AP - 92

ANNUAL MONITORING REPORT

YEAR(S): 2012

PLAINS
ALL AMERICAN

March 15, 2013

Mr. Edward Hansen
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Plains All American – 2012 Annual Monitoring Reports
6 Sites in Lea County, New Mexico

Dear Mr. Hansen:

Plains All American is an operator of crude oil pipelines and terminal facilities in the state of New Mexico. Plains All American actively monitors certain historical release sites exhibiting groundwater impacts, consistent with assessments and work plans developed in consultation with the New Mexico Oil Conservation Division (NMOCD). In accordance with the rules and regulations of the NMOCD, Plains All American hereby submits our Annual Monitoring reports for the following sites:

8-inch Moore to Jal #1	AP-91 (1R-0380)	Section 16, T17S, R37E, Lea County
8-inch Moore to Jal #2	AP-92 (1R-0381)	Section 16, T17S, R37E, Lea County
C.S. Cayler	AP-052	Section 06, T17S, R37E, Lea County
Hobbs Junction Mainline	AP-054	Section 26, T18S, R37E, Lea County
Kimbrough Sweet 8-inch	AP-0029	Section 03, T18S, R37E, Lea County
Lovington Deep 6-inch	AP-037	Section 06, T17S, R36E, Lea County

Talon/LPE (Talon) prepared these documents and has vouched for their accuracy and completeness, and on behalf of Plains All American, I have personally reviewed the documents and interviewed Talon personnel in order to verify the accuracy and completeness of these documents. It is based upon these inquiries and reviews that Plains All American submits the enclosed Annual Monitoring Reports for the above facilities.

If you have any questions or require further information, please contact me at (575) 441-1099.

Sincerely,

Jason Henry
Remediation Coordinator
Plains All American

CC: Geoff Leking, NMOCD, Hobbs, NM

Enclosures

2530 State Hwy. 214 • Denver City, TX 79323 • (575)441-1099

2012 ANNUAL GROUNDWATER MONITORING REPORT

8" MOORE TO JAL #2
LEA COUNTY, NEW MEXICO
SRS #2002 - 10273
NMOCD REF. # AP-92

PLAINS PIPELINE, L.P.
333 CLAY STREET, SUITE 1600
HOUSTON, TEXAS

TALON/LPE PROJECT NO. 700376.045.01

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4/5/13

TALON/LPE F-6502

February 2012

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NMOCD - New Mexico Oil Conservation Division
NMSLO – New Mexico State Land Office

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INTRODUCTION AND OBJECTIVES

1.1 Objectives and Site Background

The 8" Moore to Jal #2 (site) is located approximately 9.2 miles southeast of Lovington, Lea County, New Mexico, on property owned by the State of New Mexico. The site is located within the West Lovington Oil Field at 32° 49' 56.61" N, 103° 15' 08.47" W. There are no residences, groundwater wells, or surface water bodies within a 1,000-foot radius of the site. The initial release occurred from an EOTT Energy Pipeline (EOTT) steel pipeline on October 22, 2002. Subsequently, EOTT changed its name to Link Energy in October 2003, and Plains Marketing, L.P. (Plains) purchased the assets of Link Energy on April 1, 2004. Initial reports estimated that 25 barrels (bbls) of crude oil were released. Approximately 5,794 square feet of surface area was impacted by the release.

On February 5, 2007, Talon/LPE (Talon) was retained by Plains to assume remediation activities at the site. Remediation activities at the site were previously conducted by Environmental Plus, Inc. (EPI).

1.2 Site Geology

The surface deposits in Lea County are composed of Blackwater Draw (Illinoian) sediments, Ogallala sediments and undivided Quaternary alluvium, which is also termed 'cover sands'. The soil in the upper two (2) feet at the site is composed of gravelly loam that consists of 43% sand, 18% clay and 40% silt and also contains abundant eroded gravel to cobble size caliche fragments. Below the top soil is predominately unconsolidated sand to weakly cemented sandstone which has undergone calcification of varying extent.

Below the Blackwater Draw Formation is the Ogallala Formation of Miocene to Pliocene age. The Ogallala Formation was deposited from sediments eroded from the Southern Rockies and consists mostly of eolian sediments, silty to very fine sand or loess. During the middle to late Miocene, the Ogallala was deposited by fluvial mechanism as paleovalley fill composed of gravelly to sandy braided stream deposits that trended west to east across the Southern High Plains. During the late Miocene the west to east drainage was diverted (captured) by the Pecos River. Subsequently, the Pecos River basin has experienced deflation, which facilitated eolian deposition on the Southern High Plains during the Pliocene.

1.3 Previous Environmental Investigations

Currently, there are a total of twenty-one (21) groundwater monitor wells that have been installed in the vicinity of the release (see Figure 1). With New Mexico Oil Conservation Division (NMOCD) approval and landowner concurrence, groundwater monitor well MW-1 was installed in July 2004. Subsequently, groundwater monitor wells MW-2, MW-3, and MW-4 were installed in October 2004, monitor wells MW-6 through MW-13 were installed in November 2007, MW-14 through MW-16 were installed in March of 2010 and MW-17 through MW-21 were installed in August of 2010.

Phase-separated hydrocarbon (PSH) recovery operations have been performed at the site since 2004. Currently, there are four (4) skimmer pumps and two (2) total fluid pumps in operation at the site used to recover phase-separated hydrocarbon (PSH). Table 1, which summarizes historical groundwater and PSH gauging, is provided in Appendix B. In addition, cumulative historical tables are on the attached CD that is an adjunct to this report.

A water transfer system was installed during the year 2011 that is designed to pump recovered groundwater from the site to the Rocky Smith SWD Systems, State 'E' #23 salt water disposal (SWD) (NMOCD # 307219) facility, thereby, eliminating the need to haul water to a disposal facility with a vacuum truck. The system is composed of a 3-inch HDPE line that was installed (slip-lined) into the out of service Moore to Jal 8-inch pipeline from the site through the Moore to Jal #1 site to the C.S. Cayler site, where it is connected to the HDPE line that runs from the Cayler site to the afore referenced SWD. A five (5) HP transfer pump is used to impel the water down the HDPE line.

1.4 Regulatory Framework

Groundwater analytical data collected from this site is evaluated to the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards outlined in the table below.

New Mexico Water Quality Control Commission (NMWQCC) groundwater standards	
Compound	**mg/L**
Benzene	0.010
Toluene	0.750
Ethylbenzene	0.750
Total Xylenes	0.620
PAH (Naphthalene)	0.030
PAH (Benzo[a]-pyrene)	0.007

2.0 SITE ACTIVITIES

The sections that follow summarize groundwater monitoring and PSH recovery activities conducted at the subject site during the year 2012. The primary function of groundwater monitoring activities is to collect depth to fluid measurements and to collect groundwater samples from monitor wells for laboratory analysis. The objective of groundwater monitoring is to evaluate the status of the dissolved-phase and PSH plumes in order to verify the effectiveness of the remediation system as to inhibiting plume migration, reducing the volume of PSH impacting the groundwater and determining if modifications to the remediation system would improve its overall performance and efficiency.

A synopsis of analytical results for the four (4) groundwater monitoring events is located in Table 2, in Appendix B, and annotated in map form on Figures 3a through 3d in Appendix A. Laboratory analytical data reports and chain of custody documentation are included in Appendix C. In addition, the entire annual groundwater monitoring report, including cumulative historical analytical data, are located on the attached CD, which is an adjunct to this report.

2.1 Groundwater Monitoring Activities

A total of four (4) groundwater monitoring events were conducted by Talon during the year 2012. The events occurred on: March 21, June 12, September 26, and December 14. Details of the gauging, purging, and sampling activities are presented below in Section 2.2.

2.2 Groundwater Gauging, Purging, and Sampling Procedures

During each groundwater monitoring event, all monitor wells were measured with an oil/water interface probe to determine static water levels and to determine the thickness of PSH accumulations if present. The data collected from measurements was used to construct groundwater gradient maps and PSH thickness maps. The results of the measured depths to fluids collected during the four (4) events are incorporated in Table 1 – Summary of Historical Fluid Level Measurements.

Subsequent to gauging, all monitor wells were purged using a down-hole pump equipped with vinyl tubing. The pump and tubing were decontaminated with Alconox® detergent and rinsed with distilled water after each use. Recovered purge water and water used in the decontamination process was contained in 55-gallon drums. After the groundwater monitoring event, all retained water was placed in the recovery tank and properly disposed. Approximately 2,083 gallons of purged groundwater and water used for decontamination was generated during the monitoring events of 2012.

Groundwater samples were collected from all monitor wells not impacted with PSH using dedicated disposable polyethylene bailers. Groundwater samples were not collected from wells impacted with PSH. All groundwater samples were contained in laboratory supplied sample vials infused with the appropriate preservative required for the requested analysis. The groundwater samples were maintained on ice, in the custody of Talon personnel, until

they were delivered to TraceAnalysis, Inc. in Midland, Texas for testing. The groundwater samples collected during all four events were quantified for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method SW-846 8021B. In addition, selected groundwater samples were collected for quantification of poly-nuclear aromatic hydrocarbons by EPA Method SW-846 8270C.

2.3 Phase Separated Hydrocarbon Recovery

Prior to October 2008, a mobile recovery trailer with total fluids pumps was mobilized to the site on a weekly basis to recover PSH from monitor wells MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, and MW-9.

On October 7, 2008, a permanent system was installed utilizing two (2) AP-4 pneumatic total fluid pumps in monitor wells MW-1 and MW-7 and four (4) skimmers in monitor wells MW-3, MW-5, MW-6, and MW-9 to recover PSH and to inhibit migration of the PSH plume. The skimmer assembly consists of bladder pumps combined with 24-inch traveling float specific gravity skimmer attachments. The skimmer system and total fluids pumps are powered by a single-phase 230 volt, 7.5 HP two stage reciprocating air compressor. Fluid, recovered by the pumps, is retained in a 6,500-gallon poly tank. The poly tank is equipped with a high level shut off switch to prevent overflow and it is located within a secondary containment compound that is outfitted with a poly-liner. Recovered PSH is periodically removed from the recovery tank with a vacuum truck. Recovered groundwater is transported to an approved NMOCD disposal facility through the water transfer system and removed PSH is re-introduced to the Plains' pipeline system at the Plains operated Lea Station.

Talon personnel performed a minimum of weekly maintenance to the remediation system to ensure efficient operation, to optimize PSH recovery and to minimize down time. The poly tank is gauged weekly to monitor PSH recovery volume. The system has been effective at recovering PSH from the groundwater.

During 2012 the quarterly PSH and groundwater recovery totals are as follows:

- 1st Quarter - 4.0 bbls crude oil and 202 bbls of groundwater
- 2nd Quarter – 6.0 bbls crude oil and 5336 bbls of groundwater
- 3rd Quarter – 6.0 bbls crude oil and 2800 bbls of groundwater
- 4th Quarter – 4.0 bbls of crude oil and 700 bbls of groundwater

During 2012, a total of 20 bbls of crude oil and a total of 9,038 bbls of groundwater were recovered by the PSH recovery system. Approximately 187 bbls of crude oil has been recovered at the subject site since PSH recovery activities were initiated.

2.4 Groundwater Monitoring Results

The sections that follow present the results from the four (4) groundwater monitoring events conducted at the subject site.

2.4.1 Physical Characteristics of the First Water-Bearing Zone

The primary groundwater resource under the Southern High Plains, including the site, is referred to as the Ogallala Aquifer or High Plains Aquifer. The Southern portion of the Ogallala aquifer underlies an area of about 29,000 square miles (mi^2) in western Texas and eastern New Mexico, encompassing all or part of 31 counties in Texas and 6 counties in New Mexico.

The Ogallala Aquifer is generally unconfined and the poteniometric surface generally mirrors the land surface elevation with the regional flow direction is from the northwest to the southeast. The mean regional gradient is 15 feet per mile and the typical groundwater velocity averages seven inches per day. The regional hydraulic conductivity averages 17 gallons per day per square-foot and specific yield averages 16%.

