: 2009-06-12

Analyzed By: ME

Report Date: June 16, 2009  
114-6400210

Work Order: 9060527  
COG/RJU #119 Flowline Spill

Page Number: 53 of 53

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| GRO   |      | mg/Kg | 1.00                  | 1.19                   | 119                         | 80 - 120                      | 2009-06-12       |

Standard (CCV-1)

QC Batch: 60438

Date Analyzed: 2009-06-15

Analyzed By: ME

| Param        | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | mg/Kg | 0.100                 | 0.104                  | 104                         | 80 - 120                      | 2009-06-15       |
| Toluene      |      | mg/Kg | 0.100                 | 0.104                  | 104                         | 80 - 120                      | 2009-06-15       |
| Ethylbenzene |      | mg/Kg | 0.100                 | 0.108                  | 108                         | 80 - 120                      | 2009-06-15       |
| Xylene       |      | mg/Kg | 0.300                 | 0.334                  | 111                         | 80 - 120                      | 2009-06-15       |

Standard (CCV-2)

QC Batch: 60438

Date Analyzed: 2009-06-15

Analyzed By: ME

| Param        | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | mg/Kg | 0.100                 | 0.100                  | 100                         | 80 - 120                      | 2009-06-15       |
| Toluene      |      | mg/Kg | 0.100                 | 0.0990                 | 99                          | 80 - 120                      | 2009-06-15       |
| Ethylbenzene |      | mg/Kg | 0.100                 | 0.0974                 | 97                          | 80 - 120                      | 2009-06-15       |
| Xylene       |      | mg/Kg | 0.300                 | 0.300                  | 100                         | 80 - 120                      | 2009-06-15       |

# Analysis Request of Chain of Custody Record



**TETRA TECH**

1910 N. Big Spring St.  
Midland, Texas 79705  
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

COG

SITE MANAGER:

Ike Tavares

PROJECT NO.:

114-6400210

PROJECT NAME:

RJV #119 Flowline spill

| LAB I.D. NUMBER | DATE | TIME | MATRIX | COMP. | GRAB | SAMPLE IDENTIFICATION | NUMBER OF FILTERED (Y) | HCL | HNO3 | ICE | NONE | BTEX 8021B | TPH 8015     | PAH 8270     | RCRA Metals | TCLP Metals | TCLP Volatile | TCLP Semi V | RCI | GC-MS Vol. 8 | GC-MS Semi | PCB's 8080/800 | Pest. 808/600 | Chloride | Gamma Spec | Alpha Beta (C) | PLM (Asbest) | Major Anions |  |
|-----------------|------|------|--------|-------|------|-----------------------|------------------------|-----|------|-----|------|------------|--------------|--------------|-------------|-------------|---------------|-------------|-----|--------------|------------|----------------|---------------|----------|------------|----------------|--------------|--------------|--|
| 148009          | 6/4  |      | S      |       | X    | BG-1 0-1'             | 1                      |     |      | X   |      |            | <del>X</del> | <del>0</del> |             |             |               |             |     |              |            |                |               |          | X          |                |              |              |  |
| 010             |      |      |        |       |      | BG-1 2-2.5'           | 1                      |     |      | X   |      |            |              |              |             |             |               |             |     |              |            |                |               |          | X          |                |              |              |  |
| 011             |      |      |        |       |      | BG-1 3-3.5'           | 1                      |     |      | X   |      |            |              |              |             |             |               |             |     |              |            |                |               |          | X          |                |              |              |  |
| 012             |      |      |        |       |      | AH-1 0-1' BEB         | 1                      |     |      | X   |      |            | X            |              |             |             |               |             |     |              |            |                |               |          | X          |                |              |              |  |
| 013             |      |      |        |       |      | AH-1 1-1.5' BEB       | 1                      |     |      | X   |      |            |              |              |             |             |               |             |     |              |            |                |               |          | X          |                |              |              |  |
| 014             |      |      |        |       |      | AH-1 2-2.5' BEB       | 1                      |     |      | X   |      |            |              |              |             |             |               |             |     |              |            |                |               |          | X          |                |              |              |  |
| 015             |      |      |        |       |      | AH-1 3-3.5' BEB       | 1                      |     |      | X   |      |            |              |              |             |             |               |             |     |              |            |                |               |          | X          |                |              |              |  |
| 016             |      |      |        |       |      | AH-1 4-4.5' BEB       | 1                      |     |      | X   |      |            |              |              |             |             |               |             |     |              |            |                |               |          | X          |                |              |              |  |
| 017             |      |      |        |       |      | AH-1 5-5.5' BEB       | 1                      |     |      | X   |      |            |              |              |             |             |               |             |     |              |            |                |               |          | X          |                |              |              |  |
| 018             |      |      |        |       |      | AH-1 6-6.5' BEB       | 1                      |     |      | X   |      |            |              |              |             |             |               |             |     |              |            |                |               |          | X          |                |              |              |  |

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

IT/KD

Date:

Time:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

HAND DELIVERED

TETRA TECH CONTACT PERSON:

AIRBILL #:

OTHER:

Results by:

RUSH Charges Authorized:

Yes No

RECEIVING LABORATORY:

ADDRESS:

CITY:

STATE:

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

TIME:

SAMPLE CONDITION WHEN RECEIVED:

13.1°C

REMARKS:

Run deeper samples 14 TPH exceed 5000 mg/kg.

Ike Tavares

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Run (4) BTEX on 8 samples w highest TPH.

AR

# Analysis Request of Chain of Custody Record



**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

PAGE: 2

OF: 5

ANALYSIS REQUEST  
(Circle or Specify Method No.)

CLIENT NAME:

COG

SITE MANAGER:

Ike Tavaréz

PROJECT NO.:

114-6400210

PROJECT NAME:

RJV #119 Flowline Spill

| LAB I.D. NUMBER | DATE | TIME | MATRIX | COMPR. | GRAB | SAMPLE IDENTIFICATION | NUMBER OF CONTAINERS | PRESERVATIVE METHOD |     |      |     |      | BTX 8021B | TX1005 (Ext. to C35) | PAH 8270 | RCRA Metals Ag As Ba Cd Cr Pb Hg Se | TCLP Metals Ag As Ba Cd Vr Pd Hg Se | TCLP Volatiles | TCLP Semi Volatiles | RCI | GC/MS Vol. 8240/8260/824 | GC/MS Semi. Vol. 8270/825 | PCB's 8080/608 | Pest. 808/608 | Chloride | Gamma Spec. | Alpha Beta (Air) | PLM (Asbestos) | Major Anions/Cations, pH, TDS |
|-----------------|------|------|--------|--------|------|-----------------------|----------------------|---------------------|-----|------|-----|------|-----------|----------------------|----------|-------------------------------------|-------------------------------------|----------------|---------------------|-----|--------------------------|---------------------------|----------------|---------------|----------|-------------|------------------|----------------|-------------------------------|
|                 |      |      |        |        |      |                       |                      | Filtered (Y/N)      | HCL | HNO3 | ICE | NONE |           |                      |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |
| 198019          | 6/4  |      | S      |        | X    | AH-2 0-1' BEB         | 1                    |                     |     |      | X   |      |           | X                    |          |                                     |                                     |                |                     |     |                          |                           |                |               | X        |             |                  |                |                               |
| 020             | 6/4  |      | S      |        | X    | AH-2 1-1.5' BEB       | 1                    |                     |     |      | X   |      |           |                      |          |                                     |                                     |                |                     |     |                          |                           |                |               | Y        |             |                  |                |                               |
| 021             | 6/4  |      | S      |        | X    | AH-2 2-2.5' BEB       | 1                    |                     |     |      | X   |      |           |                      |          |                                     |                                     |                |                     |     |                          |                           |                |               | X        |             |                  |                |                               |
| 022             | 6/4  |      | S      |        | X    | AH-2 3-3.5' BEB       | 1                    |                     |     |      | X   |      |           |                      |          |                                     |                                     |                |                     |     |                          |                           |                |               | Y        |             |                  |                |                               |
| 023             | 6/4  |      | S      |        | X    | AH-2 4-4.5' BEB       | 1                    |                     |     |      | X   |      |           |                      |          |                                     |                                     |                |                     |     |                          |                           |                |               | Y        |             |                  |                |                               |
| 024             | 6/4  |      | S      |        | X    | AH-2 5-5.5' BEB       | 1                    |                     |     |      | X   |      |           |                      |          |                                     |                                     |                |                     |     |                          |                           |                |               | Y        |             |                  |                |                               |
| 025             | 6/4  |      | S      |        | X    | AH-2 6-6.5' BEB       | 1                    |                     |     |      | X   |      |           |                      |          |                                     |                                     |                |                     |     |                          |                           |                |               | Y        |             |                  |                |                               |
| 026             | 6/4  |      | S      |        | X    | AH-3 0-1' BEB         | 1                    |                     |     |      | X   |      |           | X                    |          |                                     |                                     |                |                     |     |                          |                           |                |               | Y        |             |                  |                |                               |
| 027             | 6/4  |      | S      |        | X    | AH-3 1-1.5' BEB       | 1                    |                     |     |      | X   |      |           |                      |          |                                     |                                     |                |                     |     |                          |                           |                |               | Y        |             |                  |                |                               |
| 028             | 6/4  |      | S      |        | X    | AH-3 2-2.5' BEB       | 1                    |                     |     |      | X   |      |           |                      |          |                                     |                                     |                |                     |     |                          |                           |                |               | Y        |             |                  |                |                               |

RELINQUISHED BY: (Signature)

Date: 6/5/09

Time: 1440

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

IT KD

Date: 6/4/09

Time:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

TRAC

ADDRESS:

CITY: Midland

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

Ike Tavaréz

DATE: 6-5-09

TIME: 14:40

Ike Tavaréz

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

13.1°C

REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

AR

# Analysis Request of Chain of Custody Record



**TETRA TECH**

1910 N. Big Spring St.  
Midland, Texas 79705  
(432) 682-4559 • Fax (432) 682-3946

PAGE: 3 OF: 5

ANALYSIS REQUEST  
(Circle or Specify Method No.)

CLIENT NAME:

COG

SITE MANAGER:

Ike Tavares

PROJECT NO.:

#114-6400210

PROJECT NAME:

RJV #119 Flowline Spill

| LAB I.D. NUMBER | DATE | TIME | MATRIX | COMP. | GRAB | SAMPLE IDENTIFICATION | NUMBER OF | FILTERED (Y) | HCL | HNO3 | ICE | NONE | BTEX 8021B | TPH 8015 | PAH 8270 | RCRA Metals | TCLP Metals | TCLP Volatiles | TCLP Semi V | RCI | GC-MS Vol. 8 | GC-MS Semi | PCB's 8080/60 | Pest. 808/60 | Chloride | Barium Spec | Alpha Beta ( | PLM (Asbest | Major Anions |  |
|-----------------|------|------|--------|-------|------|-----------------------|-----------|--------------|-----|------|-----|------|------------|----------|----------|-------------|-------------|----------------|-------------|-----|--------------|------------|---------------|--------------|----------|-------------|--------------|-------------|--------------|--|
| 198029          | 6/4  |      | S      |       | X    | AH-3 3-3.5' BEB       | 1         |              |     |      | X   |      |            |          |          |             |             |                |             |     |              |            |               |              | X        |             |              |             |              |  |
| 030             | 6/4  |      | S      |       | X    | AH-3 4-4.5' BEB       | 1         |              |     |      | X   |      |            |          |          |             |             |                |             |     |              |            |               |              | X        |             |              |             |              |  |
| 031             | 6/4  |      | S      |       | X    | AH-3 5-5.5' BEB       | 1         |              |     |      | X   |      |            |          |          |             |             |                |             |     |              |            |               |              | X        |             |              |             |              |  |
| 032             | 6/4  |      | S      |       | X    | AH-3 6-6.5' BEB       | 1         |              |     |      | X   |      |            |          |          |             |             |                |             |     |              |            |               |              | X        |             |              |             |              |  |
| 033             | 6/4  |      | S      |       | X    | AH-4 0-1' BEB         | 1         |              |     |      | X   |      |            | X        |          |             |             |                |             |     |              |            |               |              | X        |             |              |             |              |  |
| 034             | 6/4  |      | S      |       | X    | AH-4 1-1.5' BEB       | 1         |              |     |      | X   |      |            |          |          |             |             |                |             |     |              |            |               |              | X        |             |              |             |              |  |
| 035             | 6/4  |      | S      |       | X    | AH-4 2-2.5' BEB       | 1         |              |     |      | X   |      |            |          |          |             |             |                |             |     |              |            |               |              | X        |             |              |             |              |  |
| 036             | 6/4  |      | S      |       | X    | AH-4 3-3.5' BEB       | 1         |              |     |      | X   |      |            |          |          |             |             |                |             |     |              |            |               |              | X        |             |              |             |              |  |
| 037             | 6/4  |      | S      |       | X    | AH-4 4-4.5' BEB       | 1         |              |     |      | X   |      |            |          |          |             |             |                |             |     |              |            |               |              | X        |             |              |             |              |  |
| 038             | 6/4  |      | S      |       | X    | AH-4 5-5.5' BEB       | 1         |              |     |      | X   |      |            |          |          |             |             |                |             |     |              |            |               |              | X        |             |              |             |              |  |

RELINQUISHED BY: (Signature)

Date: 6/5/09

Time: 14:40

RECEIVED BY: (Signature)

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

Time: \_\_\_\_\_

SAMPLED BY: (Print & Initial)

IT KD

Date: 6/4/09

Time: \_\_\_\_\_

RELINQUISHED BY: (Signature)

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

Time: \_\_\_\_\_

RECEIVED BY: (Signature)

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

Time: \_\_\_\_\_

SAMPLE SHIPPED BY: (Circle)

FEDEX ☒ BUS ☐

HAND DELIVERED ☒ UPS ☐

AIRBILL #: \_\_\_\_\_

OTHER: \_\_\_\_\_

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: Midland STATE: TX ZIP: \_\_\_\_\_

CONTACT: \_\_\_\_\_ PHONE: \_\_\_\_\_

RECEIVED BY: (Signature)

Melanie Batten

DATE: 6-5-09 TIME: 14:40

TETRA TECH CONTACT PERSON:

Ike Tavares

Results by:

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

13.1°C

REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

# Analysis Request of Chain of Custody Record

PAGE: 4 OF: 5



**TETRA TECH**

1910 N. Big Spring St.  
Midland, Texas 79705  
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST  
(Circle or Specify Method No.)