The Ogallala Aquifer has experienced acute depletion from extensive irrigation and urban demand, which have exceeded the average annual recharge rate. Recharge of the Ogallala Aquifer on the Southern High Plains occurs predominately from rainfall runoff that accumulates in ephemeral streams and playa lakes as well as direct recharge in areas that contain permeable soils such as sand hills. Recharge rates vary depending on mechanism, but averages from 0 to 1.6 inches per year.

The composition of Ogallala groundwater is defined as mixed-cation-HCO_3, therefore, Ogallala groundwater is considered hard. Problems with scale have occurred with residential and commercial water systems that use Ogallala groundwater and often treatment strategies are employed to reduce the effects of scale. The typical total dissolved solids of Ogallala groundwater in the Hobbs-Lovington area is generally less than 1,000 mg/L (ppm) in areas not impacted by oil-field brines. The pH of Ogallala water averages 7.3.

2.4.2 Groundwater Gradient and Flow Direction

The depth to fluid measurements was collected during each of the four (4) groundwater monitoring events during the year 2012. The results of the fluid level measurements are summarized in Table 1 - Summary of Historical Fluid Level Measurements in Appendix B.

The collected data was used to construct potentiometric surface maps in order to interpret the groundwater gradient and flow direction. The maps, designated Figures 2a through 2d are presented in Appendix A.

The potentiometric surface maps constructed for each of the four (4) groundwater monitoring events indicate consistently that the groundwater flow direction is to southeast at an approximate gradient of 0.0040 feet/foot or approximately 21 feet per mile. Groundwater levels at the subject site have exhibited a steady decline of an average of 1.29 feet for the year. The declines in groundwater levels appear to be associated with a regional trend of declining groundwater levels for the Ogallala Aquifer.

2.4.3 Phase Separated Hydrocarbon (PSH)

An oil/water interface probe was used to determine the thicknesses of PSH during the four (4) groundwater monitoring events. The following summarizes the status of the PSH thicknesses observed during the four groundwater monitoring events:

- In March 2012, PSH was observed in seven (7) monitor wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-9. PSH thickness ranged from 0.22 feet to 5.41 feet.
- In June 2012, PSH was observed in seven (7) monitor wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-9. PSH thickness ranged from 0.18 feet to 5.87 feet.
- In September 2012, PSH was observed in seven (7) monitor wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-9. PSH thickness ranged from 0.09 feet to 5.98 feet.
- In December 2012, PSH was observed in seven (7) monitor wells MW-1, MW-3 through MW-7, and MW-9. PSH thickness ranged from 0.29 feet to 3.04 feet.

  Note : MW-3 is basically dry but has a trace of PSH in the mud at bottom of well in all four events.

In addition to potentiometric surface maps, isopleth maps were prepared depicting the measured PSH thicknesses and PSH plume geometry. PSH plume delineation and thickness maps are presented in Appendix A as Figures 3a through 3d. Currently, the PSH plume is delineated. PSH recovery operations have been performed at the site since 2004. Currently there are a total of two (2) total fluid pumps and four (4) skimmer pumps in operation at the site. A summary of the historical groundwater and PSH gauging results is provided in Table 1 in Appendix B.

2.4.4 Groundwater Analytical Results

During the first quarter, March 2012 sampling event, groundwater samples were collected from monitor wells MW-2, MW-8, and MW-10 through MW-21. Monitor wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-9 were not sampled due to the presence of PSH.

The following analytical results were observed from laboratory analyses:

- Benzene concentrations ranged from <0.00100 mg/L to 33.2 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-8, MW-13, MW-15, MW-16, and MW-19.
- Toluene concentrations ranged from <0.00100 mg/L to 0.0112 mg/L. The toluene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in none of the groundwater samples collected from monitor wells.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.409 mg/L. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in the groundwater samples collected from monitor wells.

- Xylene concentrations ranged from <0.00100 mg/L to 0.54 mg/L. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in the groundwater samples collected from monitor wells.

During the June 2012 sampling event, groundwater samples were collected from monitor wells MW-2, MW-8, and MW-10 through MW-21. Monitor wells MW-1, MW-3 through MW-7, and MW-9 were not sampled due to the presence of PSH.

Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from <0.00100 mg/L to 33.6 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-8, MW-13, MW-15, MW-16, MW-18, MW-19 and MW-20.
- Toluene concentrations ranged from <0.00100 mg/L to <0.200 mg/L. The toluene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in none of the groundwater samples collected from monitor wells.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.380 mg/L. The ethylbenzene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in none of the groundwater samples collected from monitor wells.
- Xylene concentrations ranged from <0.00100 mg/L to 0.286 mg/L. The xylene concentration did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any of the collected groundwater samples.

During the September 2012 sampling event, groundwater samples were collected from monitor wells MW-8, and MW-10 through MW-21. Monitor wells MW-1 through MW-7, and MW-9 were not sampled due to the presence of PSH.

Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from <0.00100 mg/L to 17.1 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-8, MW-13, MW-15, MW-16, MW-18, and MW-19.
- Toluene concentrations ranged from <0.00100 mg/L to 0.05 mg/L. The toluene concentration did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the groundwater samples collected.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.141 mg/L. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the collected groundwater samples.
- Xylene concentrations ranged from <0.00100 mg/L to 0.187 mg/L. The xylene concentration did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any of the groundwater samples collected.

During the December 2012 sampling event, groundwater samples were collected from monitor wells MW-8 and MW-10 through MW-21. Monitor wells MW-1 through MW-7 and MW-9 were not sampled due to the presence of PSH. In addition, a sample was collected from monitor wells MW-17, MW-18, and MW-19 for quantification of PAHs.

Laboratory analytical results of the groundwater samples collected exhibited the following findings:

- Benzene concentrations ranged from <0.00100 mg/L to 10.7 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-8, MW-13, MW-15, MW-16, and MW-18.
- Toluene concentrations ranged from <0.00100 mg/L to <0.0500 mg/L. The toluene concentration did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the groundwater samples collected.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.122 mg/L Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any collected groundwater sample.
- Xylene concentrations ranged from <0.00100 mg/L to 0.279 mg/L. The xylene concentration did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any of the groundwater samples collected.
- Total naphthalenes concentrations ranged from <0.000183 mg/L to 0.00253 mg/L. The total naphthalenes concentration did not exceed the NMWQCC groundwater standard of 0.030 mg/L in any of the groundwater samples collected.

Generally, dissolved-phase concentrations have declined during the year 2012 with the most significant declines in down-gradient monitor wells MW-8, and MW-13. However, increases have been observed in further down-gradient well MW-15. Dissolved-phase concentrations have fluctuated in cross-gradient monitor wells MW-18 and MW-19. Currently, the dissolved-phase groundwater plume is not delineated.

CONCLUSIONS AND RECOMMENDATIONS

The following section presents a summary of the four groundwater monitoring events conducted at the 8" Moore to Jal #2 site and provides recommendations for future corrective actions.

2.5 Summary of Findings

- The groundwater flow direction is to the southeast at an average gradient of 0.0040 feet per foot or 21.25 feet per mile.
- Groundwater levels at the subject site have exhibited a steady decline that appears to be associated with a regional trend of declining groundwater levels for the Ogallala Aquifer.
- PSH has been observed in monitor wells MW-1 through MW-7 and MW-9.
- Generally, PSH thicknesses have fluctuated from quarter to quarter during the year 2012, but have declined throughout the year.
- In general, monitor wells have exhibited stable or declining concentrations of dissolved-phase contaminants except for down-gradient monitor well MW-15, which exhibited increasing dissolved-phase concentrations over the year 2012. Currently, the dissolved-phase plume is not delineated.
- Approximately 20 bbls of crude oil was recovered during the year 2012 indicating that the PSH recovery system is performing its function.

2.6 Recommendations

Based upon the results of the quarterly groundwater monitoring and PSH recovery efforts, Talon proposes the following actions:

- Continue operation and maintenance of the skimmer/bladder pump and total fluids pumps recovery system. Monitor the system on a weekly basis to optimize PSH recovery efficiency.
- Add or reposition pumps as necessary to optimize PSH recovery and inhibit plume migration.
- Perform quarterly groundwater monitoring events in accordance with NMOCD directives.
- Add 2 new monitor wells to delineate the dissolve-phase plume. (See Figure 4)

APPENDIX A

Figures

Figure 1 - Site Plan with Proposed Monitor Well Locations Map

Figure 2a - Groundwater Gradient Map - 03/21/2012

Figure 2b - Groundwater Gradient Map - 06/12/2012

Figure 2c - Groundwater Gradient Map – 09/26/2012

Figure 2d - Groundwater Gradient Map - 12/14/2012

Figure 3a - PSH Thickness & Groundwater Concentration Map - 03/21/2012

Figure 3b - PSH Thickness & Groundwater Concentration Map - 06/20/2012

Figure 3c - PSH Thickness & Groundwater Concentration Map – 09/27/2012

Figure 3d - PSH Thickness & Groundwater Concentration Map - 12/14/2012

Figure 4 – Proposed Monitor Well Locations

Project # 700376.045.01

TALON LPE

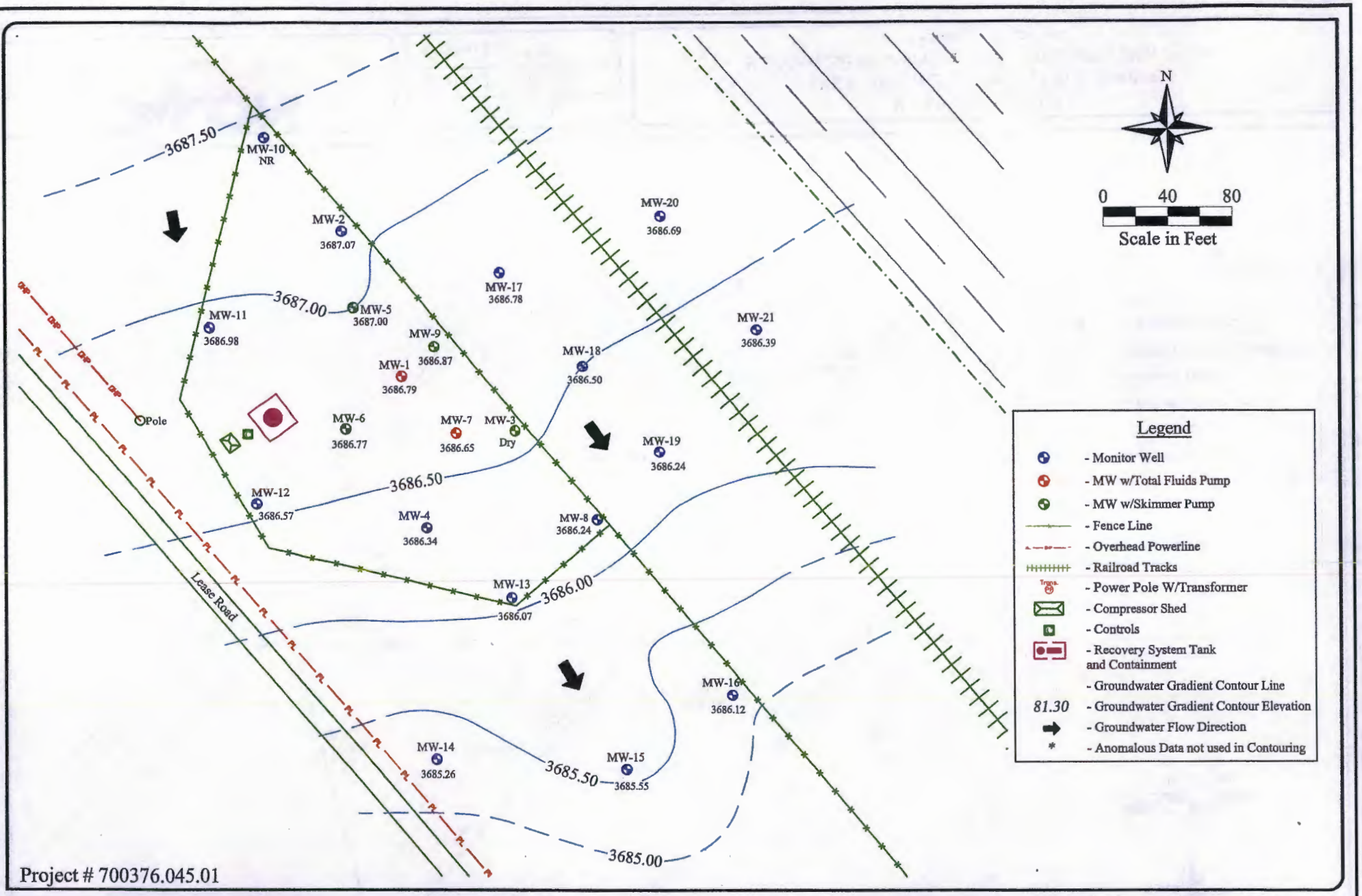
Date:	07/07/2011
Scale:	1" = 80'
Drawn By:	TJS

8" Moore to Jal # 2

SRS # 2002-10273, NMOCD REF. # AP-92

9.2 Miles SE of Lovington, NM, Lea County, New Mexico

Figure 1 - Site Plan

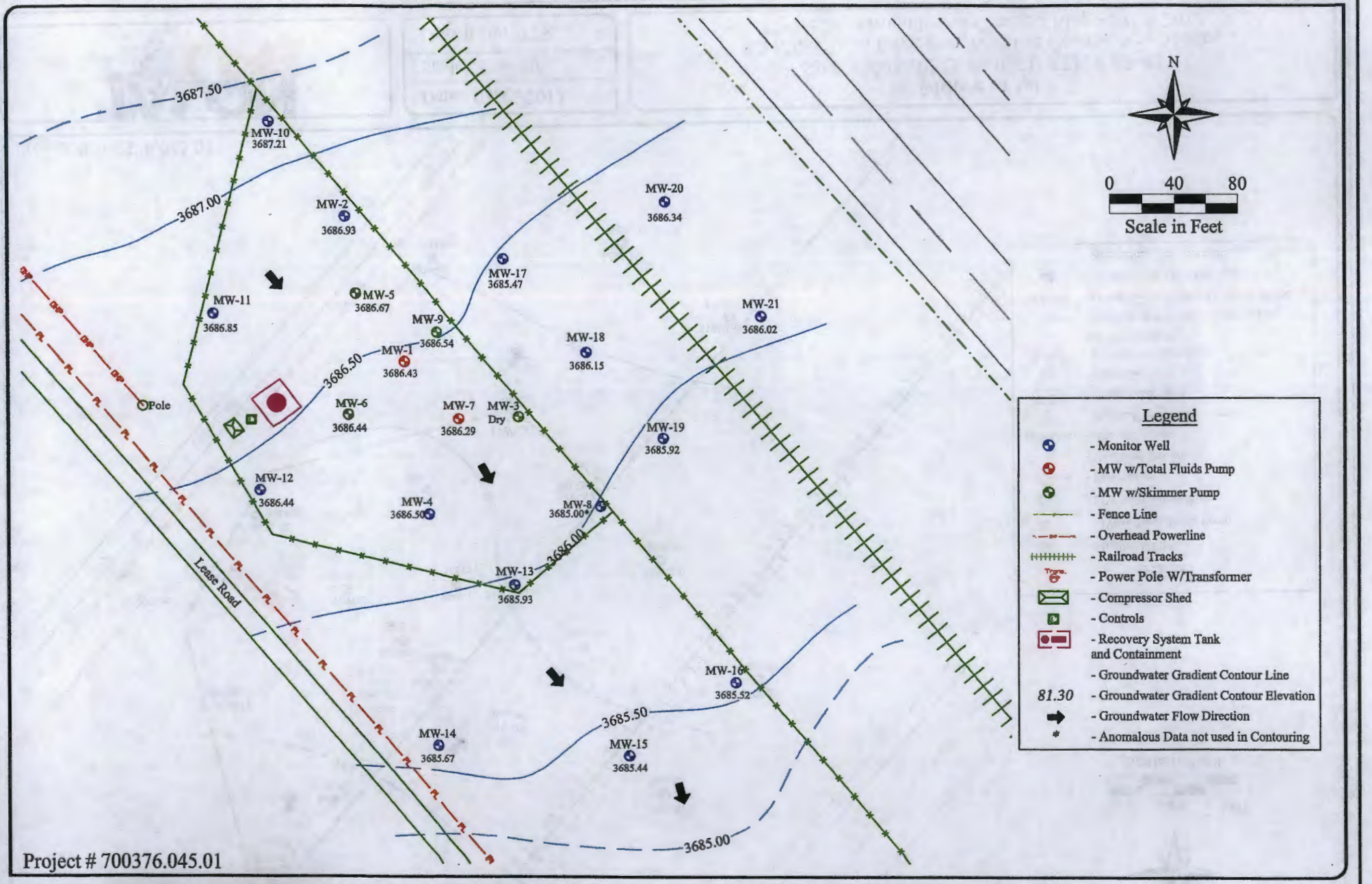


TALON LPE

Date: 04/05/2012
Scale: 1" = 80'
Drawn By: TJS

8" Moore to Jal # 2

SRS # 2002-10273, NMOCD REF. # AP-92
9.2 Miles SE of Lovington, NM, Lea County, New Mexico
Figure 2a - Groundwater Gradient Map - 03/21/2012



TALON LPE

Date:	07/25/2012
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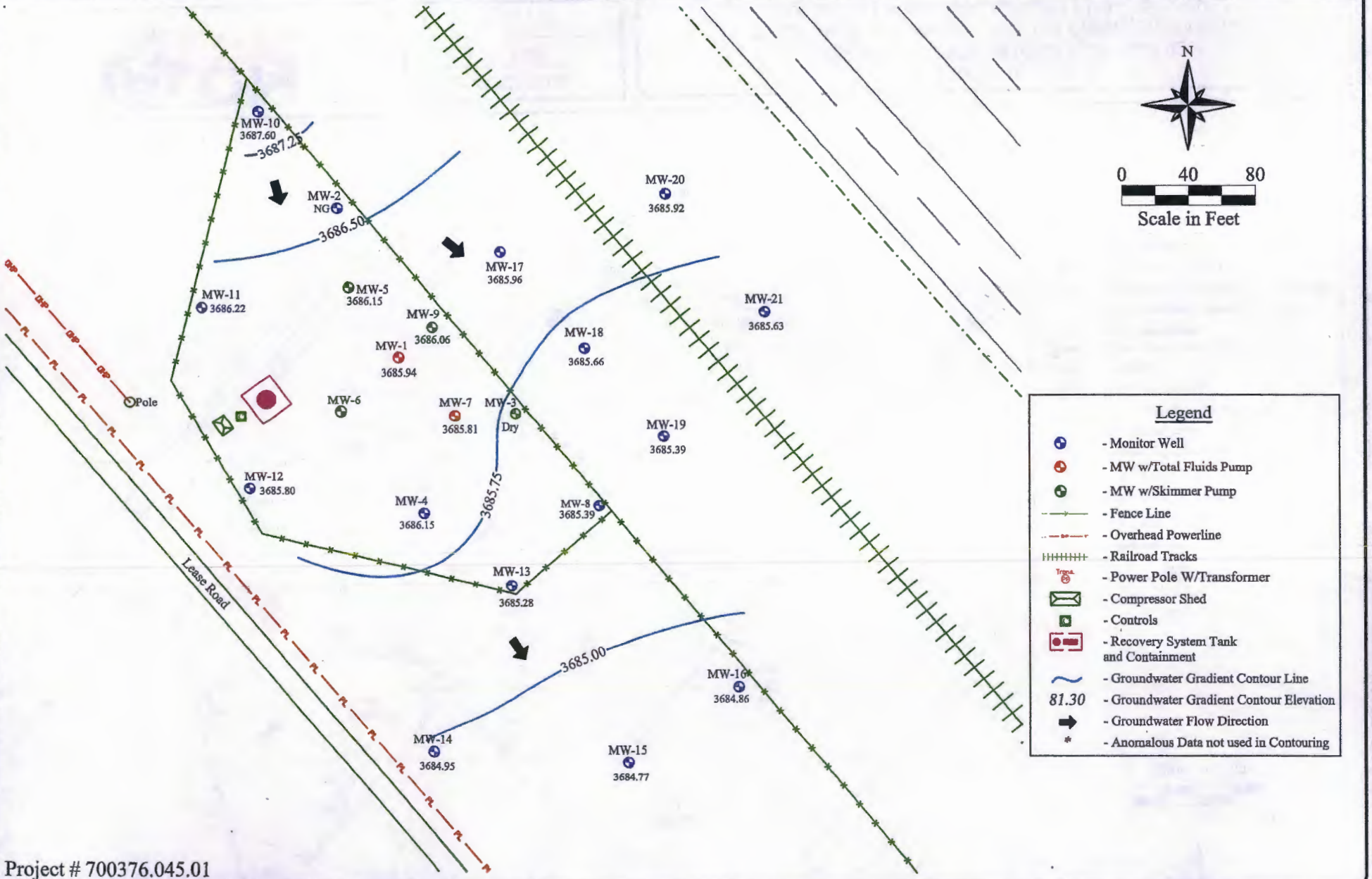
Drawn By:	TJS

8" Moore to Jal # 2

SRS # 2002-10273, NMOCD REF. # AP-92

9.2 Miles SE of Lovington, NM, Lea County, New Mexico

Figure 2b - Groundwater Gradient Map - 06/12/2012



Project # 700376.045.01

TALON LPE

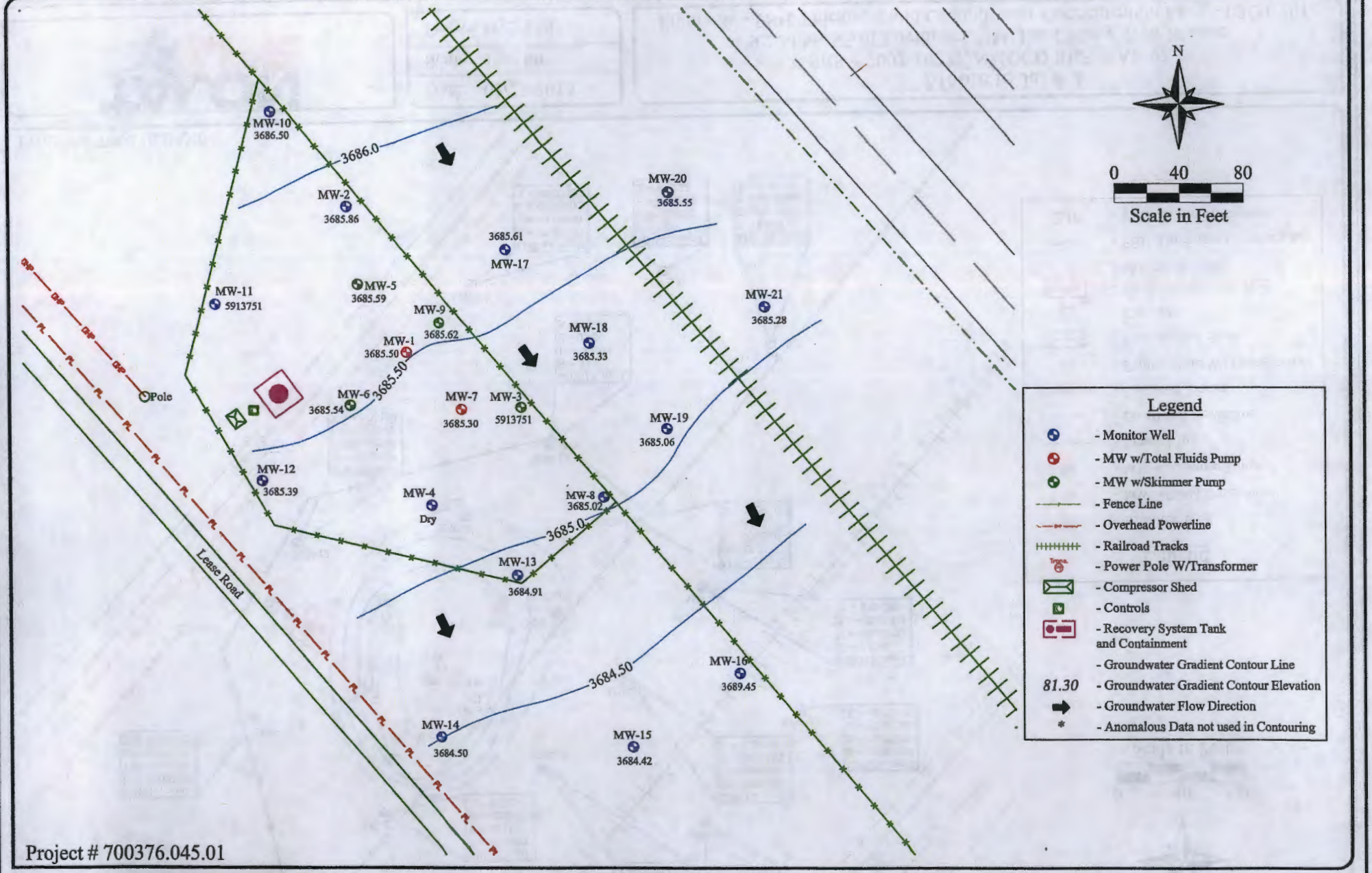
Date:	01/22/2013
Scale:	1" = 80'
Drawn By:	TJS