CLIENT NAME:

COG

SITE MANAGER:

Ike Tavaraz

PROJECT NO.:

#114-6400210

PROJECT NAME:

RJU #119 Flowline Spill

| LAB I.D. NUMBER | DATE | TIME | MATRIX | COMP. | GRAB            | SAMPLE IDENTIFICATION | NUMBER OF FILTERED (Y) | HCL | HNO3 | ICE | NONE | BTEX 8021B | TPH 8015 | PAH 8270 | RCRA Metals | TCLP Metals | TCLP Volatiles | TCLP Semi V | RCI | GC/MS Vol. 8 | GC/MS Semi | PCB's 8080/608 | Pest. 808/608 | Chloride | Gamma Spec | Alpha Beta (4 | PLM (Asbest | Major Anions |
|-----------------|------|------|--------|-------|-----------------|-----------------------|------------------------|-----|------|-----|------|------------|----------|----------|-------------|-------------|----------------|-------------|-----|--------------|------------|----------------|---------------|----------|------------|---------------|-------------|--------------|
| 198039          | 6/4  |      | S      |       | X               | AH-5 0-1' BEB         | 1                      |     |      | X   |      |            | X        |          |             |             |                |             |     |              |            |                |               | X        |            |               |             |              |
| 040             |      |      |        |       |                 | AH-5 1-1.5' BEB       | 1                      |     |      | X   |      |            |          |          |             |             |                |             |     |              |            |                | X             |          |            |               |             |              |
| 041             |      |      |        |       | AH-5 2-2.5' BEB | 1                     |                        |     | X    |     |      |            |          |          |             |             |                |             |     |              |            | X              |               |          |            |               |             |              |
| 042             |      |      |        |       | AH-5 3-3.5' BEB | 1                     |                        |     | X    |     |      |            |          |          |             |             |                |             |     |              |            | X              |               |          |            |               |             |              |
| 043             |      |      |        |       | AH-5 4-4.5' BEB | 1                     |                        |     | X    |     |      |            |          |          |             |             |                |             |     |              |            | X              |               |          |            |               |             |              |
| 044             |      |      |        |       | AH-5 5-5.5' BEB | 1                     |                        |     | X    |     |      |            |          |          |             |             |                |             |     |              |            | X              |               |          |            |               |             |              |
| 045             |      |      |        |       | AH-5 6-6.5' BEB | 1                     |                        |     | X    |     |      |            |          |          |             |             |                |             |     |              |            | X              |               |          |            |               |             |              |
| 046             |      |      |        |       | AH-5 7-7.5' BEB | 1                     |                        |     | X    |     |      |            |          |          |             |             |                |             |     |              |            | X              |               |          |            |               |             |              |
| 047             |      |      |        |       | AH-5 8-8.5' BEB | 1                     |                        |     | X    |     |      |            |          |          |             |             |                |             |     |              |            | X              |               |          |            |               |             |              |
| 048             |      |      |        |       |                 | AH-6 0-1' BEB         | 1                      |     |      | X   |      |            | X        |          |             |             |                |             |     |              |            |                | X             |          |            |               |             |              |

RELINQUISHED BY: (Signature)

Date: 6/5/09  
Time: 1440

RECEIVED BY: (Signature)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

SAMPLED BY: (Print & Initial)

IT KD

Date: 6/4/09  
Time: \_\_\_\_\_

RELINQUISHED BY: (Signature)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

RECEIVED BY: (Signature)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

SAMPLE SHIPPED BY: (Circle)

FEDEX BUS  
HAND DELIVERED UPS

AIRBILL #: \_\_\_\_\_

OTHER: \_\_\_\_\_

RELINQUISHED BY: (Signature)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

RECEIVED BY: (Signature)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

ADDRESS: TRAC  
CITY: Midland STATE: TX ZIP: \_\_\_\_\_  
CONTACT: \_\_\_\_\_ PHONE: \_\_\_\_\_

RECEIVED BY: (Signature)

Wendy Ballen  
DATE: 6-5-09 TIME: 14:40

Ike Tavaraz

RUSH Charges Authorized:  
Yes No

SAMPLE CONDITION WHEN RECEIVED:

13.1°C

REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

AR

# Analysis Request of Chain of Custody Record



**TETRA TECH**

1910 N. Big Spring St.  
Midland, Texas 79705  
(432) 682-4559 • Fax (432) 682-3946

PAGE: 5 OF: 5

ANALYSIS REQUEST  
(Circle or Specify Method No.)

CLIENT NAME:

COG

SITE MANAGER:

Ike Tavaréz

PROJECT NO.:

#114-6400210

PROJECT NAME:

RJV #119 Flowline Spill

| LAB I.D. NUMBER | DATE     | TIME | MATRIX | COMP. | GRAB            | SAMPLE IDENTIFICATION | NUMBER OF FILTERED N | HCL | HNO3 | ICE | NONE | BTEX 8021B | TPH 8015 MOD | PAH 8270 | RCRA Metals | TCLP Metals | TCLP Volatiles | TCLP Semi Vol | RCI | GC-MS Vol. 8240/8260/824 | GC-MS Semi. Vol. 8270/825 | PCB's 8080/608 | Pest. 808/608 | Chloride | Gamma Spec. | Alpha Beta (Air) | PLM (Asbestos) | Major Anions/Cations, pH, TDS |  |
|-----------------|----------|------|--------|-------|-----------------|-----------------------|----------------------|-----|------|-----|------|------------|--------------|----------|-------------|-------------|----------------|---------------|-----|--------------------------|---------------------------|----------------|---------------|----------|-------------|------------------|----------------|-------------------------------|--|
| 198049          | 2009 6/4 |      | S      |       | X               | AH-6 1-1.5' BEB       | 1                    |     |      | X   |      |            |              |          |             |             |                |               |     |                          |                           |                |               |          | X           |                  |                |                               |  |
| 050             |          |      |        |       |                 | AH-6 2-2.5' BEB       | 1                    |     |      | X   |      |            |              |          |             |             |                |               |     |                          |                           |                |               |          | X           |                  |                |                               |  |
| 051             |          |      |        |       |                 | AH-6 3-3.5' BEB       | 1                    |     |      | X   |      |            |              |          |             |             |                |               |     |                          |                           |                |               | X        |             |                  |                |                               |  |
| 052             |          |      |        |       |                 | AH-6 4-4.5' BEB       | 1                    |     |      | X   |      |            |              |          |             |             |                |               |     |                          |                           |                |               | X        |             |                  |                |                               |  |
| 053             |          |      |        |       |                 | AH-6 5-5.5' BEB       | 1                    |     |      | X   |      |            |              |          |             |             |                |               |     |                          |                           |                |               | X        |             |                  |                |                               |  |
| 054             |          |      |        |       |                 | AH-6 6-6.5' BEB       | 1                    |     |      | X   |      |            |              |          |             |             |                |               |     |                          |                           |                |               | X        |             |                  |                |                               |  |
| 055             |          |      |        |       |                 | AH-7 0-1' BEB         | 1                    |     |      | X   |      |            |              | X        |             |             |                |               |     |                          |                           |                |               | X        |             |                  |                |                               |  |
| 056             |          |      |        |       |                 | AH-7 1-1.5' BEB       | 1                    |     |      | X   |      |            |              |          |             |             |                |               |     |                          |                           |                |               | X        |             |                  |                |                               |  |
| 057             |          |      |        |       |                 | AH-7 2-2.5' BEB       | 1                    |     |      | X   |      |            |              |          |             |             |                |               |     |                          |                           |                |               | X        |             |                  |                |                               |  |
| 058             |          |      |        |       | AH-7 3-3.5' BEB | 1                     |                      |     | X    |     |      |            |              |          |             |             |                |               |     |                          |                           |                | X             |          |             |                  |                |                               |  |

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

IT KD

Date:

Time:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

ADDRESS:

CITY:

STATE:

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

TIME:

Ike Tavaréz

RUSH Charges Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

REMARKS:

135°C

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

AR

## Summary Report

Ike Tavaréz  
Tetra Tech  
1910 N. Big Spring Street  
Midland, TX 79705

Report Date: July 8, 2009

Work Order: 9070243



Project Name: RJU Unit #119  
Project Number: 114-6400210

| Sample | Description   | Matrix | Date Taken | Time Taken | Date Received |
|--------|---------------|--------|------------|------------|---------------|
| 201081 | SB-1 (5-6')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201082 | SB-1 (8-9')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201083 | SB-1 (11-12') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201084 | SB-1 (13-14') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201085 | SB-1 (15-16') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201086 | SB-1 (20-21') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201087 | SB-1 (25-26') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201088 | SB-1 (30-31') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201089 | SB-1 (35-36') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201090 | SB-2 (5-6')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201091 | SB-2 (8-9')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201092 | SB-2 (11-12') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201093 | SB-2 (13-14') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201094 | SB-2 (15-16') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201095 | SB-3 (5-6')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201096 | SB-3 (8-9')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201097 | SB-3 (11-12') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201098 | SB-3 (13-14') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201099 | SB-3 (15-16') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201100 | SB-3 (20-21') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201101 | SB-3 (25-26') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201102 | SB-4 (0-1')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201103 | SB-4 (2-3')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201104 | SB-4 (5-6')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201105 | SB-4 (8-9')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201106 | SB-5 (3-4')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201107 | SB-5 (5-6')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201108 | SB-5 (8-9')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201109 | SB-5 (11-12') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201110 | SB-5 (13-14') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201111 | SB-5 (15-16') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |

TraceAnalysis, Inc. • 6701 Aberdeen Ave., Suite 9 • Lubbock, TX 79424-1515 • (806) 794-1296

*This is only a summary. Please, refer to the complete report package for quality control data.*

| Sample | Description    | Matrix | Date Taken | Time Taken | Date Received |
|--------|----------------|--------|------------|------------|---------------|
| 201112 | SB-5 (20-21')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201113 | SB-5 (25-26')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201114 | SB-6 (0-1')    | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201115 | SB-6 (2-3')    | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201116 | SB-6 (5-6')    | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201117 | SB-6 (8-9')    | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201118 | SB-6 (11-12')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201119 | SB-6 (13-14')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201120 | SB-6 (15-16')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201121 | SB-6 (20-21')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201122 | SB-6 (25-26')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201123 | SB-6 (30-31')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201124 | SB-7 (5-6')    | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201125 | SB-7 (8-9')    | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201126 | SB-7 (11-12')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201127 | SB-7 (13-14')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201128 | SB-7 (15-16')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201129 | SB-7 (20-21')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201130 | SB-7 (25-26')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201131 | SB-7 (30-31')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201132 | SB-8 (0-1')    | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201133 | SB-8 (2-3')    | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201134 | SB-8 (5-6')    | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201135 | SB-8 (8-9')    | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201136 | SB-8 (11-12')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201137 | SB-8 (13-14')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201138 | SB-8 (15-16')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201139 | SB-8 (20-21')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201140 | SB-8 (25-26')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201141 | SB-8 (30-31')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201142 | SB-9 (5-6')    | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201143 | SB-9 (8-9')    | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201144 | SB-9 (11-12')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201145 | SB-9 (13-14')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201146 | SB-9 (15-16')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201147 | SB-9 (20-21')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201148 | SB-9 (25-26')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201149 | SB-9 (30-31')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201150 | SB-10 (0-1')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201151 | SB-10 (2-3')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201152 | SB-10 (5-6')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201153 | SB-10 (8-9')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201154 | SB-10 (11-12') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201155 | SB-10 (13-14') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201156 | SB-10 (15-16') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201157 | SB-10 (20-21') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201158 | SB-10 (25-26') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201159 | SB-10 (30-31') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201160 | SB-10 (35-36') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |

| Sample | Description    | Matrix | Date Taken | Time Taken | Date Received |
|--------|----------------|--------|------------|------------|---------------|
| 201161 | SB-11 (5-6')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201162 | SB-11 (8-9')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201163 | SB-11 (11-12') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201164 | SB-11 (13-14') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201165 | SB-11 (15-16') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201166 | SB-11 (20-21') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201167 | SB-11 (25-26') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201168 | SB-11 (30-31') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201169 | SB-4 (11-12')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201170 | SB-4 (13-14')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201171 | SB-4 (15-16')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201172 | SB-4 (20-21')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201173 | SB-4 (25-26')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |

| Sample - Field Code  | BTEX               |                    |                         |                   | TPH DRO        | TPH GRO        |
|----------------------|--------------------|--------------------|-------------------------|-------------------|----------------|----------------|
|                      | Benzene<br>(mg/Kg) | Toluene<br>(mg/Kg) | Ethylbenzene<br>(mg/Kg) | Xylene<br>(mg/Kg) | DRO<br>(mg/Kg) | GRO<br>(mg/Kg) |
| 201102 - SB-4 (0-1') | <0.0500            | 7.52               | 19.5                    | 43.0              | 1160           | 736            |
| 201103 - SB-4 (2-3') | <0.100             | 7.19               | 20.1                    | 37.2              | 691            | 817            |
| 201104 - SB-4 (5-6') | <0.0500            | 6.06               | 23.2                    | 34.0              |                |                |
| 201105 - SB-4 (8-9') | <0.0100            | <0.0100            | <0.0100                 | <0.0100           |                |                |
| 201106 - SB-5 (3-4') | <0.0100            | <0.0100            | <0.0100                 | <0.0100           |                |                |