8" Moore to Jal # 2

SRS # 2002-10273, NMOCD REF. # AP-92

9.2 Miles SE of Lovington, NM, Lea County, New Mexico

Figure 2c - Groundwater Gradient Map - 09/26/2012

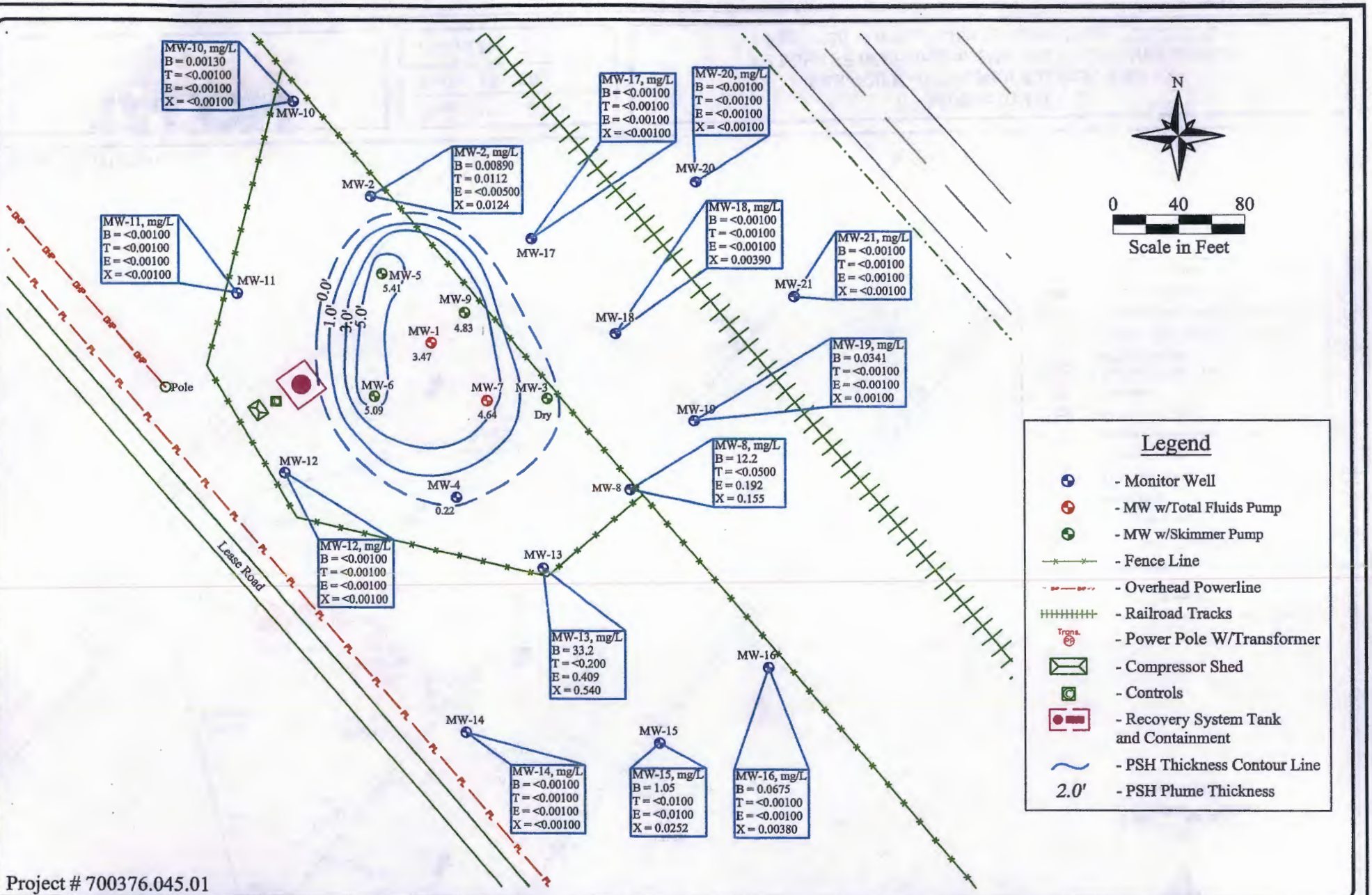


TALON LPE

Date: 01/21/2013
Scale: 1" = 80'
Drawn By: TJS

8" Moore to Jal # 2

SRS # 2002-10273, NMOCD REF. # AP-92
9.2 Miles SE of Lovington, NM, Lea County, New Mexico
Figure 2d - Groundwater Gradient Map - 12/14/2012



Project # 700376.045.01

TALON LPE

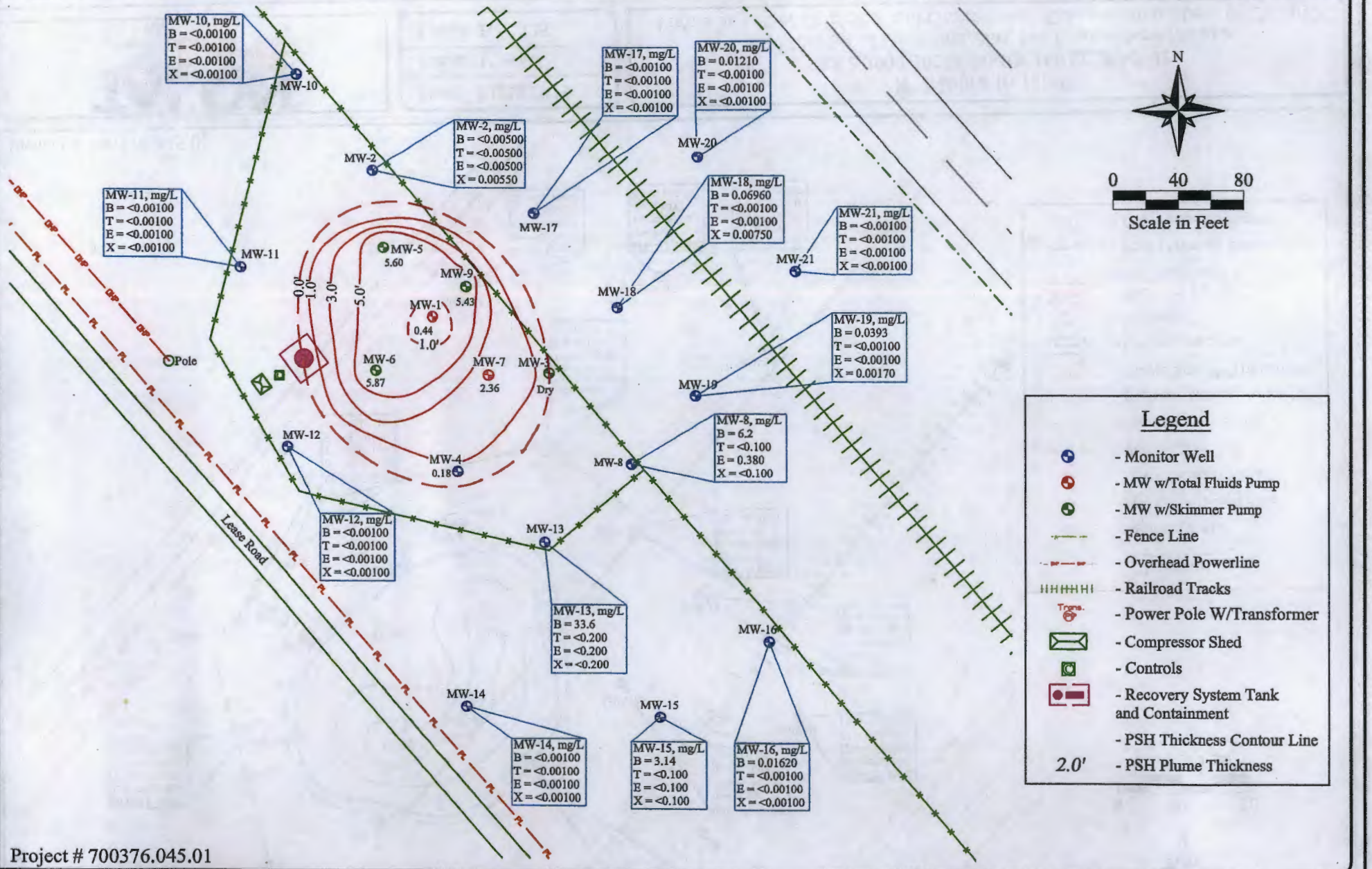
Date:	01/22/2013
Scale:	1" = 80'
Drawn By:	TJS