## Sample: 201081 - SB-1 (5-6')

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1190   | mg/Kg | 4.00 |

## Sample: 201082 - SB-1 (8-9')

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1630   | mg/Kg | 4.00 |

## Sample: 201083 - SB-1 (11-12')

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 6240   | mg/Kg | 4.00 |

## Sample: 201084 - SB-1 (13-14')

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2760   | mg/Kg | 4.00 |

**Sample: 201085 - SB-1 (15-16')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 4210   | mg/Kg | 4.00 |

**Sample: 201086 - SB-1 (20-21')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1870   | mg/Kg | 4.00 |

**Sample: 201087 - SB-1 (25-26')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1290   | mg/Kg | 4.00 |

**Sample: 201088 - SB-1 (30-31')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 706    | mg/Kg | 4.00 |

**Sample: 201089 - SB-1 (35-36')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 406    | mg/Kg | 4.00 |

**Sample: 201090 - SB-2 (5-6')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3990   | mg/Kg | 4.00 |

**Sample: 201091 - SB-2 (8-9')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3290   | mg/Kg | 4.00 |

**Sample: 201092 - SB-2 (11-12')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 590    | mg/Kg | 4.00 |

**Sample: 201093 - SB-2 (13-14')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 207    | mg/Kg | 4.00 |

**Sample: 201094 - SB-2 (15-16')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | <200   | mg/Kg | 4.00 |

**Sample: 201095 - SB-3 (5-6')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1430   | mg/Kg | 4.00 |

**Sample: 201096 - SB-3 (8-9')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2880   | mg/Kg | 4.00 |

**Sample: 201097 - SB-3 (11-12')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2820   | mg/Kg | 4.00 |

**Sample: 201098 - SB-3 (13-14')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2250   | mg/Kg | 4.00 |

**Sample: 201099 - SB-3 (15-16')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1980   | mg/Kg | 4.00 |

**Sample: 201100 - SB-3 (20-21')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 993    | mg/Kg | 4.00 |

**Sample: 201101 - SB-3 (25-26')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | <200   | mg/Kg | 4.00 |

**Sample: 201102 - SB-4 (0-1')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1070   | mg/Kg | 4.00 |

**Sample: 201103 - SB-4 (2-3')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1520   | mg/Kg | 4.00 |

**Sample: 201104 - SB-4 (5-6')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1390   | mg/Kg | 4.00 |

**Sample: 201105 - SB-4 (8-9')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1860   | mg/Kg | 4.00 |

**Sample: 201106 - SB-5 (3-4')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2670   | mg/Kg | 4.00 |

**Sample: 201107 - SB-5 (5-6')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1790   | mg/Kg | 4.00 |

**Sample: 201108 - SB-5 (8-9')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2950   | mg/Kg | 4.00 |

**Sample: 201109 - SB-5 (11-12')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3660   | mg/Kg | 4.00 |

**Sample: 201110 - SB-5 (13-14')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 5090   | mg/Kg | 4.00 |

**Sample: 201111 - SB-5 (15-16')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 5090   | mg/Kg | 4.00 |

**Sample: 201112 - SB-5 (20-21')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2600   | mg/Kg | 4.00 |

**Sample: 201113 - SB-5 (25-26')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 386    | mg/Kg | 4.00 |

**Sample: 201114 - SB-6 (0-1')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1380   | mg/Kg | 4.00 |

**Sample: 201115 - SB-6 (2-3')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 10200  | mg/Kg | 4.00 |

**Sample: 201116 - SB-6 (5-6')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 5910   | mg/Kg | 4.00 |

**Sample: 201117 - SB-6 (8-9')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 6300   | mg/Kg | 4.00 |

**Sample: 201118 - SB-6 (11-12')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2430   | mg/Kg | 4.00 |

**Sample: 201119 - SB-6 (13-14')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1850   | mg/Kg | 4.00 |

**Sample: 201120 - SB-6 (15-16')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 436    | mg/Kg | 4.00 |

**Sample: 201121 - SB-6 (20-21')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 421    | mg/Kg | 4.00 |

**Sample: 201122 - SB-6 (25-26')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 389    | mg/Kg | 4.00 |

**Sample: 201123 - SB-6 (30-31')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | <200   | mg/Kg | 4.00 |

**Sample: 201124 - SB-7 (5-6')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 6230   | mg/Kg | 4.00 |

**Sample: 201125 - SB-7 (8-9')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 4100   | mg/Kg | 4.00 |

**Sample: 201126 - SB-7 (11-12')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3180   | mg/Kg | 4.00 |

**Sample: 201127 - SB-7 (13-14')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1820   | mg/Kg | 4.00 |

**Sample: 201128 - SB-7 (15-16')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1590   | mg/Kg | 4.00 |

**Sample: 201129 - SB-7 (20-21')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1180   | mg/Kg | 4.00 |

**Sample: 201130 - SB-7 (25-26')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 952    | mg/Kg | 4.00 |

**Sample: 201131 - SB-7 (30-31')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 309    | mg/Kg | 4.00 |

**Sample: 201132 - SB-8 (0-1')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 10700  | mg/Kg | 4.00 |

**Sample: 201133 - SB-8 (2-3')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3980   | mg/Kg | 4.00 |

**Sample: 201134 - SB-8 (5-6')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3120   | mg/Kg | 4.00 |

**Sample: 201135 - SB-8 (8-9')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3390   | mg/Kg | 4.00 |

**Sample: 201136 - SB-8 (11-12')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3130   | mg/Kg | 4.00 |

**Sample: 201137 - SB-8 (13-14')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 4020   | mg/Kg | 4.00 |

**Sample: 201138 - SB-8 (15-16')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 5120   | mg/Kg | 4.00 |

**Sample: 201139 - SB-8 (20-21')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 4480   | mg/Kg | 4.00 |

**Sample: 201140 - SB-8 (25-26')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 275    | mg/Kg | 4.00 |

**Sample: 201141 - SB-8 (30-31')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 310    | mg/Kg | 4.00 |

**Sample: 201142 - SB-9 (5-6')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2080   | mg/Kg | 4.00 |

**Sample: 201143 - SB-9 (8-9')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3030   | mg/Kg | 4.00 |

**Sample: 201144 - SB-9 (11-12')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3150   | mg/Kg | 4.00 |

**Sample: 201145 - SB-9 (13-14')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2370   | mg/Kg | 4.00 |

**Sample: 201146 - SB-9 (15-16')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2260   | mg/Kg | 4.00 |

**Sample: 201147 - SB-9 (20-21')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 5250   | mg/Kg | 4.00 |

**Sample: 201148 - SB-9 (25-26')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 838    | mg/Kg | 4.00 |

**Sample: 201149 - SB-9 (30-31')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 486    | mg/Kg | 4.00 |

**Sample: 201150 - SB-10 (0-1')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | <200   | mg/Kg | 4.00 |

**Sample: 201151 - SB-10 (2-3')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 527    | mg/Kg | 4.00 |

**Sample: 201152 - SB-10 (5-6')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1150   | mg/Kg | 4.00 |

**Sample: 201153 - SB-10 (8-9')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2360   | mg/Kg | 4.00 |

**Sample: 201154 - SB-10 (11-12')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 9190   | mg/Kg | 4.00 |

**Sample: 201155 - SB-10 (13-14')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 7050   | mg/Kg | 4.00 |

**Sample: 201156 - SB-10 (15-16')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 4920   | mg/Kg | 4.00 |

**Sample: 201157 - SB-10 (20-21')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3620   | mg/Kg | 4.00 |

**Sample: 201158 - SB-10 (25-26')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 2140   | mg/Kg | 4.00 |

**Sample: 201159 - SB-10 (30-31')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 709    | mg/Kg | 4.00 |

**Sample: 201160 - SB-10 (35-36')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 274    | mg/Kg | 4.00 |

**Sample: 201161 - SB-11 (5-6')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3820   | mg/Kg | 4.00 |

**Sample: 201162 - SB-11 (8-9')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 4030   | mg/Kg | 4.00 |

**Sample: 201163 - SB-11 (11-12')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 9070   | mg/Kg | 4.00 |

**Sample: 201164 - SB-11 (13-14')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 4930   | mg/Kg | 4.00 |

**Sample: 201165 - SB-11 (15-16')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 3750   | mg/Kg | 4.00 |

**Sample: 201166 - SB-11 (20-21')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1330   | mg/Kg | 4.00 |

**Sample: 201167 - SB-11 (25-26')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 310    | mg/Kg | 4.00 |

**Sample: 201168 - SB-11 (30-31')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 284    | mg/Kg | 4.00 |

**Sample: 201169 - SB-4 (11-12')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 1790   | mg/Kg | 4.00 |

**Sample: 201170 - SB-4 (13-14')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 966    | mg/Kg | 4.00 |

**Sample: 201171 - SB-4 (15-16')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 518    | mg/Kg | 4.00 |

**Sample: 201172 - SB-4 (20-21')**

| Param    | Flag | Result | Units | RL   |
|----------|------|--------|-------|------|
| Chloride |      | 510    | mg/Kg | 4.00 |

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## Certifications

WBENC: 237019

HUB: 1752439743100-86536

DBE: VN 20657

NCTRCA WFWB38444Y0909

## NELAP Certifications

Lubbock: T104704219-08-TX  
LELAP-02003  
Kansas E-10317

El Paso: T104704221-08-TX  
LELAP-02002

Midland: T104704392-08-TX

## Analytical and Quality Control Report

Ike Tavaréz  
Tetra Tech  
1910 N. Big Spring Street  
Midland, TX, 79705

Report Date: July 8, 2009

Work Order: 9070243



Project Name: RJU Unit #119  
Project Number: 114-6400210

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description   | Matrix | Date Taken | Time Taken | Date Received |
|--------|---------------|--------|------------|------------|---------------|
| 201081 | SB-1 (5-6')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201082 | SB-1 (8-9')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201083 | SB-1 (11-12') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201084 | SB-1 (13-14') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201085 | SB-1 (15-16') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201086 | SB-1 (20-21') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201087 | SB-1 (25-26') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201088 | SB-1 (30-31') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201089 | SB-1 (35-36') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201090 | SB-2 (5-6')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201091 | SB-2 (8-9')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |

| Sample | Description   | Matrix | Date Taken | Time Taken | Date Received |
|--------|---------------|--------|------------|------------|---------------|
| 201092 | SB-2 (11-12') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201093 | SB-2 (13-14') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201094 | SB-2 (15-16') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201095 | SB-3 (5-6')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201096 | SB-3 (8-9')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201097 | SB-3 (11-12') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201098 | SB-3 (13-14') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201099 | SB-3 (15-16') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201100 | SB-3 (20-21') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201101 | SB-3 (25-26') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201102 | SB-4 (0-1')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201103 | SB-4 (2-3')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201104 | SB-4 (5-6')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201105 | SB-4 (8-9')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201106 | SB-5 (3-4')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201107 | SB-5 (5-6')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201108 | SB-5 (8-9')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201109 | SB-5 (11-12') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201110 | SB-5 (13-14') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201111 | SB-5 (15-16') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201112 | SB-5 (20-21') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201113 | SB-5 (25-26') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201114 | SB-6 (0-1')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201115 | SB-6 (2-3')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201116 | SB-6 (5-6')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201117 | SB-6 (8-9')   | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201118 | SB-6 (11-12') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201119 | SB-6 (13-14') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201120 | SB-6 (15-16') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201121 | SB-6 (20-21') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201122 | SB-6 (25-26') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201123 | SB-6 (30-31') | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201124 | SB-7 (5-6')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201125 | SB-7 (8-9')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201126 | SB-7 (11-12') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201127 | SB-7 (13-14') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201128 | SB-7 (15-16') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201129 | SB-7 (20-21') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201130 | SB-7 (25-26') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201131 | SB-7 (30-31') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201132 | SB-8 (0-1')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201133 | SB-8 (2-3')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201134 | SB-8 (5-6')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201135 | SB-8 (8-9')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201136 | SB-8 (11-12') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201137 | SB-8 (13-14') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |

| Sample | Description    | Matrix | Date Taken | Time Taken | Date Received |
|--------|----------------|--------|------------|------------|---------------|
| 201138 | SB-8 (15-16')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201139 | SB-8 (20-21')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201140 | SB-8 (25-26')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201141 | SB-8 (30-31')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201142 | SB-9 (5-6')    | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201143 | SB-9 (8-9')    | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201144 | SB-9 (11-12')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201145 | SB-9 (13-14')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201146 | SB-9 (15-16')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201147 | SB-9 (20-21')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201148 | SB-9 (25-26')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201149 | SB-9 (30-31')  | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201150 | SB-10 (0-1')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201151 | SB-10 (2-3')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201152 | SB-10 (5-6')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201153 | SB-10 (8-9')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201154 | SB-10 (11-12') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201155 | SB-10 (13-14') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201156 | SB-10 (15-16') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201157 | SB-10 (20-21') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201158 | SB-10 (25-26') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201159 | SB-10 (30-31') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201160 | SB-10 (35-36') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201161 | SB-11 (5-6')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201162 | SB-11 (8-9')   | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201163 | SB-11 (11-12') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201164 | SB-11 (13-14') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201165 | SB-11 (15-16') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201166 | SB-11 (20-21') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201167 | SB-11 (25-26') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201168 | SB-11 (30-31') | soil   | 2009-07-01 | 00:00      | 2009-07-02    |
| 201169 | SB-4 (11-12')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201170 | SB-4 (13-14')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201171 | SB-4 (15-16')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201172 | SB-4 (20-21')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |
| 201173 | SB-4 (25-26')  | soil   | 2009-06-30 | 00:00      | 2009-07-02    |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 52 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



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Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

**Standard Flags**

B - The sample contains less than ten times the concentration found in the method blank.

## Case Narrative

Samples for project RJU Unit #119 were received by TraceAnalysis, Inc. on 2009-07-02 and assigned to work order 9070243. Samples for work order 9070243 were received intact at a temperature of 15.9 deg. C.

Samples were analyzed for the following tests using their respective methods.

| Test                 | Method       | Prep<br>Batch | Prep<br>Date        | QC<br>Batch | Analysis<br>Date    |
|----------------------|--------------|---------------|---------------------|-------------|---------------------|
| BTEX                 | S 8021B      | 52230         | 2009-07-07 at 10:00 | 61243       | 2009-07-07 at 11:35 |
| Chloride (Titration) | SM 4500-Cl B | 52178         | 2009-07-06 at 08:45 | 61200       | 2009-07-07 at 11:45 |
| Chloride (Titration) | SM 4500-Cl B | 52179         | 2009-07-06 at 08:46 | 61201       | 2009-07-07 at 11:46 |
| Chloride (Titration) | SM 4500-Cl B | 52180         | 2009-07-06 at 08:47 | 61202       | 2009-07-07 at 11:47 |
| Chloride (Titration) | SM 4500-Cl B | 52181         | 2009-07-06 at 12:47 | 61203       | 2009-07-07 at 11:47 |
| Chloride (Titration) | SM 4500-Cl B | 52182         | 2009-07-06 at 12:48 | 61205       | 2009-07-07 at 11:48 |
| Chloride (Titration) | SM 4500-Cl B | 52183         | 2009-07-06 at 12:48 | 61259       | 2009-07-08 at 11:25 |
| Chloride (Titration) | SM 4500-Cl B | 52184         | 2009-07-06 at 13:49 | 61260       | 2009-07-08 at 11:26 |
| Chloride (Titration) | SM 4500-Cl B | 52185         | 2009-07-06 at 14:50 | 61261       | 2009-07-08 at 11:27 |
| Chloride (Titration) | SM 4500-Cl B | 52186         | 2009-07-06 at 14:51 | 61262       | 2009-07-08 at 11:28 |
| Chloride (Titration) | SM 4500-Cl B | 52187         | 2009-07-06 at 14:51 | 61263       | 2009-07-08 at 11:29 |
| Chloride (Titration) | SM 4500-Cl B | 52188         | 2009-07-06 at 14:52 | 61264       | 2009-07-08 at 11:30 |
| TPH DRO              | Mod. 8015B   | 52221         | 2009-07-07 at 10:00 | 61231       | 2009-07-07 at 13:40 |
| TPH GRO              | S 8015B      | 52230         | 2009-07-07 at 10:00 | 61244       | 2009-07-07 at 12:02 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9070243 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

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## Analytical Report

### Sample: 201081 - SB-1 (5-6')

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61200                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52178                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1190         | mg/Kg | 50       | 4.00 |

### Sample: 201082 - SB-1 (8-9')

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61201                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52179                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1630         | mg/Kg | 50       | 4.00 |

### Sample: 201083 - SB-1 (11-12')

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61201                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52179                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 6240         | mg/Kg | 50       | 4.00 |

### Sample: 201084 - SB-1 (13-14')

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61201                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52179                |                     |              |              |     |

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| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2760         | mg/Kg | 50       | 4.00 |

**Sample: 201085 - SB-1 (15-16')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61201      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52179      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 4210         | mg/Kg | 50       | 4.00 |

**Sample: 201086 - SB-1 (20-21')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61201      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52179      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1870         | mg/Kg | 50       | 4.00 |

**Sample: 201087 - SB-1 (25-26')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61201      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52179      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1290         | mg/Kg | 50       | 4.00 |

**Sample: 201088 - SB-1 (30-31')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61201      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52179      Sample Preparation: 2009-07-06      Prepared By: AR

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| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 706          | mg/Kg | 50       | 4.00 |

**Sample: 201089 - SB-1 (35-36')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61201      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52179      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 406          | mg/Kg | 50       | 4.00 |

**Sample: 201090 - SB-2 (5-6')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61201      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52179      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3990         | mg/Kg | 50       | 4.00 |

**Sample: 201091 - SB-2 (8-9')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61201      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52179      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3290         | mg/Kg | 50       | 4.00 |

**Sample: 201092 - SB-2 (11-12')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61202      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52180      Sample Preparation: 2009-07-06      Prepared By: AR

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| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 590          | mg/Kg | 50       | 4.00 |

**Sample: 201093 - SB-2 (13-14')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61202      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52180      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 207          | mg/Kg | 50       | 4.00 |

**Sample: 201094 - SB-2 (15-16')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61202      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52180      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | <200         | mg/Kg | 50       | 4.00 |

**Sample: 201095 - SB-3 (5-6')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61202      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52180      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1430         | mg/Kg | 50       | 4.00 |

**Sample: 201096 - SB-3 (8-9')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61202      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52180      Sample Preparation: 2009-07-06      Prepared By: AR

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| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2880         | mg/Kg | 50       | 4.00 |

**Sample: 201097 - SB-3 (11-12')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61202      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52180      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2820         | mg/Kg | 50       | 4.00 |

**Sample: 201098 - SB-3 (13-14')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61202      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52180      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2250         | mg/Kg | 50       | 4.00 |

**Sample: 201099 - SB-3 (15-16')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61202      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52180      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1980         | mg/Kg | 50       | 4.00 |

**Sample: 201100 - SB-3 (20-21')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61202      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52180      Sample Preparation: 2009-07-06      Prepared By: AR

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| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 993          | mg/Kg | 50       | 4.00 |

**Sample: 201101 - SB-3 (25-26')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61202      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52180      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | <200         | mg/Kg | 50       | 4.00 |

**Sample: 201102 - SB-4 (0-1')**

Laboratory: Midland  
Analysis: BTEX      Analytical Method: S 8021B      Prep Method: S 5035  
QC Batch: 61243      Date Analyzed: 2009-07-07      Analyzed By: ME  
Prep Batch: 52230      Sample Preparation: 2009-07-07      Prepared By: ME

| Parameter    | Flag | RL<br>Result | Units | Dilution | RL     |
|--------------|------|--------------|-------|----------|--------|
| Benzene      |      | <0.0500      | mg/Kg | 5        | 0.0100 |
| Toluene      |      | 7.52         | mg/Kg | 5        | 0.0100 |
| Ethylbenzene |      | 19.5         | mg/Kg | 5        | 0.0100 |
| Xylene       |      | 43.0         | mg/Kg | 5        | 0.0100 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 9.97   | mg/Kg | 5        | 10.0            | 100                 | 49 - 129.7         |
| 4-Bromofluorobenzene (4-BFB) |      | 13.2   | mg/Kg | 5        | 10.0            | 132                 | 45.2 - 144.3       |

**Sample: 201102 - SB-4 (0-1')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61203      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52181      Sample Preparation: 2009-07-06      Prepared By: AR

*continued ...*

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sample 201102 continued ...

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
| Chloride  |      | 1070         | mg/Kg | 50       | 4.00 |

Sample: 201102 - SB-4 (0-1')

|                     |                                |                  |
|---------------------|--------------------------------|------------------|
| Laboratory: Midland | Analytical Method: Mod. 8015B  | Prep Method: N/A |
| Analysis: TPH DRO   | Date Analyzed: 2009-07-07      | Analyzed By: AG  |
| QC Batch: 61231     | Sample Preparation: 2009-07-07 | Prepared By: AG  |
| Prep Batch: 52221   |                                |                  |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| DRO       |      | 1160         | mg/Kg | 1        | 50.0 |

| Surrogate     | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|---------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| n-Triacontane |      | 130    | mg/Kg | 1        | 100             | 130                 | 13.2 - 219.3       |

Sample: 201102 - SB-4 (0-1')

|                     |                                |                     |
|---------------------|--------------------------------|---------------------|
| Laboratory: Midland | Analytical Method: S 8015B     | Prep Method: S 5035 |
| Analysis: TPH GRO   | Date Analyzed: 2009-07-07      | Analyzed By: ME     |
| QC Batch: 61244     | Sample Preparation: 2009-07-07 | Prepared By: ME     |
| Prep Batch: 52230   |                                |                     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| GRO       |      | 736          | mg/Kg | 5        | 1.00 |

| Surrogate                    | Flag         | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|--------------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |              | 9.06   | mg/Kg | 5        | 10.0            | 91                  | 68.5 - 119.4       |
| 4-Bromofluorobenzene (4-BFB) | <sup>1</sup> | 36.3   | mg/Kg | 5        | 10.0            | 363                 | 52 - 117           |

<sup>1</sup>High surrogate recovery due to peak interference.

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**Sample: 201103 - SB-4 (2-3')**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 61243  
Prep Batch: 52230

Analytical Method: S 8021B  
Date Analyzed: 2009-07-07  
Sample Preparation: 2009-07-07

Prep Method: S 5035  
Analyzed By: ME  
Prepared By: ME

| Parameter    | Flag | RL<br>Result | Units | Dilution | RL     |
|--------------|------|--------------|-------|----------|--------|
| Benzene      |      | <0.100       | mg/Kg | 10       | 0.0100 |
| Toluene      |      | 7.19         | mg/Kg | 10       | 0.0100 |
| Ethylbenzene |      | 20.1         | mg/Kg | 10       | 0.0100 |
| Xylene       |      | 37.2         | mg/Kg | 10       | 0.0100 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 19.8   | mg/Kg | 10       | 20.0            | 99                  | 49 - 129.7         |
| 4-Bromofluorobenzene (4-BFB) |      | 21.7   | mg/Kg | 10       | 20.0            | 108                 | 45.2 - 144.3       |

**Sample: 201103 - SB-4 (2-3')**

Laboratory: Midland  
Analysis: Chloride (Titration)  
QC Batch: 61203  
Prep Batch: 52181

Analytical Method: SM 4500-Cl B  
Date Analyzed: 2009-07-07  
Sample Preparation: 2009-07-06

Prep Method: N/A  
Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1520         | mg/Kg | 50       | 4.00 |

**Sample: 201103 - SB-4 (2-3')**

Laboratory: Midland  
Analysis: TPH DRO  
QC Batch: 61231  
Prep Batch: 52221

Analytical Method: Mod. 8015B  
Date Analyzed: 2009-07-07  
Sample Preparation: 2009-07-07

Prep Method: N/A  
Analyzed By: AG  
Prepared By: AG

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| DRO       |      | 691          | mg/Kg | 1        | 50.0 |

| Surrogate     | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|---------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| n-Triacontane |      | 102    | mg/Kg | 1        | 100             | 102                 | 13.2 - 219.3       |

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**Sample: 201103 - SB-4 (2-3')**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 61244  
Prep Batch: 52230

Analytical Method: S 8015B  
Date Analyzed: 2009-07-07  
Sample Preparation: 2009-07-07

Prep Method: S 5035  
Analyzed By: ME  
Prepared By: ME

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| GRO       |      | 817          | mg/Kg | 10       | 1.00 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 17.9   | mg/Kg | 10       | 20.0            | 90                  | 68.5 - 119.4       |
| 4-Bromofluorobenzene (4-BFB) | 2    | 44.3   | mg/Kg | 10       | 20.0            | 222                 | 52 - 117           |

**Sample: 201104 - SB-4 (5-6')**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 61243  
Prep Batch: 52230

Analytical Method: S 8021B  
Date Analyzed: 2009-07-07  
Sample Preparation: 2009-07-07

Prep Method: S 5035  
Analyzed By: ME  
Prepared By: ME

| Parameter    | Flag | RL<br>Result | Units | Dilution | RL     |
|--------------|------|--------------|-------|----------|--------|
| Benzene      |      | <0.0500      | mg/Kg | 5        | 0.0100 |
| Toluene      |      | 6.06         | mg/Kg | 5        | 0.0100 |
| Ethylbenzene |      | 23.2         | mg/Kg | 5        | 0.0100 |
| Xylene       |      | 34.0         | mg/Kg | 5        | 0.0100 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 9.95   | mg/Kg | 5        | 10.0            | 100                 | 49 - 129.7         |
| 4-Bromofluorobenzene (4-BFB) |      | 12.6   | mg/Kg | 5        | 10.0            | 126                 | 45.2 - 144.3       |

**Sample: 201104 - SB-4 (5-6')**

Laboratory: Midland  
Analysis: Chloride (Titration)  
QC Batch: 61203  
Prep Batch: 52181

Analytical Method: SM 4500-Cl B  
Date Analyzed: 2009-07-07  
Sample Preparation: 2009-07-06

Prep Method: N/A  
Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1390         | mg/Kg | 50       | 4.00 |

<sup>2</sup>High surrogate recovery due to peak interference.

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**Sample: 201105 - SB-4 (8-9')**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 61243  
Prep Batch: 52230

Analytical Method: S 8021B  
Date Analyzed: 2009-07-07  
Sample Preparation: 2009-07-07

Prep Method: S 5035  
Analyzed By: ME  
Prepared By: ME

| Parameter    | Flag | RL<br>Result | Units | Dilution | RL     |
|--------------|------|--------------|-------|----------|--------|
| Benzene      |      | <0.0100      | mg/Kg | 1        | 0.0100 |
| Toluene      |      | <0.0100      | mg/Kg | 1        | 0.0100 |
| Ethylbenzene |      | <0.0100      | mg/Kg | 1        | 0.0100 |
| Xylene       |      | <0.0100      | mg/Kg | 1        | 0.0100 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 1.97   | mg/Kg | 1        | 2.00            | 98                  | 49 - 129.7         |
| 4-Bromofluorobenzene (4-BFB) |      | 1.47   | mg/Kg | 1        | 2.00            | 74                  | 45.2 - 144.3       |

**Sample: 201105 - SB-4 (8-9')**

Laboratory: Midland  
Analysis: Chloride (Titration)  
QC Batch: 61203  
Prep Batch: 52181

Analytical Method: SM 4500-Cl B  
Date Analyzed: 2009-07-07  
Sample Preparation: 2009-07-06

Prep Method: N/A  
Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1860         | mg/Kg | 50       | 4.00 |

**Sample: 201106 - SB-5 (3-4')**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 61243  
Prep Batch: 52230

Analytical Method: S 8021B  
Date Analyzed: 2009-07-07  
Sample Preparation: 2009-07-07

Prep Method: S 5035  
Analyzed By: ME  
Prepared By: ME

| Parameter    | Flag | RL<br>Result | Units | Dilution | RL     |
|--------------|------|--------------|-------|----------|--------|
| Benzene      |      | <0.0100      | mg/Kg | 1        | 0.0100 |
| Toluene      |      | <0.0100      | mg/Kg | 1        | 0.0100 |
| Ethylbenzene |      | <0.0100      | mg/Kg | 1        | 0.0100 |
| Xylene       |      | <0.0100      | mg/Kg | 1        | 0.0100 |

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**Sample: 201109 - SB-5 (11-12')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61203                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52181                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3660         | mg/Kg | 50       | 4.00 |

**Sample: 201110 - SB-5 (13-14')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61203                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52181                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 5090         | mg/Kg | 50       | 4.00 |

**Sample: 201111 - SB-5 (15-16')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61203                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52181                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 5090         | mg/Kg | 50       | 4.00 |

**Sample: 201112 - SB-5 (20-21')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61205                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52182                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2600         | mg/Kg | 50       | 4.00 |

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**Sample: 201113 - SB-5 (25-26')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61205                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52182                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 386          | mg/Kg | 50       | 4.00 |

**Sample: 201114 - SB-6 (0-1')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61205                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52182                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1380         | mg/Kg | 50       | 4.00 |

**Sample: 201115 - SB-6 (2-3')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61205                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52182                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 10200        | mg/Kg | 50       | 4.00 |

**Sample: 201116 - SB-6 (5-6')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61205                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52182                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 5910         | mg/Kg | 50       | 4.00 |

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**Sample: 201117 - SB-6 (8-9')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61205                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52182                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 6300         | mg/Kg | 50       | 4.00 |

**Sample: 201118 - SB-6 (11-12')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61205                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52182                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2430         | mg/Kg | 50       | 4.00 |

**Sample: 201119 - SB-6 (13-14')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61205                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52182                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1850         | mg/Kg | 50       | 4.00 |

**Sample: 201120 - SB-6 (15-16')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61205                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52182                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 436          | mg/Kg | 50       | 4.00 |

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**Sample: 201121 - SB-6 (20-21')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-07   | Analyzed By: | AR  |
| QC Batch:   | 61205                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52182                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 421          | mg/Kg | 50       | 4.00 |

**Sample: 201122 - SB-6 (25-26')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61259                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52183                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 389          | mg/Kg | 50       | 4.00 |

**Sample: 201123 - SB-6 (30-31')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61259                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52183                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | <200         | mg/Kg | 50       | 4.00 |

**Sample: 201124 - SB-7 (5-6')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61259                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52183                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 6230         | mg/Kg | 50       | 4.00 |

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**Sample: 201125 - SB-7 (8-9')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61259                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52183                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 4100         | mg/Kg | 50       | 4.00 |

**Sample: 201126 - SB-7 (11-12')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61259                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52183                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3180         | mg/Kg | 50       | 4.00 |

**Sample: 201127 - SB-7 (13-14')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61259                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52183                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1820         | mg/Kg | 50       | 4.00 |

**Sample: 201128 - SB-7 (15-16')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61259                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52183                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1590         | mg/Kg | 50       | 4.00 |

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**Sample: 201129 - SB-7 (20-21')**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 61259                | Date Analyzed:      | 2009-07-08   |
| Prep Batch: | 52183                | Sample Preparation: | 2009-07-06   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1180         | mg/Kg | 50       | 4.00 |

**Sample: 201130 - SB-7 (25-26')**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 61259                | Date Analyzed:      | 2009-07-08   |
| Prep Batch: | 52183                | Sample Preparation: | 2009-07-06   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 952          | mg/Kg | 50       | 4.00 |

**Sample: 201131 - SB-7 (30-31')**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 61259                | Date Analyzed:      | 2009-07-08   |
| Prep Batch: | 52183                | Sample Preparation: | 2009-07-06   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 309          | mg/Kg | 50       | 4.00 |

**Sample: 201132 - SB-8 (0-1')**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 61260                | Date Analyzed:      | 2009-07-08   |
| Prep Batch: | 52184                | Sample Preparation: | 2009-07-06   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 10700        | mg/Kg | 50       | 4.00 |

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**Sample: 201133 - SB-8 (2-3')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61260                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52184                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3980         | mg/Kg | 50       | 4.00 |

**Sample: 201134 - SB-8 (5-6')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61260                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52184                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3120         | mg/Kg | 50       | 4.00 |

**Sample: 201135 - SB-8 (8-9')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61260                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52184                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3390         | mg/Kg | 50       | 4.00 |

**Sample: 201136 - SB-8 (11-12')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61260                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52184                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3130         | mg/Kg | 50       | 4.00 |

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**Sample: 201137 - SB-8 (13-14')**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 61260                | Date Analyzed:      | 2009-07-08   |
| Prep Batch: | 52184                | Sample Preparation: | 2009-07-06   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 4020         | mg/Kg | 50       | 4.00 |

**Sample: 201138 - SB-8 (15-16')**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 61260                | Date Analyzed:      | 2009-07-08   |
| Prep Batch: | 52184                | Sample Preparation: | 2009-07-06   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 5120         | mg/Kg | 50       | 4.00 |

**Sample: 201139 - SB-8 (20-21')**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 61260                | Date Analyzed:      | 2009-07-08   |
| Prep Batch: | 52184                | Sample Preparation: | 2009-07-06   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 4480         | mg/Kg | 50       | 4.00 |

**Sample: 201140 - SB-8 (25-26')**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 61260                | Date Analyzed:      | 2009-07-08   |
| Prep Batch: | 52184                | Sample Preparation: | 2009-07-06   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 275          | mg/Kg | 50       | 4.00 |

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**Sample: 201141 - SB-8 (30-31')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61260                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52184                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 310          | mg/Kg | 50       | 4.00 |

**Sample: 201142 - SB-9 (5-6')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61261                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52185                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2080         | mg/Kg | 50       | 4.00 |

**Sample: 201143 - SB-9 (8-9')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61261                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52185                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3030         | mg/Kg | 50       | 4.00 |

**Sample: 201144 - SB-9 (11-12')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61261                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52185                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3150         | mg/Kg | 50       | 4.00 |

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**Sample: 201145 - SB-9 (13-14')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61261                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52185                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2370         | mg/Kg | 50       | 4.00 |

**Sample: 201146 - SB-9 (15-16')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61261                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52185                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2260         | mg/Kg | 50       | 4.00 |

**Sample: 201147 - SB-9 (20-21')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61261                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52185                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 5250         | mg/Kg | 50       | 4.00 |

**Sample: 201148 - SB-9 (25-26')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61261                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52185                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 838          | mg/Kg | 50       | 4.00 |

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**Sample: 201149 - SB-9 (30-31')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61261                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52185                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 486          | mg/Kg | 50       | 4.00 |

**Sample: 201150 - SB-10 (0-1')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61261                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52185                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | <200         | mg/Kg | 50       | 4.00 |

**Sample: 201151 - SB-10 (2-3')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61261                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52185                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 527          | mg/Kg | 50       | 4.00 |