8" Moore to Jal # 2

SRS # 2002-10273, NMOCD REF. # AP-92

9.2 Miles SE of Lovington, NM, Lea County, New Mexico

Figure 3a - PSH Thickness and Groundwater Concentration Map, - 03/21/2012



TALON LPE

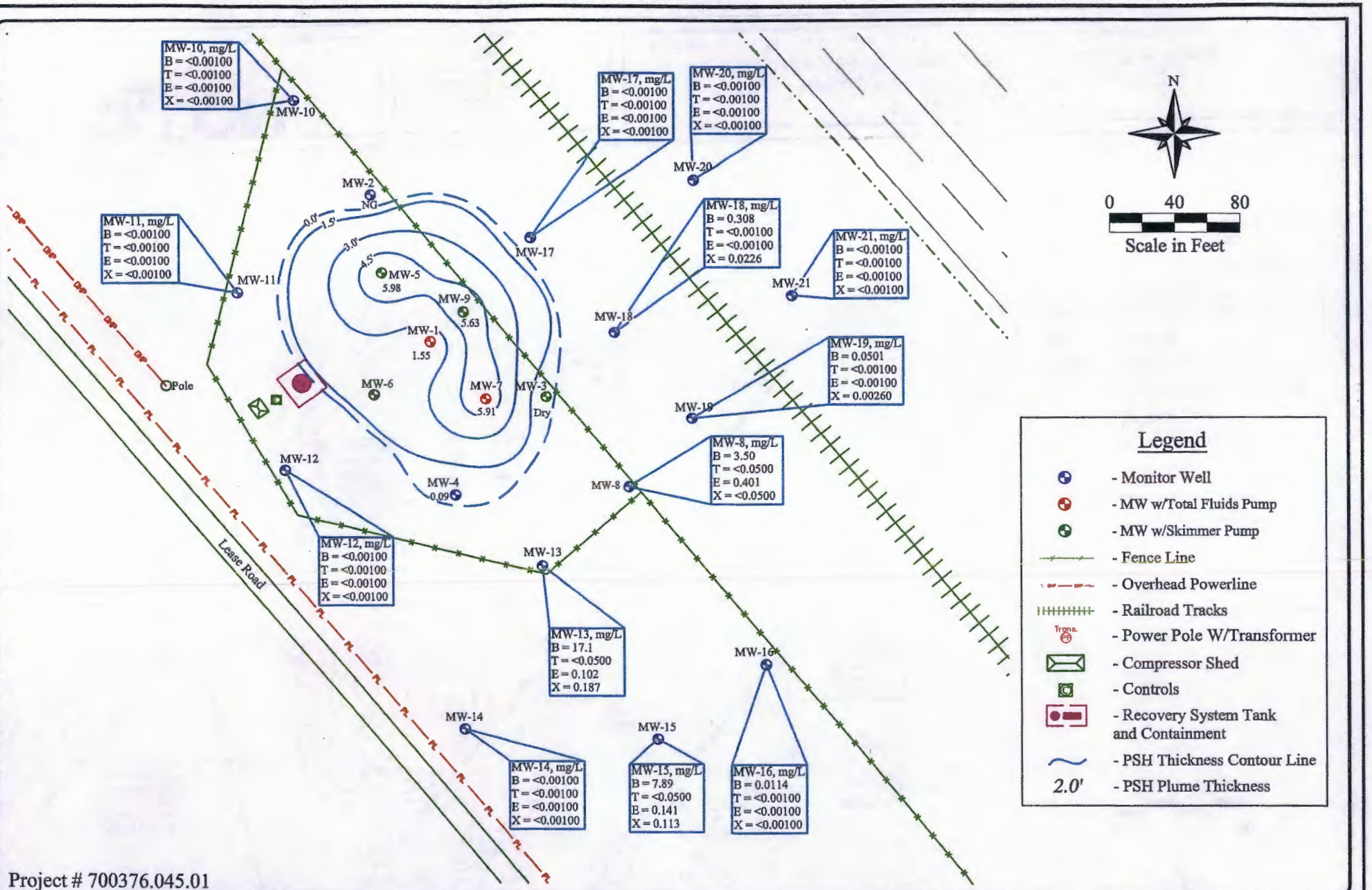
Date:	07/25/2012
Scale:	1" = 80'
Drawn By:	TJS

8" Moore to Jal # 2

SRS # 2002-10273, NMOCD REF. # AP-92

9.2 Miles SE of Lovington, NM, Lea County, New Mexico

Figure 3b - PSH Thickness and Groundwater Concentration Map - 06/20/2012



TALON LPE

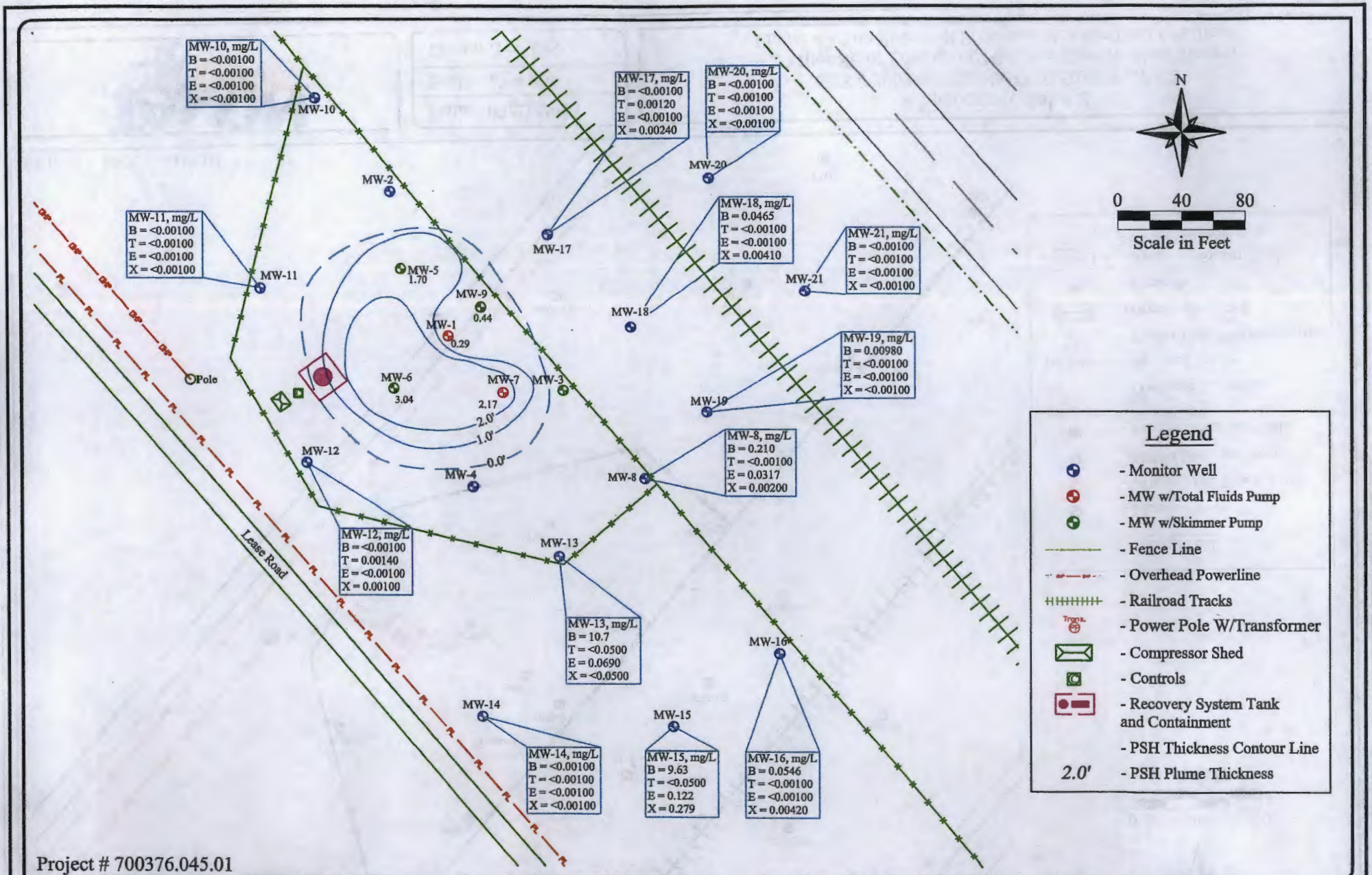
Date:	01/22/2013
Scale:	1" = 80'
Drawn By:	TJS

8" Moore to Jal # 2

SRS # 2002-10273, NMOCD REF. # AP-92

9.2 Miles SE of Lovington, NM, Lea County, New Mexico

Figure 3c - PSH Thickness and Groundwater Concentration Map - 09/27/2012



Project # 700376.045.01

TALON LPE

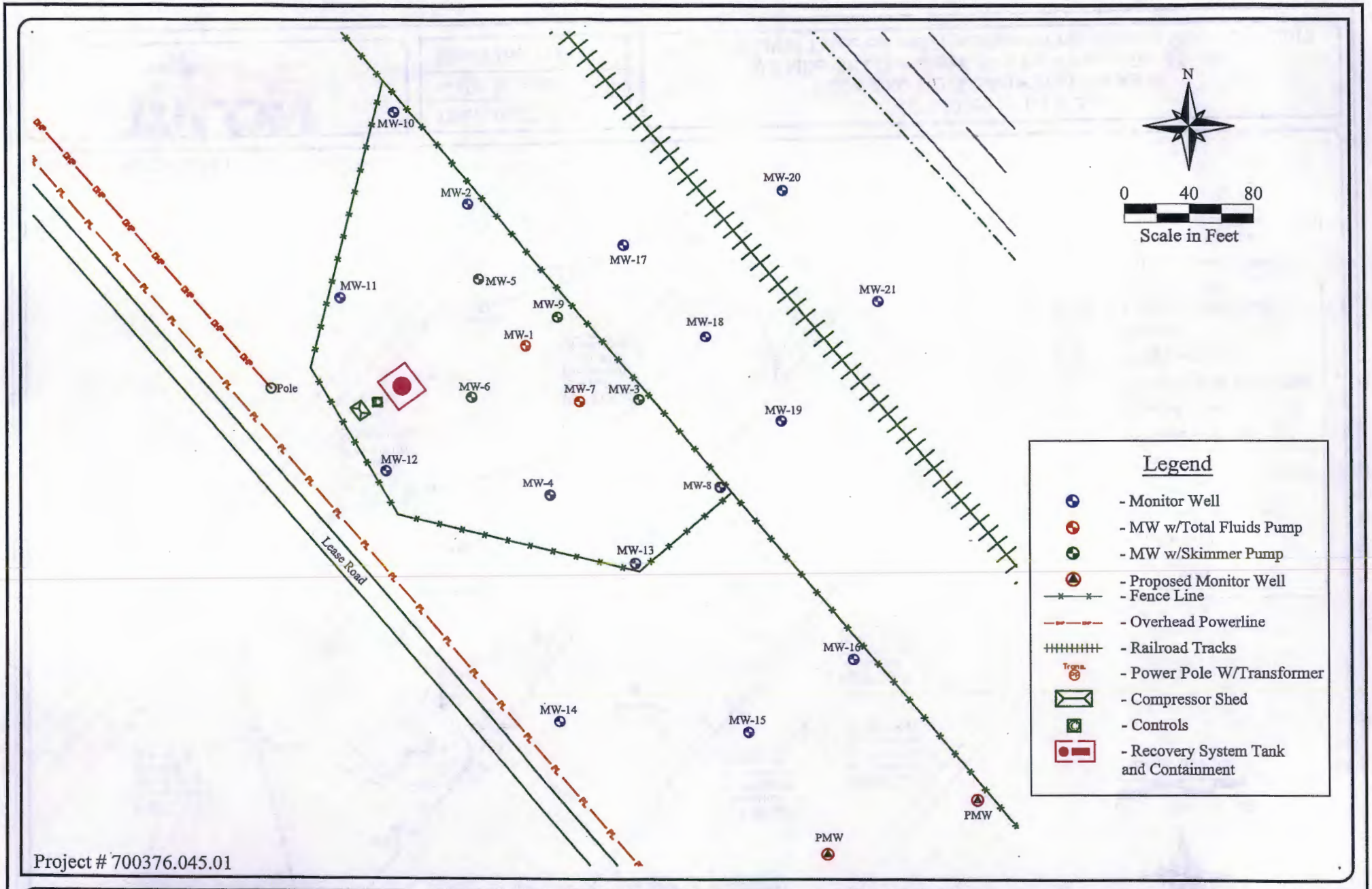
Date:	01/22/2013
Scale:	1" = 80'
Drawn By:	TJS

8" Moore to Jal # 2

SRS # 2002-10273, NMOCD REF. # AP-92

9.2 Miles SE of Lovington, NM, Lea County, New Mexico

Figure 3d - PSH Thickness and Groundwater Concentration Map - 12/14/2012



Project # 700376.045.01

TALON LPE

Date:	03/21/2013
Scale:	1" = 80'
Drawn By:	TJS

8" Moore to Jal # 2
SRS # 2002-10273, NMOCD REF. # AP-92
9.2 Miles SE of Lovington, NM, Lea County, New Mexico
Figure 4 - Site Plan with Proposed Monitor Well Locations

APPENDIX B

Tables

Table 1 - Summary of Groundwater Elevations and Phase Separated Hydrocarbon (PSH) Thicknesses

Table 2 - Summary of Groundwater Analytical Results - BTEX

Table 3 - Summary of Groundwater Analytical Results – PAH

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Table 3 - Elevations and PSH Thickness
Moore to Jal #2
SRS #2002-10273