**Sample: 201152 - SB-10 (5-6')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61262                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52186                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1150         | mg/Kg | 50       | 4.00 |

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**Sample: 201153 - SB-10 (8-9')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61262                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52186                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2360         | mg/Kg | 50       | 4.00 |

**Sample: 201154 - SB-10 (11-12')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61262                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52186                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 9190         | mg/Kg | 50       | 4.00 |

**Sample: 201155 - SB-10 (13-14')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61262                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52186                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 7050         | mg/Kg | 50       | 4.00 |

**Sample: 201156 - SB-10 (15-16')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61262                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52186                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 4920         | mg/Kg | 50       | 4.00 |

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**Sample: 201157 - SB-10 (20-21')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61262      Date Analyzed: 2009-07-08      Analyzed By: AR  
Prep Batch: 52186      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3620         | mg/Kg | 50       | 4.00 |

**Sample: 201158 - SB-10 (25-26')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61262      Date Analyzed: 2009-07-08      Analyzed By: AR  
Prep Batch: 52186      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 2140         | mg/Kg | 50       | 4.00 |

**Sample: 201159 - SB-10 (30-31')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61262      Date Analyzed: 2009-07-08      Analyzed By: AR  
Prep Batch: 52186      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 709          | mg/Kg | 50       | 4.00 |

**Sample: 201160 - SB-10 (35-36')**

Laboratory: Midland  
Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 61262      Date Analyzed: 2009-07-08      Analyzed By: AR  
Prep Batch: 52186      Sample Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 274          | mg/Kg | 50       | 4.00 |

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**Sample: 201165 - SB-11 (15-16')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61263                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52187                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 3750         | mg/Kg | 50       | 4.00 |

**Sample: 201166 - SB-11 (20-21')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61263                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52187                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1330         | mg/Kg | 50       | 4.00 |

**Sample: 201167 - SB-11 (25-26')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61263                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52187                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 310          | mg/Kg | 50       | 4.00 |

**Sample: 201168 - SB-11 (30-31')**

|             |                      |                     |              |              |     |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| Laboratory: | Midland              | Analytical Method:  | SM 4500-Cl B | Prep Method: | N/A |
| Analysis:   | Chloride (Titration) | Date Analyzed:      | 2009-07-08   | Analyzed By: | AR  |
| QC Batch:   | 61263                | Sample Preparation: | 2009-07-06   | Prepared By: | AR  |
| Prep Batch: | 52187                |                     |              |              |     |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 284          | mg/Kg | 50       | 4.00 |

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**Sample: 201169 - SB-4 (11-12')**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 61263                | Date Analyzed:      | 2009-07-08   |
| Prep Batch: | 52187                | Sample Preparation: | 2009-07-06   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 1790         | mg/Kg | 50       | 4.00 |

**Sample: 201170 - SB-4 (13-14')**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 61263                | Date Analyzed:      | 2009-07-08   |
| Prep Batch: | 52187                | Sample Preparation: | 2009-07-06   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 966          | mg/Kg | 50       | 4.00 |

**Sample: 201171 - SB-4 (15-16')**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 61263                | Date Analyzed:      | 2009-07-08   |
| Prep Batch: | 52187                | Sample Preparation: | 2009-07-06   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 518          | mg/Kg | 50       | 4.00 |

**Sample: 201172 - SB-4 (20-21')**

|             |                      |                     |              |
|-------------|----------------------|---------------------|--------------|
| Laboratory: | Midland              |                     |              |
| Analysis:   | Chloride (Titration) | Analytical Method:  | SM 4500-Cl B |
| QC Batch:   | 61264                | Date Analyzed:      | 2009-07-08   |
| Prep Batch: | 52188                | Sample Preparation: | 2009-07-06   |
|             |                      | Prep Method:        | N/A          |
|             |                      | Analyzed By:        | AR           |
|             |                      | Prepared By:        | AR           |

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 510          | mg/Kg | 50       | 4.00 |

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**Sample: 201173 - SB-4 (25-26')**

Laboratory: Midland  
Analysis: Chloride (Titration)  
QC Batch: 61264  
Prep Batch: 52188

Analytical Method: SM 4500-Cl B  
Date Analyzed: 2009-07-08  
Sample Preparation: 2009-07-06

Prep Method: N/A  
Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | RL<br>Result | Units | Dilution | RL   |
|-----------|------|--------------|-------|----------|------|
| Chloride  |      | 336          | mg/Kg | 50       | 4.00 |

**Method Blank (1)      QC Batch: 61200**

QC Batch: 61200  
Prep Batch: 52178

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

**Method Blank (1)      QC Batch: 61201**

QC Batch: 61201  
Prep Batch: 52179

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

**Method Blank (1)      QC Batch: 61202**

QC Batch: 61202  
Prep Batch: 52180

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

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Method Blank (1) QC Batch: 61203

QC Batch: 61203 Date Analyzed: 2009-07-07 Analyzed By: AR  
Prep Batch: 52181 QC Preparation: 2009-07-06 Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

Method Blank (1) QC Batch: 61205

QC Batch: 61205 Date Analyzed: 2009-07-07 Analyzed By: AR  
Prep Batch: 52182 QC Preparation: 2009-07-06 Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

Method Blank (1) QC Batch: 61231

QC Batch: 61231 Date Analyzed: 2009-07-07 Analyzed By: AG  
Prep Batch: 52221 QC Preparation: 2009-07-07 Prepared By: AG

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| DRO       |      | <5.86         | mg/Kg | 50 |

| Surrogate     | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|---------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| n-Triacontane |      | 110    | mg/Kg | 1        | 100             | 110                 | 13 - 178.5         |

Method Blank (1) QC Batch: 61243

QC Batch: 61243 Date Analyzed: 2009-07-07 Analyzed By: ME  
Prep Batch: 52230 QC Preparation: 2009-07-07 Prepared By: ME

| Parameter    | Flag | MDL<br>Result | Units | RL   |
|--------------|------|---------------|-------|------|
| Benzene      |      | <0.00100      | mg/Kg | 0.01 |
| Toluene      |      | <0.00100      | mg/Kg | 0.01 |
| Ethylbenzene |      | <0.00110      | mg/Kg | 0.01 |

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method blank continued ...

| Parameter | Flag | MDL<br>Result | Units | RL   |
|-----------|------|---------------|-------|------|
| Xylene    |      | <0.00360      | mg/Kg | 0.01 |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 1.95   | mg/Kg | 1        | 2.00            | 98                  | 65.6 - 130.6       |
| 4-Bromofluorobenzene (4-BFB) |      | 1.62   | mg/Kg | 1        | 2.00            | 81                  | 51.9 - 128.1       |

Method Blank (1) QC Batch: 61244

QC Batch: 61244  
Prep Batch: 52230

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-07

Analyzed By: ME  
Prepared By: ME

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| GRO       |      | <0.482        | mg/Kg | 1  |

| Surrogate                    | Flag | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      | 1.82   | mg/Kg | 1        | 2.00            | 91                  | 71.9 - 115         |
| 4-Bromofluorobenzene (4-BFB) |      | 1.51   | mg/Kg | 1        | 2.00            | 76                  | 45.7 - 118.9       |

Method Blank (1) QC Batch: 61259

QC Batch: 61259  
Prep Batch: 52183

Date Analyzed: 2009-07-08  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

Method Blank (1) QC Batch: 61260

QC Batch: 61260  
Prep Batch: 52184

Date Analyzed: 2009-07-08  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

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**Method Blank (1)      QC Batch: 61261**

QC Batch: 61261      Date Analyzed: 2009-07-08      Analyzed By: AR  
Prep Batch: 52185      QC Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

**Method Blank (1)      QC Batch: 61262**

QC Batch: 61262      Date Analyzed: 2009-07-08      Analyzed By: AR  
Prep Batch: 52186      QC Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

**Method Blank (1)      QC Batch: 61263**

QC Batch: 61263      Date Analyzed: 2009-07-08      Analyzed By: AR  
Prep Batch: 52187      QC Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

**Method Blank (1)      QC Batch: 61264**

QC Batch: 61264      Date Analyzed: 2009-07-08      Analyzed By: AR  
Prep Batch: 52188      QC Preparation: 2009-07-06      Prepared By: AR

| Parameter | Flag | MDL<br>Result | Units | RL |
|-----------|------|---------------|-------|----|
| Chloride  |      | <2.18         | mg/Kg | 4  |

**Laboratory Control Spike (LCS-1)**

QC Batch: 61200      Date Analyzed: 2009-07-07      Analyzed By: AR  
Prep Batch: 52178      QC Preparation: 2009-07-06      Prepared By: AR

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| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 99.1          | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 99.9           | mg/Kg | 1    | 100             | <2.18            | 100  | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 61201  
Prep Batch: 52179

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 99.2          | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 101            | mg/Kg | 1    | 100             | <2.18            | 101  | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 61202  
Prep Batch: 52180

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 99.1          | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 100            | mg/Kg | 1    | 100             | <2.18            | 100  | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 61203  
Prep Batch: 52181

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

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| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 98.8          | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 100            | mg/Kg | 1    | 100             | <2.18            | 100  | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 61205  
Prep Batch: 52182

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 98.0          | mg/Kg | 1    | 100             | <2.18            | 98   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 99.4           | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 61231  
Prep Batch: 52221

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-07

Analyzed By: AG  
Prepared By: AG

| Param | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|
| DRO   | 243           | mg/Kg | 1    | 250             | <5.86            | 97   | 57.4 - 133.4  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| DRO   | 258            | mg/Kg | 1    | 250             | <5.86            | 103  | 57.4 - 133.4  | 6   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate     | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|---------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| n-Triacontane | 88.1          | 87.4           | mg/Kg | 1    | 100             | 88          | 87           | 48.5 - 146.7  |

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#### Laboratory Control Spike (LCS-1)

QC Batch: 61243  
Prep Batch: 52230

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-07

Analyzed By: ME  
Prepared By: ME

| Param        | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|---------------|-------|------|-----------------|------------------|------|---------------|
| Benzene      | 2.20          | mg/Kg | 1    | 2.00            | <0.00100         | 110  | 72.7 - 129.8  |
| Toluene      | 2.19          | mg/Kg | 1    | 2.00            | <0.00100         | 110  | 71.6 - 129.6  |
| Ethylbenzene | 2.15          | mg/Kg | 1    | 2.00            | <0.00110         | 108  | 70.8 - 129.7  |
| Xylene       | 6.28          | mg/Kg | 1    | 6.00            | <0.00360         | 105  | 70.9 - 129.4  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Benzene      | 2.21           | mg/Kg | 1    | 2.00            | <0.00100         | 110  | 72.7 - 129.8  | 0   | 20           |
| Toluene      | 2.22           | mg/Kg | 1    | 2.00            | <0.00100         | 111  | 71.6 - 129.6  | 1   | 20           |
| Ethylbenzene | 2.21           | mg/Kg | 1    | 2.00            | <0.00110         | 110  | 70.8 - 129.7  | 3   | 20           |
| Xylene       | 6.53           | mg/Kg | 1    | 6.00            | <0.00360         | 109  | 70.9 - 129.4  | 4   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|------------------------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| Trifluorotoluene (TFT)       | 1.96          | 1.96           | mg/Kg | 1    | 2.00            | 98          | 98           | 65.9 - 132    |
| 4-Bromofluorobenzene (4-BFB) | 1.67          | 1.73           | mg/Kg | 1    | 2.00            | 84          | 86           | 55.2 - 128.9  |

#### Laboratory Control Spike (LCS-1)

QC Batch: 61244  
Prep Batch: 52230

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-07

Analyzed By: ME  
Prepared By: ME

| Param | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|
| GRO   | 13.3          | mg/Kg | 1    | 20.0            | <0.482           | 66   | 60.5 - 100.1  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| GRO   | 12.5           | mg/Kg | 1    | 20.0            | <0.482           | 62   | 60.5 - 100.1  | 6   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|------------------------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| Trifluorotoluene (TFT)       | 1.84          | 1.85           | mg/Kg | 1    | 2.00            | 92          | 92           | 78.8 - 104.7  |
| 4-Bromofluorobenzene (4-BFB) | 1.62          | 1.68           | mg/Kg | 1    | 2.00            | 81          | 84           | 66.1 - 108.3  |

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**Laboratory Control Spike (LCS-1)**

QC Batch: 61259  
Prep Batch: 52183

Date Analyzed: 2009-07-08  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 98.6          | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 99.1           | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      | 0   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 61260  
Prep Batch: 52184

Date Analyzed: 2009-07-08  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 101           | mg/Kg | 1    | 100             | <2.18            | 101  | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 99.4           | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 61261  
Prep Batch: 52185

Date Analyzed: 2009-07-08  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 98.4          | mg/Kg | 1    | 100             | <2.18            | 98   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 99.3           | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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#### Laboratory Control Spike (LCS-1)

QC Batch: 61262  
Prep Batch: 52186

Date Analyzed: 2009-07-08  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 98.3          | mg/Kg | 1    | 100             | <2.18            | 98   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 100            | mg/Kg | 1    | 100             | <2.18            | 100  | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 61263  
Prep Batch: 52187

Date Analyzed: 2009-07-08  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 98.7          | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 99.4           | mg/Kg | 1    | 100             | <2.18            | 99   | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 61264  
Prep Batch: 52188

Date Analyzed: 2009-07-08  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Param    | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 100           | mg/Kg | 1    | 100             | <2.18            | 100  | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 101            | mg/Kg | 1    | 100             | <2.18            | 101  | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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**Matrix Spike (MS-1)** Spiked Sample: 201081

QC Batch: 61200 Date Analyzed: 2009-07-07 Analyzed By: AR  
Prep Batch: 52178 QC Preparation: 2009-07-06 Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 6360         | mg/Kg | 50   | 5000            | 1190             | 103  | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 6390          | mg/Kg | 50   | 5000            | 1190             | 104  | 85 - 115      | 0   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 201091

QC Batch: 61201 Date Analyzed: 2009-07-07 Analyzed By: AR  
Prep Batch: 52179 QC Preparation: 2009-07-06 Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 8310         | mg/Kg | 50   | 5000            | 3290             | 100  | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 8350          | mg/Kg | 50   | 5000            | 3290             | 101  | 85 - 115      | 0   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 201101

QC Batch: 61202 Date Analyzed: 2009-07-07 Analyzed By: AR  
Prep Batch: 52180 QC Preparation: 2009-07-06 Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 5060         | mg/Kg | 50   | 5000            | 197              | 97   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 5170          | mg/Kg | 50   | 5000            | 197              | 99   | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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**Matrix Spike (MS-1)** Spiked Sample: 201111

QC Batch: 61203  
Prep Batch: 52181

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 10100        | mg/Kg | 50   | 5000            | 5090             | 100  | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 10200         | mg/Kg | 50   | 5000            | 5090             | 102  | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 201121

QC Batch: 61205  
Prep Batch: 52182

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-06

Analyzed By: AR  
Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 5380         | mg/Kg | 50   | 5000            | 421              | 99   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 5460          | mg/Kg | 50   | 5000            | 421              | 101  | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 201194

QC Batch: 61231  
Prep Batch: 52221

Date Analyzed: 2009-07-07  
QC Preparation: 2009-07-07

Analyzed By: AG  
Prepared By: AG

| Param | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|--------------|-------|------|-----------------|------------------|------|---------------|
| DRO   | 212          | mg/Kg | 1    | 250             | <5.86            | 85   | 35.2 - 167.1  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| DRO   | 210           | mg/Kg | 1    | 250             | <5.86            | 84   | 35.2 - 167.1  | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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| Surrogate     | MS<br>Result | MSD<br>Result | Units | Dil. | Spike<br>Amount | MS<br>Rec. | MSD<br>Rec. | Rec.<br>Limit |
|---------------|--------------|---------------|-------|------|-----------------|------------|-------------|---------------|
| n-Triacontane | 72.8         | 73.1          | mg/Kg | 1    | 100             | 73         | 73          | 34.5 - 178.4  |

Matrix Spike (MS-1) Spiked Sample: 201106

QC Batch: 61243 Date Analyzed: 2009-07-07 Analyzed By: ME  
Prep Batch: 52230 QC Preparation: 2009-07-07 Prepared By: ME

| Param        | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|--------------|-------|------|-----------------|------------------|------|---------------|
| Benzene      | 2.19         | mg/Kg | 1    | 2.00            | <0.00100         | 110  | 58.6 - 165.2  |
| Toluene      | 2.17         | mg/Kg | 1    | 2.00            | <0.00100         | 108  | 64.2 - 153.8  |
| Ethylbenzene | 2.18         | mg/Kg | 1    | 2.00            | <0.00110         | 109  | 61.6 - 159.4  |
| Xylene       | 6.27         | mg/Kg | 1    | 6.00            | <0.00360         | 104  | 64.4 - 155.3  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Benzene      | 2.20          | mg/Kg | 1    | 2.00            | <0.00100         | 110  | 58.6 - 165.2  | 0   | 20           |
| Toluene      | 2.17          | mg/Kg | 1    | 2.00            | <0.00100         | 108  | 64.2 - 153.8  | 0   | 20           |
| Ethylbenzene | 2.21          | mg/Kg | 1    | 2.00            | <0.00110         | 110  | 61.6 - 159.4  | 1   | 20           |
| Xylene       | 6.43          | mg/Kg | 1    | 6.00            | <0.00360         | 107  | 64.4 - 155.3  | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | MS<br>Result | MSD<br>Result | Units | Dil. | Spike<br>Amount | MS<br>Rec. | MSD<br>Rec. | Rec.<br>Limit |
|------------------------------|--------------|---------------|-------|------|-----------------|------------|-------------|---------------|
| Trifluorotoluene (TFT)       | 2.02         | 2.02          | mg/Kg | 1    | 2               | 101        | 101         | 76 - 127.9    |
| 4-Bromofluorobenzene (4-BFB) | 1.53         | 1.52          | mg/Kg | 1    | 2               | 76         | 76          | 72 - 127.8    |

Matrix Spike (MS-1) Spiked Sample: 201194

QC Batch: 61244 Date Analyzed: 2009-07-07 Analyzed By: ME  
Prep Batch: 52230 QC Preparation: 2009-07-07 Prepared By: ME

| Param | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|--------------|-------|------|-----------------|------------------|------|---------------|
| GRO   | 18.0         | mg/Kg | 1    | 20.0            | <0.482           | 90   | 12.8 - 175.2  |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| GRO   | 18.2          | mg/Kg | 1    | 20.0            | <0.482           | 91   | 12.8 - 175.2  | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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| Surrogate                    | MS<br>Result | MSD<br>Result | Units | Dil. | Spike<br>Amount | MS<br>Rec. | MSD<br>Rec. | Rec.<br>Limit |
|------------------------------|--------------|---------------|-------|------|-----------------|------------|-------------|---------------|
| Trifluorotoluene (TFT)       | 1.94         | 1.94          | mg/Kg | 1    | 2               | 97         | 97          | 60.8 - 132.1  |
| 4-Bromofluorobenzene (4-BFB) | 1.53         | 1.52          | mg/Kg | 1    | 2               | 76         | 76          | 31.3 - 161.7  |

**Matrix Spike (MS-1)** Spiked Sample: 201131

QC Batch: 61259 Date Analyzed: 2009-07-08 Analyzed By: AR  
Prep Batch: 52183 QC Preparation: 2009-07-06 Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 5260         | mg/Kg | 50   | 5000            | 309              | 99   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 5310          | mg/Kg | 50   | 5000            | 309              | 100  | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 201141

QC Batch: 61260 Date Analyzed: 2009-07-08 Analyzed By: AR  
Prep Batch: 52184 QC Preparation: 2009-07-06 Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 5160         | mg/Kg | 50   | 5000            | 310              | 97   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 5220          | mg/Kg | 50   | 5000            | 310              | 98   | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 201151

QC Batch: 61261 Date Analyzed: 2009-07-08 Analyzed By: AR  
Prep Batch: 52185 QC Preparation: 2009-07-06 Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 5370         | mg/Kg | 50   | 5000            | 527              | 97   | 85 - 115      |

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Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 5450          | mg/Kg | 50   | 5000            | 527              | 98   | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 201161

QC Batch: 61262 Date Analyzed: 2009-07-08 Analyzed By: AR  
Prep Batch: 52186 QC Preparation: 2009-07-06 Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 8730         | mg/Kg | 50   | 5000            | 3820             | 98   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 8790          | mg/Kg | 50   | 5000            | 3820             | 99   | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 201171

QC Batch: 61263 Date Analyzed: 2009-07-08 Analyzed By: AR  
Prep Batch: 52187 QC Preparation: 2009-07-06 Prepared By: AR

| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 5360         | mg/Kg | 50   | 5000            | 518              | 97   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 5460          | mg/Kg | 50   | 5000            | 518              | 99   | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 201194

QC Batch: 61264 Date Analyzed: 2009-07-08 Analyzed By: AR  
Prep Batch: 52188 QC Preparation: 2009-07-06 Prepared By: AR

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| Param    | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride | 5040         | mg/Kg | 50   | 5000            | 229              | 96   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride | 5140          | mg/Kg | 50   | 5000            | 229              | 98   | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Standard (ICV-1)

QC Batch: 61200

Date Analyzed: 2009-07-07

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 102                    | 102                         | 85 - 115                      | 2009-07-07       |

#### Standard (CCV-1)

QC Batch: 61200

Date Analyzed: 2009-07-07

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 98.4                   | 98                          | 85 - 115                      | 2009-07-07       |

#### Standard (ICV-1)

QC Batch: 61201

Date Analyzed: 2009-07-07

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 97.4                   | 97                          | 85 - 115                      | 2009-07-07       |

#### Standard (CCV-1)

QC Batch: 61201

Date Analyzed: 2009-07-07

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 103                    | 103                         | 85 - 115                      | 2009-07-07       |

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**Standard (ICV-1)**

QC Batch: 61202

Date Analyzed: 2009-07-07

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 103                    | 103                         | 85 - 115                      | 2009-07-07       |

**Standard (CCV-1)**

QC Batch: 61202

Date Analyzed: 2009-07-07

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 96.8                   | 97                          | 85 - 115                      | 2009-07-07       |

**Standard (ICV-1)**

QC Batch: 61203

Date Analyzed: 2009-07-07

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 98.0                   | 98                          | 85 - 115                      | 2009-07-07       |

**Standard (CCV-1)**

QC Batch: 61203

Date Analyzed: 2009-07-07

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 102                    | 102                         | 85 - 115                      | 2009-07-07       |

**Standard (ICV-1)**

QC Batch: 61205

Date Analyzed: 2009-07-07

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 100                    | 100                         | 85 - 115                      | 2009-07-07       |

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**Standard (CCV-1)**

QC Batch: 61205

Date Analyzed: 2009-07-07

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 99.8                   | 100                         | 85 - 115                      | 2009-07-07       |

**Standard (CCV-1)**

QC Batch: 61231

Date Analyzed: 2009-07-07

Analyzed By: AG

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| DRO   |      | mg/Kg | 250                   | 251                    | 100                         | 80 - 120                      | 2009-07-07       |

**Standard (CCV-2)**

QC Batch: 61231

Date Analyzed: 2009-07-07

Analyzed By: AG

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| DRO   |      | mg/Kg | 250                   | 222                    | 89                          | 80 - 120                      | 2009-07-07       |

**Standard (CCV-1)**

QC Batch: 61243

Date Analyzed: 2009-07-07

Analyzed By: ME

| Param        | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | mg/Kg | 0.100                 | 0.114                  | 114                         | 80 - 120                      | 2009-07-07       |
| Toluene      |      | mg/Kg | 0.100                 | 0.114                  | 114                         | 80 - 120                      | 2009-07-07       |
| Ethylbenzene |      | mg/Kg | 0.100                 | 0.115                  | 115                         | 80 - 120                      | 2009-07-07       |
| Xylene       |      | mg/Kg | 0.300                 | 0.343                  | 114                         | 80 - 120                      | 2009-07-07       |

**Standard (CCV-2)**

QC Batch: 61243

Date Analyzed: 2009-07-07

Analyzed By: ME

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| Param        | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | mg/Kg | 0.100                 | 0.110                  | 110                         | 80 - 120                      | 2009-07-07       |
| Toluene      |      | mg/Kg | 0.100                 | 0.110                  | 110                         | 80 - 120                      | 2009-07-07       |
| Ethylbenzene |      | mg/Kg | 0.100                 | 0.107                  | 107                         | 80 - 120                      | 2009-07-07       |
| Xylene       |      | mg/Kg | 0.300                 | 0.316                  | 105                         | 80 - 120                      | 2009-07-07       |

**Standard (CCV-1)**

QC Batch: 61244

Date Analyzed: 2009-07-07

Analyzed By: ME

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| GRO   |      | mg/Kg | 1.00                  | 0.854                  | 85                          | 80 - 120                      | 2009-07-07       |

**Standard (CCV-2)**

QC Batch: 61244

Date Analyzed: 2009-07-07

Analyzed By: ME

| Param | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| GRO   |      | mg/Kg | 1.00                  | 0.978                  | 98                          | 80 - 120                      | 2009-07-07       |

**Standard (ICV-1)**

QC Batch: 61259

Date Analyzed: 2009-07-08

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 100                    | 100                         | 85 - 115                      | 2009-07-08       |

**Standard (CCV-1)**

QC Batch: 61259

Date Analyzed: 2009-07-08

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 100                    | 100                         | 85 - 115                      | 2009-07-08       |

Report Date: July 8, 2009  
114-6400210

Work Order: 9070243  
RJU Unit #119

Page Number: 52 of 52

**Standard (CCV-1)**

QC Batch: 61262

Date Analyzed: 2009-07-08

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 101                    | 101                         | 85 - 115                      | 2009-07-08       |

**Standard (ICV-1)**

QC Batch: 61263

Date Analyzed: 2009-07-08

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 100                    | 100                         | 85 - 115                      | 2009-07-08       |

**Standard (CCV-1)**

QC Batch: 61263

Date Analyzed: 2009-07-08

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 99.7                   | 100                         | 85 - 115                      | 2009-07-08       |

**Standard (ICV-1)**

QC Batch: 61264

Date Analyzed: 2009-07-08

Analyzed By: AR

| Param    | Flag | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 102                    | 102                         | 85 - 115                      | 2009-07-08       |

**Standard (CCV-1)**

QC Batch: 61264

Date Analyzed: 2009-07-08

Analyzed By: AR

| Param    | Flag | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | mg/Kg | 100                   | 98.0                   | 98                          | 85 - 115                      | 2009-07-08       |

# Analysis Request of Chain of Custody Record



**TETRA TECH**

1910 N. Big Spring St.  
Midland, Texas 79705  
(432) 682-4559 • Fax (432) 682-3946

PAGE: 1

OF: 10

ANALYSIS REQUEST  
(Circle or Specify Method No.)

CLIENT NAME:

COG

SITE MANAGER:

IK Tavares

PROJECT NO.:

114-6400210

PROJECT NAME:

RJO Unit # 119

| LAB I.D. NUMBER | DATE     | TIME | MATRIX | COMP. | GRAB | SAMPLE IDENTIFICATION. | NUMBER OF | FILTERED ( | HCL | HNO3 | ICE | NONE | BTEX 8021B | TPH 8015 | PAH 8270 | RCRA Metals | TCLP Metals | TCLP Volatili | TCLP Semi | RCI | GC-MS Vol. | GC-MS Sem | PCB's 8080 | Pest. 808/6 | Chloride | Gamma Spe | Alpha Beta | PLM (Asbes | Major Anion |  |  |  |  |
|-----------------|----------|------|--------|-------|------|------------------------|-----------|------------|-----|------|-----|------|------------|----------|----------|-------------|-------------|---------------|-----------|-----|------------|-----------|------------|-------------|----------|-----------|------------|------------|-------------|--|--|--|--|
| 201081          | 06/30/09 |      | S      |       | ✓    | SB-1 (5-6')            | 1         |            |     |      | ✓   | ✓    |            |          |          |             |             |               |           |     |            |           |            |             | ✓        |           |            |            |             |  |  |  |  |
| 082             | 06/30/09 |      | S      |       | ✓    | SB-1 (8-9')            | 1         |            |     |      | ✓   | ✓    |            |          |          |             |             |               |           |     |            |           |            |             | ✓        |           |            |            |             |  |  |  |  |
| 083             | 06/30/09 |      | S      |       | ✓    | SB-1 (11-12')          | 1         |            |     |      | ✓   | ✓    |            |          |          |             |             |               |           |     |            |           |            |             | ✓        |           |            |            |             |  |  |  |  |
| 084             | 06/30/09 |      | S      |       | ✓    | SB-1 (13-14')          | 1         |            |     |      | ✓   | ✓    |            |          |          |             |             |               |           |     |            |           |            |             | ✓        |           |            |            |             |  |  |  |  |
| 085             | 06/30/09 |      | S      |       | ✓    | SB-1 (15-16')          | 1         |            |     |      | ✓   | ✓    |            |          |          |             |             |               |           |     |            |           |            |             | ✓        |           |            |            |             |  |  |  |  |
| 086             | 06/30/09 |      | S      |       | ✓    | SB-1 (20-21')          | 1         |            |     |      | ✓   | ✓    |            |          |          |             |             |               |           |     |            |           |            |             | ✓        |           |            |            |             |  |  |  |  |
| 087             | 06/30/09 |      | S      |       | ✓    | SB-1 (25-26')          | 1         |            |     |      | ✓   | ✓    |            |          |          |             |             |               |           |     |            |           |            |             | ✓        |           |            |            |             |  |  |  |  |
| 088             | 06/30/09 |      | S      |       | ✓    | SB-1 (30-31')          | 1         |            |     |      | ✓   | ✓    |            |          |          |             |             |               |           |     |            |           |            |             | ✓        |           |            |            |             |  |  |  |  |
| 089             | 06/30/09 |      | S      |       | ✓    | SB-1 (35-36')          | 1         |            |     |      | ✓   | ✓    |            |          |          |             |             |               |           |     |            |           |            |             | ✓        |           |            |            |             |  |  |  |  |
| 090             | 06/30/09 |      | S      |       | ✓    | SB-2 (5-6')            | 1         |            |     |      | ✓   | ✓    |            |          |          |             |             |               |           |     |            |           |            |             | ✓        |           |            |            |             |  |  |  |  |

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Date:

Time:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE/SHIPPED BY: (Circle)

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

FEDEX

BUS

OTHER:

HAND DELIVERED

UPS

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

ADDRESS:

CITY:

STATE:

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

TIME:

IK Tavares

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

REMARKS:

15.9 °C

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

# Analysis Request of Chain of Custody Record



**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

Order #4010293

PAGE: 2

OF: 10

ANALYSIS REQUEST  
(Circle or Specify Method No.)