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-1			Diameter: 4 in.	Screened Interval: 63.00 ft. to 83.0 ft.		TD: 83.0 ft.
	03/30/06	3767.30	79.93	73.41	6.52	3692.81
	07/07/06	3767.30	80.02	73.64	6.38	3692.61
	09/29/06	3767.30	NG	-	-	NG
	10/06/06	3767.30	85.64	79.04	6.60	3687.17
	12/27/06	3767.30	85.92	79.35	6.57	3686.87
	03/27/07	3767.30	85.98	79.48	6.50	3686.75
	06/19/07	3767.30	86.18	79.65	6.53	3686.57
	09/20/07	3767.30	86.31	79.76	6.55	3686.46
	09/28/07	3767.30	86.36	79.79	6.57	3686.43
	10/11/07	3767.30	86.39	79.82	6.57	3686.40
	12/17/07	3773.35	86.70	80.04	6.66	3692.21
	09/02/09	3773.35	87.53	81.97	5.56	3690.46
	11/11/09	3773.35	87.22	82.54	4.68	3690.04
	12/14/11	3773.35	90.08	85.50	4.58	3687.09
	03/21/12	3773.35	89.47	86.00	3.47	3686.78
	06/12/12	3773.35	87.29	86.85	0.44	3686.43
	09/26/12	3773.35	88.70	87.15	1.55	3685.94
	12/14/12	3773.35	88.09	87.80	0.29	3685.50
MW-2			Diameter: 2 in.	Screened Interval: 62.50 ft. to 82.5 ft.		TD: 82.5 ft.
	03/30/06	3771.04	77.86	-	-	3693.18
	07/07/06	3771.04	78.22	-	-	3692.82
	09/29/06	3771.04	78.68	78.52	0.16	3692.49
	10/06/06	3771.04	79.74	78.54	1.20	3692.30
	12/27/06	3771.04	78.96	78.84	0.12	3692.18
	03/27/07	3771.04	79.15	78.97	0.18	3692.04
	06/19/07	3771.04	79.45	79.18	0.27	3691.82
	09/20/07	3771.04	79.61	79.32	0.29	3691.67
	09/28/07	3771.04	79.57	79.24	0.33	3691.75
	10/11/07	3771.04	79.60	79.34	0.26	3691.66
	12/17/07	3772.07	79.85	79.56	0.29	3692.46
	09/02/09	3772.07	81.37	-	-	3690.70
	11/11/09	3772.07	81.59	-	-	3690.48
	12/14/11	3772.07	84.57	-	-	3687.50
	03/21/12	3772.07	85.00	-	-	3687.07
	06/12/12	3772.07	85.14	-	-	3686.93
	09/26/12	3772.07	NG	-	-	NG
	12/14/12	3772.07	86.21	-	-	3685.86
MW-3			Diameter: 2 in.	Screened Interval: 63.00 ft. to 83.0 ft.		TD: ____ ft.
	03/30/06	3771.94	80.22	79.20	1.02	3692.57
	07/07/06	3771.94	82.57	78.97	3.60	3692.38
	09/29/06	3771.94	83.81	79.10	4.71	3692.06
	10/06/06	3771.94	82.28	79.47	2.81	3692.01
	12/27/06	3771.94	81.82	79.94	1.88	3691.69
	03/27/07	3771.94	82.42	80.01	2.41	3691.53
	06/19/07	3771.94	84.12	79.80	4.32	3691.43
	09/20/07	3771.94	82.33	80.37	1.96	3691.25
	09/28/07	3771.94	81.27	80.92	0.35	3690.96
	10/11/07	3771.94	82.10	80.51	1.59	3691.17
	12/17/07	3772.86	83.40	80.56	2.84	3691.83
	09/02/09	3772.86	82.81	82.75	0.06	3690.10
	11/11/09	3772.86	83.15	83.13	0.02	3689.73
	12/14/11	3772.86	Dry	-	-	Dry
	03/21/12	3772.86	Dry	-	-	Dry
	06/12/12	3772.86	Dry	-	-	Dry
	09/26/12	3772.86	Dry	-	-	Dry
	12/14/12	3772.86	Dry	-	-	Dry

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Table 3 - Elevations and PSH Thickness
Moore to Jal #2
SRS #2002-10273

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-4			Diameter: 2 in.	Screened Interval: 67.00 ft. to 87.0 ft.		TD: 87.0 ft.
	03/30/06	3772.86	80.29	-	-	3692.57
	07/07/06	3772.86	80.62	-	-	3692.24
	09/29/06	3772.86	79.98	-	-	3692.88
	10/06/06	3772.86	81.03	-	-	3691.83
	12/27/06	3772.86	81.33	-	-	3691.53
	03/27/07	3772.86	81.43	-	-	3691.43
	06/19/07	3772.86	81.51	-	-	3691.35
	09/20/07	3772.86	81.72	-	-	3691.14
	10/11/07	3772.86	81.77	-	-	3691.09
	12/17/07	3773.76	82.04	-	-	3691.72
	09/02/09	3773.76	83.83	-	-	3689.93
	11/11/09	3773.76	84.08	-	-	3689.68
	12/14/11	3773.76	87.32	87.31	0.01	3686.45
	03/21/12	3773.76	87.60	87.38	0.22	3686.34
	06/12/12	3773.76	87.41	87.23	0.18	3686.50
	09/26/12	3773.76	87.69	87.60	0.09	3686.15
	12/14/12	3773.76	Dry	-	-	Dry
MW-5			Diameter: 4 in.	Screened Interval: 60.00 ft. to 100.0 ft.		TD: 100.0 ft.
	12/17/07	3772.08	80.91	79.55	1.36	3692.31
	09/02/09	3772.08	85.00	80.75	4.25	3690.63
	11/11/09	3772.08	86.30	81.01	5.29	3690.20
	12/14/11	3772.08	87.79	84.22	3.57	3687.27
	03/21/12	3772.08	89.62	84.21	5.41	3686.98
	06/12/12	3772.08	90.11	84.51	5.60	3686.65
	09/26/12	3772.08	90.92	84.94	5.98	3686.15
	12/14/12	3772.08	87.91	86.21	1.70	3685.59
MW-6			Diameter: 4 in.	Screened Interval: 60.00 ft. to 100.0 ft.		TD: 100.0 ft.
	12/17/07	3772.99	83.14	80.42	2.72	3692.12
	09/02/09	3772.99	85.14	82.11	3.03	3690.38
	11/11/09	3772.99	84.22	82.78	1.44	3689.97
	12/14/11	3772.99	88.18	85.53	2.65	3687.02
	03/21/12	3772.99	90.50	85.41	5.09	3686.74
	06/12/12	3772.99	91.48	85.61	5.87	3686.41
	09/29/12	3772.99	92.13	86.05	6.08	3685.94
	12/14/12	3772.99	89.99	86.95	3.04	3685.54
MW-7			Diameter: 4 in.	Screened Interval: 60.00 ft. to 100.0 ft.		TD: 100.0 ft.
	12/17/07	3772.92	82.94	80.51	2.43	3692.01
	09/02/09	3772.92	87.79	81.68	6.11	3690.23
	11/11/09	3772.92	85.16	82.36	2.80	3690.10
	12/14/11	3772.92	85.35	85.33	0.02	3687.59
	03/21/12	3772.92	90.17	85.53	4.64	3686.62
	06/12/12	3772.92	88.61	86.25	2.36	3686.28
	09/26/12	3772.92	92.04	86.13	5.91	3685.81
	12/14/12	3772.92	89.43	87.26	2.17	3685.30
MW-8			Diameter: 4 in.	Screened Interval: 64.00 ft. to 104.0 ft.		TD: 104.7 ft.
	12/17/07	3773.80	82.21	-	-	3691.59
	09/02/09	3773.80	83.95	-	-	3689.85
	11/11/09	3773.80	84.21	-	-	3689.59
	12/14/11	3773.80	87.20	-	-	3686.60
	03/21/12	3773.80	87.56	-	-	3686.24
	06/12/12	3773.80	88.80	-	-	3685.00
	09/26/12	3773.80	88.41	-	-	3685.39
	12/14/12	3773.80	88.78	-	-	3685.02

TALON "All the Pieces"

Table 3 - Elevations and PSH Thickness
Moore to Jal #2
SRS #2002-10273

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-9			Diameter: 4 in.	Screened Interval: 60.00 ft. to 100.0 ft.		TD: 100.0 ft.
	12/17/07	3771.79	80.82	79.35	1.47	3692.20
	09/02/09	3771.79	82.29	81.18	1.11	3690.43
	11/11/09	3771.79	81.98	81.72	0.26	3690.03
	12/14/11	3771.79	86.47	84.20	2.27	3687.22
	03/21/12	3771.79	88.98	84.15	4.83	3686.84
	06/12/12	3771.79	89.81	84.38	5.43	3686.51
	09/26/12	3771.79	90.43	84.80	5.63	3686.06
	12/14/12	3771.79	86.54	86.10	0.44	3685.62
MW-10			Diameter: 4 in.	Screened Interval: 61.00 ft. to 101.0 ft.		TD: 101.2 ft.
	12/17/07	3771.90	79.18	-	-	3692.72
	09/02/09	3771.90	80.11	-	-	3691.79
	11/11/09	3771.90	81.12	-	-	3690.78
	12/14/11	3771.90	84.14	-	-	3687.76
	03/21/12	3771.90	NG	-	-	NG
	06/12/12	3771.90	84.69	-	-	3687.21
	09/26/12	3771.90	84.30	-	-	3687.60
	12/14/12	3771.90	85.40	-	-	3686.50
MW-11			Diameter: 4 in.	Screened Interval: 65.00 ft. to 105.0 ft.		TD: 105.2 ft.
	12/17/07	3772.97	80.52	-	-	3692.45
	09/02/09	3772.97	82.31	-	-	3690.66
	11/11/09	3772.97	82.54	-	-	3690.43
	12/14/11	3772.97	85.59	-	-	3687.38
	03/21/12	3772.97	85.99	-	-	3686.98
	06/12/12	3772.97	86.12	-	-	3686.85
	09/26/12	3772.97	86.75	-	-	3686.22
MW-12			Diameter: 4 in.	Screened Interval: 65.00 ft. to 105.0 ft.		TD: 105.7 ft.
	12/17/07	3773.80	81.77	-	-	3692.03
	09/02/09	3773.80	83.51	-	-	3690.29
	11/11/09	3773.80	83.76	-	-	3690.04
	12/14/11	3773.80	86.82	-	-	3686.98
	03/21/12	3773.80	87.23	-	-	3686.57
	06/12/12	3773.80	87.36	-	-	3686.44
	09/26/12	3773.80	88.00	-	-	3685.80
	12/14/12	3773.80	88.41	-	-	3685.39
MW-13			Diameter: 4 in.	Screened Interval: 65.00 ft. to 105.0 ft.		TD: 105.2 ft.
	12/17/07	3774.36	82.84	-	-	3691.52
	09/02/09	3774.36	84.60	-	-	3689.76
	11/11/09	3774.36	84.83	-	-	3689.53
	12/14/11	3774.36	87.87	-	-	3686.49
	03/21/12	3774.36	88.29	-	-	3686.07
	06/12/12	3774.36	88.43	-	-	3685.93
	09/26/12	3774.36	89.08	-	-	3685.28
	12/14/12	3774.36	89.45	-	-	3684.91
MW-14			Diameter: 4 in.	Screened Interval: 66.00 ft. to 106.0 ft.		TD: 106.0 ft.
	12/14/11	3774.40	88.25	-	-	3686.15
	03/21/12	3774.40	89.14	-	-	3685.26
	06/12/12	3774.40	88.73	-	-	3685.67
	09/26/12	3774.40	89.45	-	-	3684.95
	12/14/12	3774.40	89.90	-	-	3684.50
MW-15			Diameter: 4 in.	Screened Interval: 67.00 ft. to 107.0 ft.		TD: 107.0 ft.
	12/14/11	3774.03	88.08	-	-	3685.95
	03/21/12	3774.03	88.48	-	-	3685.55
	06/12/12	3774.03	88.59	-	-	3685.44
	09/26/12	3774.03	89.26	-	-	3684.77
	12/14/12	3774.03	89.61	-	-	3684.42

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Table 3 - Elevations and PSH Thickness
Moore to Jal #2
SRS #2002-10273