| CLIENT NAME:<br><b>COG</b>         |          |      |        | SITE MANAGER:<br><b>IK TAVANEZ</b>     |      |                       |                      | NUMBER OF CONTAINERS |     | PRESERVATIVE METHOD |     | BTEX 8021B<br>TPH 8015 MOD. TX1005 (Ext. to C35)<br>PAH 8270<br>RCRA Metals Ag As Ba Cd Cr Pb Hg Se<br>TCLP Metals Ag As Ba Cd Vr Pd Hg Se<br>TCLP Volatiles<br>TCLP Semi Volatiles<br>RCI<br>GC-MS Vol. 8240/8260/624<br>GC-MS Semi. Vol. 8270/625<br>PCB's 8080/608<br>Pest. 808/608<br>Chloride<br>Gamma Spec.<br>Alpha Beta (Air)<br>PLM (Asbestos)<br>Major Anions/Cations, pH, TDS |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------------|----------|------|--------|----------------------------------------|------|-----------------------|----------------------|----------------------|-----|---------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| PROJECT NO.:<br><b>114-6400210</b> |          |      |        | PROJECT NAME:<br><b>RJU Unit # 119</b> |      |                       |                      | FILTERED (Y/N)       |     |                     |     |                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |  |  |
| LAB I.D. NUMBER                    | DATE     | TIME | MATRIX | COMP                                   | GRAB | SAMPLE IDENTIFICATION | NUMBER OF CONTAINERS | FILTERED (Y/N)       | HCL | HNO3                | ICE | NONE                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |
| 201091                             | 06/30/09 |      | S      |                                        | ✓    | SB-2 (8-9')           | 1                    |                      |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |
| 092                                | 06/30/09 |      | S      |                                        | ✓    | SB-2 (11-12')         | 1                    |                      |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |
| 093                                | 06/30/09 |      | S      |                                        | ✓    | SB-2 (13-14')         | 1                    |                      |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |
| 094                                | 06/30/09 |      | S      |                                        | ✓    | SB-2 (15-16')         | 1                    |                      |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |
| 095                                | 06/30/09 |      | S      |                                        | ✓    | SB-3 (5-6')           | 1                    |                      |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |
| 096                                | 06/30/09 |      | S      |                                        | ✓    | SB-3 (8-9')           | 1                    |                      |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |
| 097                                | 06/30/09 |      | S      |                                        | ✓    | SB-3 (11-12')         | 1                    |                      |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |
| 098                                | 06/30/09 |      | S      |                                        | ✓    | SB-3 (13-14')         | 1                    |                      |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |
| 099                                | 06/30/09 |      | S      |                                        | ✓    | SB-3 (15-16')         | 1                    |                      |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |
| 100                                | 06/30/09 |      | S      |                                        | ✓    | SB-3 (20-21')         | 1                    |                      |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |

|                                                    |                                          |                                                |                            |                                                                                                                                                                                                           |                                                   |
|----------------------------------------------------|------------------------------------------|------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| RELINQUISHED BY: (Signature)<br><i>[Signature]</i> | Date: <b>7/2/09</b><br>Time: <b>1410</b> | RECEIVED BY: (Signature)<br><i>[Signature]</i> | Date: _____<br>Time: _____ | SAMPLED BY: (Print & Initial)<br><b>Jeffery Kindley JWK</b>                                                                                                                                               | Date: <b>07/02/09</b><br>Time: _____              |
| RELINQUISHED BY: (Signature)                       | Date: _____<br>Time: _____               | RECEIVED BY: (Signature)                       | Date: _____<br>Time: _____ | SAMPLE SHIPPED BY: (Circle)<br><b>FEDEX</b> <input type="checkbox"/> <b>BUS</b> <input type="checkbox"/><br><b>HAND DELIVERED</b> <input checked="" type="checkbox"/> <b>UPS</b> <input type="checkbox"/> | AIRBILL #: _____<br>OTHER: _____                  |
| RELINQUISHED BY: (Signature)                       | Date: _____<br>Time: _____               | RECEIVED BY: (Signature)                       | Date: _____<br>Time: _____ | TETRA TECH CONTACT PERSON:<br><b>IK TAVANEZ</b>                                                                                                                                                           | Results by:<br>RUSH Charges Authorized:<br>Yes No |

|                                                     |                                                |
|-----------------------------------------------------|------------------------------------------------|
| RECEIVING LABORATORY: <b>Tetra Analysis, Inc.</b>   | RECEIVED BY: (Signature)<br><i>[Signature]</i> |
| ADDRESS: <b>Midland</b> STATE: <b>TX</b> ZIP: _____ | DATE: <b>7/2/09</b> TIME: <b>1410</b>          |
| CONTACT: _____ PHONE: _____                         |                                                |
| SAMPLE CONDITION WHEN RECEIVED:<br><b>15.9°C</b>    | REMARKS:                                       |



Order # 41010293

# Analysis Request of Chain of Custody Record

PAGE: 4 OF: 10



**TETRA TECH**

1910 N. Big Spring St.  
Midland, Texas 79705  
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST  
(Circle or Specify Method No.)

| CLIENT NAME:<br><b>COG</b>          |          |                                        |        | SITE MANAGER:<br><b>Ike Tavaray</b> |      |                       |      | NUMBER OF CONTAINERS<br>FILTERED (Y/N) | PRESERVATIVE METHOD |      |   |  | BTX 8021B | TPH 8015 MOD. TX1005 (Ext. to C35) | PAH 8270 | RCRA Metals Ag As Ba Cd Cr Pb Hg Se | TCLP Metals Ag As Ba Cd Cr Pb Hg Se | TCLP Volatiles | TCLP Semi Volatiles | RCI | GC/MS Vol. 8240/8260/824 | GC/MS Semi. Vol. 8270/825 | PCB's 8080/608 | Pest. 808/608 | Chloride | Gamma Spec. | Alpha Beta (Air) | PLM (Asbestos) | Major Anions/Cations, pH, TDS |  |  |
|-------------------------------------|----------|----------------------------------------|--------|-------------------------------------|------|-----------------------|------|----------------------------------------|---------------------|------|---|--|-----------|------------------------------------|----------|-------------------------------------|-------------------------------------|----------------|---------------------|-----|--------------------------|---------------------------|----------------|---------------|----------|-------------|------------------|----------------|-------------------------------|--|--|
| PROJECT NO.:<br><b>114-640 0210</b> |          | PROJECT NAME:<br><b>RJO Unit # 119</b> |        |                                     |      | HCL                   | HNO3 |                                        | ICE                 | NONE |   |  |           |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |  |  |
| LAB I.D. NUMBER                     | DATE     | TIME                                   | MATRIX | COMP.                               | GRAB | SAMPLE IDENTIFICATION |      |                                        |                     |      |   |  |           |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |  |  |
| 20111                               | 06/30/09 |                                        | S      | ✓                                   |      | SB-5 (15-16')         | 1    |                                        |                     | ✓    | ✓ |  |           |                                    |          |                                     |                                     |                |                     |     |                          |                           |                | ✓             |          |             |                  |                |                               |  |  |
| 112                                 | 06/30/09 |                                        | S      | ✓                                   |      | SB-5 (20-21')         | 1    |                                        |                     | ✓    | ✓ |  |           |                                    |          |                                     |                                     |                |                     |     |                          |                           | ✓              |               |          |             |                  |                |                               |  |  |
| 113                                 | 06/30/09 |                                        | S      | ✓                                   |      | SB-5 (25-26')         | 1    |                                        |                     | ✓    | ✓ |  |           |                                    |          |                                     |                                     |                |                     |     |                          |                           | ✓              |               |          |             |                  |                |                               |  |  |
| 114                                 | 06/30/09 |                                        | S      | ✓                                   |      | SB-6 (0-1')           | 1    |                                        |                     | ✓    | ✓ |  |           |                                    |          |                                     |                                     |                |                     |     |                          |                           | ✓              |               |          |             |                  |                |                               |  |  |
| 115                                 | 06/30/09 |                                        | S      | ✓                                   |      | SB-6 (2-3')           | 1    |                                        |                     | ✓    | ✓ |  |           |                                    |          |                                     |                                     |                |                     |     |                          |                           | ✓              |               |          |             |                  |                |                               |  |  |
| 116                                 | 06/30/09 |                                        | S      | ✓                                   |      | SB-6 (5-6')           | 1    |                                        |                     | ✓    | ✓ |  |           |                                    |          |                                     |                                     |                |                     |     |                          |                           | ✓              |               |          |             |                  |                |                               |  |  |
| 117                                 | 06/30/09 |                                        | S      | ✓                                   |      | SB-6 (8-9')           | 1    |                                        |                     | ✓    | ✓ |  |           |                                    |          |                                     |                                     |                |                     |     |                          |                           | ✓              |               |          |             |                  |                |                               |  |  |
| 118                                 | 06/30/09 |                                        | S      | ✓                                   |      | SB-6 (11-12')         | 1    |                                        |                     | ✓    | ✓ |  |           |                                    |          |                                     |                                     |                |                     |     |                          |                           | ✓              |               |          |             |                  |                |                               |  |  |
| 119                                 | 06/30/09 |                                        | S      | ✓                                   |      | SB-6 (13-14')         | 1    |                                        |                     | ✓    | ✓ |  |           |                                    |          |                                     |                                     |                |                     |     |                          |                           | ✓              |               |          |             |                  |                |                               |  |  |
| 120                                 | 06/30/09 |                                        | S      | ✓                                   |      | SB-6 (15-16')         | 1    |                                        |                     | ✓    | ✓ |  |           |                                    |          |                                     |                                     |                |                     |     |                          |                           | ✓              |               |          |             |                  |                |                               |  |  |

|                                                     |                                          |                                                |                            |                                                                                                                                                                                                        |                                      |
|-----------------------------------------------------|------------------------------------------|------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| RELINQUISHED BY: (Signature)<br><i>[Signature]</i>  | Date: <b>7/2/09</b><br>Time: <b>1410</b> | RECEIVED BY: (Signature)<br><i>[Signature]</i> | Date: _____<br>Time: _____ | SAMPLED BY: (Print & Initial)<br><b>I. K. Tavaray JWK</b>                                                                                                                                              | Date: <b>07/02/09</b><br>Time: _____ |
| RELINQUISHED BY: (Signature)                        | Date: _____<br>Time: _____               | RECEIVED BY: (Signature)                       | Date: _____<br>Time: _____ | SAMPLE SHIPPED BY: (Circle)<br><b>FEDEX</b> <input type="checkbox"/> <b>BUS</b> <input type="checkbox"/> <b>HAND DELIVERED</b> <input checked="" type="checkbox"/> <b>UPS</b> <input type="checkbox"/> | AIRBILL #: _____<br>OTHER: _____     |
| RELINQUISHED BY: (Signature)                        | Date: _____<br>Time: _____               | RECEIVED BY: (Signature)                       | Date: _____<br>Time: _____ | TETRA TECH CONTACT PERSON:<br><b>IK Tavaray</b>                                                                                                                                                        |                                      |
| RECEIVING LABORATORY: <b>Trace Analysis</b>         |                                          | RECEIVED BY: (Signature)<br><i>[Signature]</i> |                            | Results by:                                                                                                                                                                                            |                                      |
| ADDRESS: <b>Midland</b> STATE: <b>TX</b> ZIP: _____ |                                          | DATE: <b>7/2/09</b> TIME: <b>1410</b>          |                            | RUSH Charges Authorized:<br>Yes No                                                                                                                                                                     |                                      |
| CONTACT: _____ PHONE: _____                         |                                          |                                                |                            |                                                                                                                                                                                                        |                                      |

|                                                   |          |
|---------------------------------------------------|----------|
| SAMPLE CONDITION WHEN RECEIVED:<br><b>15.9 °C</b> | REMARKS: |
|---------------------------------------------------|----------|

# Analysis Request of Chain of Custody Record



**TETRA TECH**

1910 N. Big Spring St.  
Midland, Texas 79705  
(432) 682-4559 • Fax (432) 682-3946

PAGE: 5 OF: 10

ANALYSIS REQUEST  
(Circle or Specify Method No.)

CLIENT NAME:  
**COG**

SITE MANAGER:  
**IK Tavaraz**

PROJECT NO.:  
**114-640021D**

PROJECT NAME:  
**RJU Unit #119**

| LAB I.D.<br>NUMBER | DATE     | TIME | MATRIX | COMP | GRAB | SAMPLE IDENTIFICATION | NUMBER OF CONTAINERS<br>FILTERED (Y/N) | PRESERVATIVE METHOD |      |     |      | BTEX 8021B | TPH 8015 MOD. TX1005 (Ext. to C35) | PAH 8270 | RCRA Metals Ag As Ba Cd Cr Pb Hg Se | TCLP Metals Ag As Ba Cd Vr Pd Hg Se | TCLP Volatiles | TCLP Semi Volatiles | RCI | GC/MS Vol. 8240/8260/624 | GC/MS Semi. Vol. 8270/625 | PCB's 8080/608 | Pest. 808/608 | Chloride | Gamma Spec. | Alpha Beta (Air) | PLM (Asbestos) | Major Anions/Cations, pH, TDS |
|--------------------|----------|------|--------|------|------|-----------------------|----------------------------------------|---------------------|------|-----|------|------------|------------------------------------|----------|-------------------------------------|-------------------------------------|----------------|---------------------|-----|--------------------------|---------------------------|----------------|---------------|----------|-------------|------------------|----------------|-------------------------------|
|                    |          |      |        |      |      |                       |                                        | HCL                 | HNO3 | ICE | NONE |            |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |
| 201121             | 06/30/09 |      | S      | ✓    |      | SB-6 (20-21')         | 1                                      |                     |      | ✓   | ✓    |            |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               | ✓        |             |                  |                |                               |
| 122                | 06/30/09 |      | S      | ✓    |      | SB-6 (25-26')         | 1                                      |                     |      | ✓   | ✓    |            |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               | ✓        |             |                  |                |                               |
| 123                | 06/30/09 |      | S      | ✓    |      | SB-6 (30-31')         | 1                                      |                     |      | ✓   | ✓    |            |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               | ✓        |             |                  |                |                               |
| 124                | 07/01/09 |      | S      | ✓    |      | SB-7 (5-6')           | 1                                      |                     |      | ✓   | ✓    |            |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               | ✓        |             |                  |                |                               |
| 125                | 07/01/09 |      | S      | ✓    |      | SB-7 (8-9')           | 1                                      |                     |      | ✓   | ✓    |            |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               | ✓        |             |                  |                |                               |
| 126                | 07/01/09 |      | S      | ✓    |      | SB-7 (11-12')         | 1                                      |                     |      | ✓   | ✓    |            |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               | ✓        |             |                  |                |                               |
| 127                | 07/01/09 |      | S      | ✓    |      | SB-7 (13-14')         | 1                                      |                     |      | ✓   | ✓    |            |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               | ✓        |             |                  |                |                               |
| 128                | 07/01/09 |      | S      | ✓    |      | SB-7 (15-16')         | 1                                      |                     |      | ✓   | ✓    |            |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               | ✓        |             |                  |                |                               |
| 129                | 07/01/09 |      | S      | ✓    |      | SB-7 (20-21')         | 1                                      |                     |      | ✓   | ✓    |            |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               | ✓        |             |                  |                |                               |
| 130                | 07/01/09 |      | S      | ✓    |      | SB-7 (25-26')         | 1                                      |                     |      | ✓   | ✓    |            |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               | ✓        |             |                  |                |                               |

RELINQUISHED BY: (Signature) *[Signature]* Date: **7/2/09** Time: **1410**

RECEIVED BY: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

SAMPLED BY: (Print & Initial) **Justin Kinley JWK** Date: **07/02/09** Time: \_\_\_\_\_

RELINQUISHED BY: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

RECEIVED BY: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

SAMPLE SHIPPED BY: (Circle) **FEDEX** **HAND DELIVERED** BUS UPS AIRBILL #: \_\_\_\_\_ OTHER: \_\_\_\_\_

RELINQUISHED BY: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

RECEIVED BY: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

TETRA TECH CONTACT PERSON: \_\_\_\_\_ Results by: \_\_\_\_\_

RECEIVING LABORATORY: **Tetra Analytic**  
ADDRESS: \_\_\_\_\_  
CITY: **Midland** STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
CONTACT: \_\_\_\_\_ PHONE: \_\_\_\_\_

RECEIVED BY: (Signature) *[Signature]* DATE: **7/2/09** TIME: **1410**

RUSH Charges Authorized: Yes ☐ No ☐

SAMPLE CONDITION WHEN RECEIVED: **15.9°C**

REMARKS:

# Analysis Request of Chain of Custody Record



**TETRA TECH**

1910 N. Big Spring St.  
Midland, Texas 79705  
(432) 682-4559 • Fax (432) 682-3946

PAGE: 6

OF: 10

ANALYSIS REQUEST  
(Circle or Specify Method No.)