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-16			Diameter: 4 in.	Screened Interval: 67.00 ft. to 107.0 ft.		TD: 107.0 ft.
	12/14/11	3773.95	87.91	-	-	3686.04
	03/21/12	3773.95	88.83	-	-	3685.12
	06/12/12	3773.95	88.43	-	-	3685.52
	09/26/12	3773.95	89.09	-	-	3684.86
	12/14/12	3773.95	84.50	-	-	3689.45
MW-17			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: ____ ft.
	12/14/11	3771.29	84.12	-	-	3687.17
	03/21/12	3771.29	84.51	-	-	3686.78
	06/12/12	3771.29	85.82	-	-	3685.47
	09/26/12	3771.29	85.33	-	-	3685.96
	12/14/12	3771.29	85.68	-	-	3685.61
MW-18			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: ____ ft.
	12/14/11	3772.41	85.51	-	-	3686.90
	03/21/12	3772.41	85.91	-	-	3686.50
	06/12/12	3772.41	86.26	-	-	3686.15
	09/26/12	3772.41	86.75	-	-	3685.66
	12/14/12	3772.41	87.08	-	-	3685.33
MW-19			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: ____ ft.
	12/14/11	3773.63	87.00	-	-	3686.63
	03/21/12	3773.63	87.39	-	-	3686.24
	06/12/12	3773.63	87.71	-	-	3685.92
	09/26/12	3773.63	88.24	-	-	3685.39
	12/14/12	3773.63	88.57	-	-	3685.06
MW-20			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: ____ ft.
	12/14/11	3770.92	83.80	-	-	3687.12
	03/21/12	3770.92	84.23	-	-	3686.69
	06/12/12	3770.92	84.58	-	-	3686.34
	09/26/12	3770.92	85.00	-	-	3685.92
	12/14/12	3770.92	85.37	-	-	3685.55
MW-21			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: ____ ft.
	12/14/11	3773.30	86.49	-	-	3686.81
	03/21/12	3773.30	86.91	-	-	3686.39
	06/12/12	3773.30	87.28	-	-	3686.02
	09/26/12	3773.30	87.67	-	-	3685.63
	12/14/12	3773.30	88.02	-	-	3685.28

Specific Gravity: 0.835

NG - Not Gauged
NSch - Not scheduled to be gauged
Block - Well blocked/obstructed
Locate - Can not locate/find well
Dry - Well is dry
P&A - Plug and Abandon
WD - Well Destroyed

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Table 2 - Groundwater Contaminant Concentrations BTEX
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)								
		Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	BTEX	MTBE	Notes
Moniter Well # 13	12/18/07	<0.00100	<0.00100	<0.00100	-	-	<0.00100	-	-	-
Moniter Well # 8	12/18/07	0.660	0.0211	0.0211	-	-	0.0789	-	-	-
Moniter Well # 11	12/19/07	0.0180	0.00790	0.00110	-	-	0.00120	-	-	-
Moniter Well # 12	12/19/07	<0.00500	<0.00500	<0.00500	-	-	<0.00500	-	-	-
Moniter Well # 10	12/19/07	<0.00100	<0.00100	<0.00100	-	-	<0.00100	-	-	-
MW-1	09/20/08	16.8	3.45	1.15	-	-	2.04	-	-	-
	09/03/09	20.4	17.8	3.84	-	-	9.31	-	-	-
	12/14/11	-	-	-	-	-	-	-	-	A
	03/21/12	-	-	-	-	-	-	-	-	A
	06/12/12	-	-	-	-	-	-	-	-	A
	09/26/12	-	-	-	-	-	-	-	-	A
	12/14/12	-	-	-	-	-	-	-	-	A
MW-2	09/20/08	4.67	3.42	0.470	-	-	1.16	-	-	-
	12/17/08	0.0247	0.0542	0.0331	-	-	0.0586	-	-	-
	02/03/09	0.0475	0.0740	BRL	-	-	0.0419	-	-	-
	06/23/09	0.0273	0.0323	BRL	-	-	0.0317	-	-	-
	09/02/09	0.00990	0.0127	BRL	-	-	0.00810	-	-	-
	11/11/09	0.0516	0.0672	0.00470	-	-	0.0432	-	-	-
	02/18/10	0.0170	0.0235	BRL	-	-	0.0223	-	-	-
	06/16/10	0.0202	0.0269	0.00140	-	-	0.0173	-	-	-
	09/28/10	0.0140	0.0249	BRL	-	-	0.0166	-	-	-
	12/23/10	0.0388	0.0528	0.00540	-	-	0.0435	-	-	-
	03/24/11	0.0139	0.0223	0.00740	-	-	0.0328	-	-	-
	06/16/11	0.0170	0.0156	BRL	-	-	0.0193	-	-	-
	09/14/11	0.00530	0.00710	BRL	-	-	0.00410	0.0165	-	-
	12/16/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/21/12	0.00890	0.0112	<0.00146	-	-	0.0124	-	-	-
	06/13/12	<0.00186	<0.00174	<0.00163	-	-	0.00550	-	-	-

TALON LPE
"All the Pieces"

Table 2 - Groundwater Contaminant Concentrations BTEX
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)								
		Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	BTEX	MTBE	Notes
MW-3	09/20/08	23.4	11.7	1.74	-	-	4.13	-	-	-
	03/21/12	-	-	-	-	-	-	-	-	I
	06/12/12	-	-	-	-	-	-	-	-	I
	09/26/12	-	-	-	-	-	-	-	-	I
	12/14/12	-	-	-	-	-	-	-	-	I
MW-4	09/29/06	6.18	0.287	0.146	0.175	0.126	-	-	-	-
	03/29/07	7.18	0.530	0.452	0.297	0.287	-	-	-	-
	12/28/07	20.6	0.912	0.856	-	-	1.50	-	-	-
	03/27/08	21.8	0.956	0.724	-	-	0.811	-	-	-
	06/30/08	24.3	0.558	1.02	-	-	1.04	-	-	-
	09/19/08	26.4	2.91	1.21	-	-	1.39	-	-	-
	12/17/08	26.8	0.368	1.20	-	-	1.17	-	-	-
	02/03/09	25.6	0.704	1.28	-	-	1.41	-	-	-
	06/23/09	23.1	BRL	1.70	-	-	BRL	-	-	-
	09/03/09	24.6	0.521	1.24	-	-	0.486	-	-	-
	11/11/09	21.3	BRL	0.883	-	-	BRL	-	-	-
	02/18/10	15.1	BRL	0.639	-	-	BRL	-	-	-
	06/16/10	16.9	BRL	0.620	-	-	BRL	-	-	-
	09/28/10	9.66	BRL	BRL	-	-	BRL	-	-	-
	12/23/10	11.0	BRL	0.583	-	-	BRL	-	-	-
	03/23/11	15.1	BRL	1.40	-	-	BRL	-	-	-
	06/16/11	13.4	1.26	BRL	-	-	BRL	-	-	-
	09/14/11	2.36	BRL	BRL	-	-	0.0849	2.44	-	-
	12/14/11	-	-	-	-	-	-	-	-	A
	03/21/12	-	-	-	-	-	-	-	-	A
	06/12/12	-	-	-	-	-	-	-	-	A
	09/26/12	-	-	-	-	-	-	-	-	A
	12/14/12	-	-	-	-	-	-	-	-	I

TALON LPE
"All the Pieces"

Table 2 - Groundwater Contaminant Concentrations BTEX
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)								
		Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	BTEX	MTBE	Notes
MW-5	09/20/08	5.36	4.73	0.878	-	-	2.00	-	-	-
	09/03/09	15.5	16.4	2.30	-	-	5.21	-	-	-
	12/14/11	-	-	-	-	-	-	-	-	A
	03/21/12	-	-	-	-	-	-	-	-	A
	06/12/12	-	-	-	-	-	-	-	-	A
	09/26/12	-	-	-	-	-	-	-	-	A
	12/14/12	-	-	-	-	-	-	-	-	A
MW-6	09/20/08	3.22	1.94	0.285	-	-	0.697	-	-	-
	09/03/09	19.2	19.3	3.13	-	-	7.48	-	-	-
	12/14/11	-	-	-	-	-	-	-	-	A
	03/21/12	-	-	-	-	-	-	-	-	A
	06/12/12	-	-	-	-	-	-	-	-	A
	09/26/12	-	-	-	-	-	-	-	-	A
	12/14/12	-	-	-	-	-	-	-	-	A
MW-7	09/20/08	10.7	1.78	0.453	-	-	0.785	-	-	-
	09/03/09	22.1	15.8	3.11	-	-	7.38	-	-	-
	12/14/11	-	-	-	-	-	-	-	-	A
	03/21/12	-	-	-	-	-	-	-	-	A
	06/12/12	-	-	-	-	-	-	-	-	A
	09/26/12	-	-	-	-	-	-	-	-	A
	12/14/12	-	-	-	-	-	-	-	-	A

TALON LPE
"All the Pieces"

Table 2 - Groundwater Contaminant Concentrations BTEX
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)								
		Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	BTEX	MTBE	Notes
MW-8	03/27/08	3.00	0.0817	0.0283	-	-	0.187	-	-	-
	06/30/08	8.55	1.12	0.244	-	-	0.687	-	-	-
	09/19/08	5.86	0.0798	BRL	-	-	0.304	-	-	-
	12/17/08	27.7	2.36	0.845	-	-	2.46	-	-	-
	02/03/09	8.27	0.485	BRL	-	-	0.346	-	-	-
	06/23/09	20.6	2.56	0.923	-	-	2.32	-	-	-
	09/02/09	12.0	2.23	0.360	-	-	0.776	-	-	-
	11/11/09	18.2	4.68	0.638	-	-	1.21	-	-	-
	02/18/10	15.1	3.46	0.719	-	-	1.38	-	-	-
	06/16/10	8.30	1.43	0.340	-	-	0.755	-	-	-
	09/28/10	10.3	2.05	0.464	-	-	0.872	-	-	-
	12/23/10	9.61	1.61	0.611	-	-	1.42	-	-	-
	03/24/11	11.5	1.41	0.774	-	-	2.13	-	-	-
	06/16/11	16.1	1.92	0.875	-	-	BRL	-	-	-
	09/12/11	15.8	0.542	0.467	-	-	0.166	17.0	BRL	-
	12/16/11	12.1	0.199	0.336	-	-	0.116	-	-	-
	03/21/12	12.2	<0.0130	0.192	-	-	0.155	-	-	-
	06/13/12	6.18	<0.0347	0.380	-	-	BRL	-	-	-
	09/27/12	3.50	<0.0174	0.401	-	-	BRL	-	<0.0477	-
	12/14/12	0.210	<0.000347	0.0317	-	-	0.00200	-	-	-
MW-9	09/20/08	14.1	5.20	1.10	-	-	1.96	-	-	-
	09/03/09	16.5	8.40	1.38	-	-	2.89	-	-	-
	12/14/11	-	-	-	-	-	-	-	-	A
	03/21/12	-	-	-	-	-	-	-	-	A
	06/12/12	-	-	-	-	-	-	-	-	A
	09/26/12	-	-	-	-	-	-	-	-	A
	12/14/12	-	-	-	-	-	-	-	-	A

TALON
"All the Pieces"

Table 2 - Groundwater Contaminant Concentrations BTEX
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)								
		Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	BTEX	MTBE	Notes
MW-10	03/27/08	0.0283	0.00240	BRL	-	-	0.00290	-	-	-
	06/30/08	BRL	BRL	BRL	-	-	BRL	-	-	-
	09/19/08	BRL	BRL	BRL	-	-	0.00220	-	-	-
	12/17/08	0.00790	BRL	BRL	-	-	BRL	-	-	-
	02/03/09	BRL	BRL	BRL	-	-	BRL	-	-	-
	06/23/09	0.00670	BRL	BRL	-	-	BRL	-	-	-
	09/02/09	BRL	BRL	BRL	-	-	<0.00100	-	-	-
	11/11/09	BRL	BRL	BRL	-	-	BRL	-	-	-
	02/18/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	06/16/10	0.00160	BRL	BRL	-	-	0.00280	-	-	-
	09/28/10	0.00160	BRL	BRL	-	-	BRL	-	-	-
	12/23/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/24/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	06/16/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	09/14/11	BRL	BRL	BRL	-	-	BRL	BRL	-	-
	12/15/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/21/12	0.00130	<0.000259	<0.000291	-	-	BRL	-	-	-
	06/12/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	-	-
	09/26/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	<0.000954	-
	12/14/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	-	-