CLIENT NAME:

COG

SITE MANAGER:

IK Tavaraz

PROJECT NO.:

114-6400210

PROJECT NAME:

R70 Unit # 119

| LAB I.D.<br>NUMBER | DATE     | TIME | MATRIX | COMP. | GRAB | SAMPLE IDENTIFICATION | NUMBER OF<br>FILTERED (Y/N) | HCL | HNO3 | ICE | NONE | BTEX 8021B | TPH 8015 | PAH 8270 | RCRA Metals | TCLP Metals | TCLP Volatiles | TCLP Semi | RCI | GC/MS Vol. | GC/MS Semi | PCB's 8080/608 | Pest. 808/608 | Chloride | Gamma Spec. | Alpha Beta | PLM (Asbest) | Major Anion |  |  |  |  |
|--------------------|----------|------|--------|-------|------|-----------------------|-----------------------------|-----|------|-----|------|------------|----------|----------|-------------|-------------|----------------|-----------|-----|------------|------------|----------------|---------------|----------|-------------|------------|--------------|-------------|--|--|--|--|
| 201131             | 07/01/09 |      | S      |       | ✓    | SB-7 (30-31')         | 1                           |     |      | ✓   | ✓    |            |          |          |             |             |                |           |     |            |            |                |               | ✓        |             |            |              |             |  |  |  |  |
| 132                | 07/01/09 |      | S      |       | ✓    | SB-8 (0-1')           | 1                           |     |      | ✓   | ✓    |            |          |          |             |             |                |           |     |            |            |                |               | ✓        |             |            |              |             |  |  |  |  |
| 133                | 07/01/09 |      | S      |       | ✓    | SB-8 (2-3')           | 1                           |     |      | ✓   | ✓    |            |          |          |             |             |                |           |     |            |            |                |               | ✓        |             |            |              |             |  |  |  |  |
| 134                | 07/01/09 |      | S      |       | ✓    | SB-8 (5-6')           | 1                           |     |      | ✓   | ✓    |            |          |          |             |             |                |           |     |            |            |                |               | ✓        |             |            |              |             |  |  |  |  |
| 135                | 07/01/09 |      | S      |       | ✓    | SB-8 (8-9')           | 1                           |     |      | ✓   | ✓    |            |          |          |             |             |                |           |     |            |            |                |               | ✓        |             |            |              |             |  |  |  |  |
| 136                | 07/01/09 |      | S      |       | ✓    | SB-8 (11-12')         | 1                           |     |      | ✓   | ✓    |            |          |          |             |             |                |           |     |            |            |                |               | ✓        |             |            |              |             |  |  |  |  |
| 137                | 07/01/09 |      | S      |       | ✓    | SB-8 (13-14')         | 1                           |     |      | ✓   | ✓    |            |          |          |             |             |                |           |     |            |            |                |               | ✓        |             |            |              |             |  |  |  |  |
| 138                | 07/01/09 |      | S      |       | ✓    | SB-8 (15-16')         | 1                           |     |      | ✓   | ✓    |            |          |          |             |             |                |           |     |            |            |                |               | ✓        |             |            |              |             |  |  |  |  |
| 139                | 07/01/09 |      | S      |       | ✓    | SB-8 (20-21')         | 1                           |     |      | ✓   | ✓    |            |          |          |             |             |                |           |     |            |            |                |               | ✓        |             |            |              |             |  |  |  |  |
| 140                | 07/01/09 |      | S      |       | ✓    | SB-8 (25-26')         | 1                           |     |      | ✓   | ✓    |            |          |          |             |             |                |           |     |            |            |                |               | ✓        |             |            |              |             |  |  |  |  |

RELINQUISHED BY: (Signature)

Date: 7/2/09  
Time: 1410

RECEIVED BY: (Signature)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

SAMPLED BY: (Print & Initial)

Jeffrey Kinler JWK

Date: 07/02/09  
Time: \_\_\_\_\_

RELINQUISHED BY: (Signature)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

RECEIVED BY: (Signature)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

SAMPLE SHIPPED BY: (Circle)

FEDEX BUS  
HAND DELIVERED UPS

AIRBILL #: \_\_\_\_\_

OTHER: \_\_\_\_\_

RELINQUISHED BY: (Signature)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

RECEIVED BY: (Signature)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

TETRA TECH CONTACT PERSON:

IK Tavaraz

Results by:

RUSH Charges  
Authorized:  
Yes No

RECEIVING LABORATORY:

ADDRESS: Iron Analysis  
CITY: Midland STATE: TX ZIP: \_\_\_\_\_  
CONTACT: PHONE: \_\_\_\_\_

RECEIVED BY: (Signature)

DATE: 7/2/09 TIME: 1410

SAMPLE CONDITION WHEN RECEIVED:

15.9°C

REMARKS:

# Analysis Request of Chain of Custody Record

PAGE: 7 OF: 10



**TETRA TECH**

1910 N. Big Spring St.  
Midland, Texas 79705  
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST  
(Circle or Specify Method No.)

| CLIENT NAME:<br><b>COG</b>          |          |      |        |      | SITE MANAGER:<br><b>IK Tavares</b>     |                       |                      |                |     | PRESERVATIVE METHOD |     | BTEX 8021B<br>TPH 8015 MOD. TX1005 (ext. to C36)<br>PAH 8270<br>RCRA Metals Ag As Ba Cd Cr Pb Hg Se<br>TCLP Metals Ag As Ba Cd Vt Pd Hg Se<br>TCLP Volatiles<br>TCLP Semi Volatiles<br>RCI<br>GC-MS Vol. 8240/8260/824<br>GC-MS Semi. Vol. 8270/825<br>PCB's 8080/808<br>Pest. 808/608<br>Chloride<br>Gamma Spec.<br>Alpha Beta (Air)<br>PLM (Asbestos)<br>Major Anions/Cations, pH, TDS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------------------|----------|------|--------|------|----------------------------------------|-----------------------|----------------------|----------------|-----|---------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| PROJECT NO.:<br><b>114-640 0210</b> |          |      |        |      | PROJECT NAME:<br><b>RTU Unit # 119</b> |                       |                      |                |     |                     |     |                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| LAB I.D. NUMBER                     | DATE     | TIME | MATRIX | COMP | GRAB                                   | SAMPLE IDENTIFICATION | NUMBER OF CONTAINERS | FILTERED (Y/N) | HCL | HNO3                | ICE | NONE                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 201141                              | 07/01/09 |      | S      | ✓    |                                        | SB-8 (30-31')         | 1                    |                |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 142                                 | 07/01/09 |      | S      | ✓    |                                        | SB-9 (5-6')           | 1                    |                |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 143                                 | 07/01/09 |      | S      | ✓    |                                        | SB-9 (8-9')           | 1                    |                |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 144                                 | 07/01/09 |      | S      | ✓    |                                        | SB-9 (11-12')         | 1                    |                |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145                                 | 07/01/09 |      | S      | ✓    |                                        | SB-9 (13-14')         | 1                    |                |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 146                                 | 07/01/09 |      | S      | ✓    |                                        | SB-9 (15-16')         | 1                    |                |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 147                                 | 07/01/09 |      | S      | ✓    |                                        | SB-9 (20-21')         | 1                    |                |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 148                                 | 07/01/09 |      | S      | ✓    |                                        | SB-9 (25-26')         | 1                    |                |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 149                                 | 07/01/09 |      | S      | ✓    |                                        | SB-9 (30-31')         | 1                    |                |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150                                 | 07/01/09 |      | S      | ✓    |                                        | SB-10 (0-1')          | 1                    |                |     |                     | ✓   | ✓                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|                                                                                                                                                  |                                          |                                                |                            |                                                                                                                                                                                                        |                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| RELINQUISHED BY: (Signature)<br><i>[Signature]</i>                                                                                               | Date: <b>7/2/09</b><br>Time: <b>1410</b> | RECEIVED BY: (Signature)<br><i>[Signature]</i> | Date: _____<br>Time: _____ | SAMPLED BY: (Print & Initial)<br><b>Dan Kelly JWK</b>                                                                                                                                                  | Date: <b>07/02/09</b><br>Time: _____ |
| RELINQUISHED BY: (Signature)                                                                                                                     | Date: _____<br>Time: _____               | RECEIVED BY: (Signature)                       | Date: _____<br>Time: _____ | SAMPLE SHIPPED BY: (Circle)<br><b>FEDEX</b> <input type="checkbox"/> <b>BUS</b> <input type="checkbox"/> <b>HAND DELIVERED</b> <input checked="" type="checkbox"/> <b>UPS</b> <input type="checkbox"/> | AIRBILL #: _____                     |
| RELINQUISHED BY: (Signature)                                                                                                                     | Date: _____<br>Time: _____               | RECEIVED BY: (Signature)                       | Date: _____<br>Time: _____ | TETRA TECH CONTACT PERSON: <b>IK Tavares</b>                                                                                                                                                           |                                      |
| RECEIVING LABORATORY: <b>Phase Analysis</b><br>ADDRESS: _____<br>CITY: <b>Midland</b> STATE: <b>Tx</b> ZIP: _____<br>CONTACT: _____ PHONE: _____ |                                          |                                                |                            | RESULTS by: _____<br>RUSH Charges Authorized: _____<br>Yes No                                                                                                                                          |                                      |
| SAMPLE CONDITION WHEN RECEIVED:<br><b>15.9 °C</b>                                                                                                |                                          | REMARKS:                                       |                            |                                                                                                                                                                                                        |                                      |

# Analysis Request of Chain of Custody Record



**TETRA TECH**

1910 N. Big Spring St.  
Midland, Texas 79705  
(432) 682-4559 • Fax (432) 682-3946

PAGE: 8 OF: 10

ANALYSIS REQUEST  
(Circle or Specify Method No.)

| CLIENT NAME:<br>COG |          |      | SITE MANAGER:<br>JKE Tavaraz |       |      | NUMBER OF CONTAINERS<br>FILTERED (Y/N) | PRESERVATIVE METHOD   |     |      |     | BTEX 8021B | TPH 8015 MOD. TX1005 (Ext. to C35) | PAH 8270 | RCRA Metals Ag As Ba Cd Cr Pb Hg Se | TCLP Metals Ag As Ba Cd Cr Pb Hg Se | TCLP Volatiles | TCLP Semi Volatiles | RCI | GC-MS Vol. 8240/8260/824 | GC-MS Semi. Vol. 8270/825 | PCB's 8080/608 | Pest. 808/608 | Chloride | Gamma Spec. | Alpha Beta (Air) | PLM (Asbestos) | Major Anions/Cations, pH, TDS |      |  |  |
|---------------------|----------|------|------------------------------|-------|------|----------------------------------------|-----------------------|-----|------|-----|------------|------------------------------------|----------|-------------------------------------|-------------------------------------|----------------|---------------------|-----|--------------------------|---------------------------|----------------|---------------|----------|-------------|------------------|----------------|-------------------------------|------|--|--|
| LAB I.D. NUMBER     | DATE     | TIME | MATRIX                       | COMP. | GRAB |                                        | SAMPLE IDENTIFICATION | HCL | HNO3 | ICE |            |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               | NONE |  |  |
| 201151              | 07/01/09 |      | S                            |       | ✓    | SB-10 (2-3')                           | 1                     |     |      | ✓   | ✓          |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |      |  |  |
| 152                 | 07/01/09 |      | S                            |       | ✓    | SB-10 (5-6')                           | 1                     |     |      | ✓   | ✓          |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |      |  |  |
| 153                 | 07/01/09 |      | S                            |       | ✓    | SB-10 (8-9')                           | 1                     |     |      | ✓   | ✓          |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |      |  |  |
| 154                 | 07/01/09 |      | S                            |       | ✓    | SB-10 (11-12')                         | 1                     |     |      | ✓   | ✓          |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |      |  |  |
| 155                 | 07/01/09 |      | S                            |       | ✓    | SB-10 (13-14')                         | 1                     |     |      | ✓   | ✓          |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |      |  |  |
| 156                 | 07/01/09 |      | S                            |       | ✓    | SB-10 (15-16')                         | 1                     |     |      | ✓   | ✓          |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |      |  |  |
| 157                 | 07/01/09 |      | S                            |       | ✓    | SB-10 (20-21')                         | 1                     |     |      | ✓   | ✓          |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |      |  |  |
| 158                 | 07/01/09 |      | S                            |       | ✓    | SB-10 (25-26')                         | 1                     |     |      | ✓   | ✓          |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |      |  |  |
| 159                 | 07/01/09 |      | S                            |       | ✓    | SB-10 (30-31')                         | 1                     |     |      | ✓   | ✓          |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |      |  |  |
| 160                 | 7/1/09   |      | S                            |       | ✓    | SB-10 (35-36')                         | 1                     |     |      | ✓   | ✓          |                                    |          |                                     |                                     |                |                     |     |                          |                           |                |               |          |             |                  |                |                               |      |  |  |

|                                                    |                            |                                                |                            |                                                                                                                                    |                             |
|----------------------------------------------------|----------------------------|------------------------------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| RELINQUISHED BY: (Signature)<br><i>[Signature]</i> | Date: 7/2/09<br>Time: 1:40 | RECEIVED BY: (Signature)<br><i>[Signature]</i> | Date: _____<br>Time: _____ | SAMPLED BY: (Print & Initial)<br>Jeffrey Kinley JWK                                                                                | Date: 7/2/09<br>Time: _____ |
| RELINQUISHED BY: (Signature)                       | Date: _____<br>Time: _____ | RECEIVED BY: (Signature)                       | Date: _____<br>Time: _____ | SAMPLE SHIPPED BY: (Circle)<br>FEDEX <input checked="" type="checkbox"/> BUS <input type="checkbox"/> UPS <input type="checkbox"/> | AIRBILL #: _____            |
| RELINQUISHED BY: (Signature)                       | Date: _____<br>Time: _____ | RECEIVED BY: (Signature)                       | Date: _____<br>Time: _____ | OTHER: _____                                                                                                                       |                             |
| RECEIVING LABORATORY: <i>Tra Analysis</i>          |                            |                                                |                            | TETRA TECH CONTACT PERSON: <i>JKE Tavaraz</i>                                                                                      |                             |
| ADDRESS: <i>Midland</i> STATE: _____ ZIP: _____    |                            |                                                |                            | Results by: _____                                                                                                                  |                             |
| CITY: <i>Midland</i> PHONE: _____                  |                            |                                                |                            | RUSH Charges Authorized: _____                                                                                                     |                             |
| CONTACT: _____ DATE: 7/2/09 TIME: 1:40             |                            |                                                |                            | Yes No                                                                                                                             |                             |

|                                           |          |
|-------------------------------------------|----------|
| SAMPLE CONDITION WHEN RECEIVED:<br>15.9°C | REMARKS: |
|-------------------------------------------|----------|

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.