TALON LPE
"All the Pieces"

Table 2 - Groundwater Contaminant Concentrations BTEX
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)								
		Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	BTEX	MTBE	Notes
MW-11	03/27/08	0.0533	0.0177	0.00230	-	-	0.00820	-	-	-
	06/30/08	0.00190	BRL	BRL	-	-	BRL	-	-	-
	09/19/08	0.0171	0.00310	BRL	-	-	BRL	-	-	-
	12/17/08	0.00340	BRL	BRL	-	-	BRL	-	-	-
	02/03/09	0.00620	0.00120	BRL	-	-	BRL	-	-	-
	06/23/09	BRL	BRL	BRL	-	-	BRL	-	-	-
	09/02/09	0.00250	BRL	BRL	-	-	<0.00100	-	-	-
	11/11/09	0.0819	0.0280	0.0198	-	-	0.0230	-	-	-
	02/18/10	0.00230	BRL	BRL	-	-	BRL	-	-	-
	06/16/10	0.00990	0.00410	0.00120	-	-	0.00330	-	-	-
	09/28/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	12/23/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/24/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	06/16/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	09/13/11	BRL	BRL	BRL	-	-	BRL	BRL	BRL	-
	12/15/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/21/12	<0.000310	<0.000259	<0.000291	-	-	BRL	-	-	-
	06/12/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	-	-
	09/26/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	<0.000954	-
	12/14/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	-	-

TALON LPE
"All the Pieces"

Table 2 - Groundwater Contaminant Concentrations BTEX
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)								
		Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	BTEX	MTBE	Notes
MW-12	03/27/08	0.0566	0.0189	0.00270	-	-	0.00720	-	-	-
	06/30/08	0.00780	BRL	BRL	-	-	BRL	-	-	-
	09/19/08	0.0151	0.00140	BRL	-	-	BRL	-	-	-
	12/17/08	0.00400	BRL	BRL	-	-	BRL	-	-	-
	02/03/09	0.00210	BRL	BRL	-	-	BRL	-	-	-
	06/23/09	0.00550	BRL	BRL	-	-	BRL	-	-	-
	09/02/09	0.00650	BRL	BRL	-	-	<0.00100	-	-	-
	11/11/09	0.0654	0.0244	0.0150	-	-	0.0184	-	-	-
	02/18/10	0.00670	0.00480	BRL	-	-	BRL	-	-	-
	06/16/10	0.0272	0.00980	0.00230	-	-	0.00390	-	-	-
	09/28/10	0.00110	BRL	BRL	-	-	BRL	-	-	-
	12/23/10	0.0109	0.00830	BRL	-	-	0.00810	-	-	-
	03/23/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	06/16/11	0.0102	BRL	BRL	-	-	BRL	-	-	-
	09/12/11	0.00140	BRL	BRL	-	-	BRL	BRL	BRL	-
	12/15/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/21/12	<0.000310	<0.000259	<0.000291	-	-	BRL	-	-	-
	06/12/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	-	-
	09/26/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	<0.000954	-
	12/14/12	<0.000310	0.00140	<0.000291	-	-	0.00100	-	-	-

TALON LPE
"All the Pieces"

Table 2 - Groundwater Contaminant Concentrations BTEX
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)								
		Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	BTEX	MTBE	Notes
MW-13	03/27/08	0.598	BRL	0.0115	-	-	0.00860	-	-	-
	06/30/08	0.191	BRL	BRL	-	-	BRL	-	-	-
	09/19/08	2.82	BRL	0.0575	-	-	0.0890	-	-	-
	12/17/08	2.41	BRL	0.0206	-	-	0.0609	-	-	-
	02/03/09	2.90	BRL	BRL	-	-	BRL	-	-	-
	06/23/09	4.63	BRL	BRL	-	-	0.373	-	-	-
	09/02/09	4.29	BRL	BRL	-	-	0.104	-	-	-
	11/11/09	14.3	BRL	0.311	-	-	BRL	-	-	-
	02/18/10	14.5	BRL	0.478	-	-	0.495	-	-	-
	06/16/10	11.3	BRL	0.229	-	-	0.384	-	-	-
	09/28/10	16.3	BRL	0.397	-	-	0.257	-	-	-
	12/23/10	6.14	BRL	BRL	-	-	0.858	-	-	-
	03/23/11	11.3	BRL	0.933	-	-	2.37	-	-	-
	06/16/11	15.1	BRL	0.702	-	-	BRL	-	-	-
	09/12/11	23.1	BRL	0.537	-	-	0.445	24.1	BRL	-
	12/15/11	36.6	BRL	0.703	-	-	BRL	-	-	-
	03/21/12	33.2	<0.0518	0.409	-	-	0.540	-	-	-
	06/13/12	33.6	<0.0694	<0.0652	-	-	0.286	-	-	-
	09/27/12	17.1	<0.0174	0.102	-	-	0.187	-	<0.0477	-
	12/14/12	10.7	<0.0130	0.0690	-	-	BRL	-	-	-
MW-14	04/13/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	06/16/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	09/28/10	0.00320	0.00130	BRL	-	-	BRL	-	-	-
	12/23/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/23/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	06/16/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	09/12/11	BRL	BRL	BRL	-	-	BRL	BRL	BRL	-
	12/15/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/21/12	<0.000310	<0.000259	<0.000291	-	-	BRL	-	-	-
	06/12/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	-	-
	09/27/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	<0.000954	-
	12/14/12	<0.000310	<0.000259	<0.000291	-	-	BRL	-	-	-

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"All the Pieces"

Table 2 - Groundwater Contaminant Concentrations BTEX
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)								
		Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	BTEX	MTBE	Notes
MW-15	04/13/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	06/16/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	09/28/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	12/23/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/23/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	06/16/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	09/12/11	BRL	BRL	BRL	-	-	BRL	BRL	BRL	-
	12/15/11	0.0358	BRL	BRL	-	-	0.00100	-	-	-
	03/21/12	1.05	<0.00259	<0.00291	-	-	0.0252	-	-	-
	06/13/12	3.14	<0.0259	<0.0291	-	-	BRL	-	-	-
	09/27/12	7.89	<0.0174	0.141	-	-	0.113	-	<0.0477	-
	12/14/12	9.63	<0.0130	0.122	-	-	0.279	-	-	-
MW-16	04/13/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	06/16/10	0.00200	BRL	BRL	-	-	BRL	-	-	-
	09/28/10	0.00270	BRL	BRL	-	-	BRL	-	-	-
	12/23/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/23/11	0.00760	BRL	BRL	-	-	BRL	-	-	-
	06/16/11	0.0305	BRL	BRL	-	-	BRL	-	-	-
	09/12/11	0.0355	BRL	BRL	-	-	BRL	0.0355	BRL	-
	12/15/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/21/12	0.0675	<0.000259	<0.000291	-	-	0.00380	-	-	-
	06/13/12	0.0162	<0.000259	<0.000291	-	-	BRL	-	-	-
	09/27/12	0.0114	<0.000347	<0.000326	-	-	BRL	-	<0.000954	-
	12/14/12	0.0546	<0.000259	<0.000291	-	-	0.00420	-	-	-

TALON LPE "All the Pieces"

Table 2 - Groundwater Contaminant Concentrations BTEX
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)								
		Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	BTEX	MTBE	Notes
MW-17	09/28/10	0.0729	0.00440	BRL	-	-	0.00610	-	-	-
	12/23/10	0.175	BRL	BRL	-	-	0.0131	-	-	-
	03/24/11	0.104	0.00740	BRL	-	-	0.0236	-	-	-
	06/16/11	0.0545	BRL	BRL	-	-	0.0193	-	-	-
	09/14/11	0.0121	BRL	BRL	-	-	0.00410	0.0170	-	-
	12/15/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/21/12	<0.000310	<0.000259	<0.000291	-	-	BRL	-	-	-
	06/12/12	<0.000310	<0.000259	<0.000291	-	-	BRL	-	-	-
	09/27/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	<0.000954	-
	12/14/12	<0.000310	0.00120	<0.000291	-	-	0.00240	-	-	-
MW-18	09/28/10	0.111	0.00220	BRL	-	-	0.00310	-	-	-
	12/23/10	0.431	BRL	BRL	-	-	0.0158	-	-	-
	03/24/11	0.378	BRL	BRL	-	-	0.0293	-	-	-
	06/14/11	0.415	BRL	BRL	-	-	0.0281	-	-	-
	09/13/11	0.538	BRL	BRL	-	-	BRL	0.538	BRL	-
	12/15/11	0.194	BRL	BRL	-	-	0.0146	-	-	-
	03/21/12	<0.000310	<0.000259	<0.000291	-	-	0.00390	-	-	-
	06/12/12	0.0696	<0.000347	<0.000326	-	-	0.00750	-	-	-
	09/27/12	0.308	<0.000347	<0.000326	-	-	0.0226	-	<0.000954	-
	12/14/12	0.0465	<0.000259	<0.000291	-	-	0.00410	-	-	-
MW-19	09/28/10	0.0854	BRL	BRL	-	-	0.00330	-	-	-
	12/23/10	0.120	0.00390	BRL	-	-	0.0138	-	-	-
	03/24/11	0.112	0.00770	BRL	-	-	0.0239	-	-	-
	06/14/11	0.117	BRL	BRL	-	-	0.0168	-	-	-
	09/13/11	0.0906	BRL	BRL	-	-	0.00890	0.0995	0.0115	-
	12/15/11	0.0282	BRL	BRL	-	-	0.00230	-	-	-
	03/21/12	0.0341	<0.000259	<0.000291	-	-	0.00100	-	-	-
	06/12/12	0.0393	<0.000347	<0.000326	-	-	0.00170	-	-	-
	09/27/12	0.0501	<0.000259	<0.000291	-	-	0.00260	-	<0.000331	-
	12/14/12	0.00980	<0.000259	<0.000291	-	-	BRL	-	-	-

TALON
"All the Pieces"

Table 2 - Groundwater Contaminant Concentrations BTEX
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)								
		Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	BTEX	MTBE	Notes
MW-20	09/28/10	0.00170	BRL	BRL	-	-	BRL	-	-	-
	12/23/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/23/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	06/14/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	09/13/11	BRL	BRL	BRL	-	-	BRL	BRL	BRL	-
	12/15/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/21/12	<0.000310	<0.000259	<0.000291	-	-	BRL	-	-	-
	06/12/12	0.0121	<0.000347	<0.000326	-	-	BRL	-	-	-
	09/26/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	<0.000954	-
	12/14/12	<0.000310	<0.000259	<0.000291	-	-	BRL	-	-	-
MW-21	09/28/10	0.00140	0.00150	BRL	-	-	BRL	-	-	-
	12/23/10	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/23/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	06/14/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	09/13/11	BRL	BRL	BRL	-	-	BRL	BRL	BRL	-
	12/15/11	BRL	BRL	BRL	-	-	BRL	-	-	-
	03/21/12	<0.000310	<0.000259	<0.000291	-	-	BRL	-	-	-
	06/12/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	-	-
	09/26/12	<0.000371	<0.000347	<0.000326	-	-	BRL	-	<0.000954	-
	12/14/12	<0.000310	<0.000259	<0.000291	-	-	BRL	-	-	-

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes, analyzed by EPA Method 8021
C6-C12, >C12-C28, >C28-C35, and C6-C35 analyzed by Method TX1005
A = Not sampled due to PSH
I = Not sampled - well dry

TALON
"All the Pieces"

Table 3 - Groundwater Contaminant Concentrations - PAH Supplement
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)																		
		1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Notes
MW-1	09/20/08	0.161	0.184	BRL	BRL	BRL	BRL	BRL	0.000394	BRL	BRL	0.00384	BRL	0.0157	0.000891	0.0220	BRL	0.0932	0.0271	0.00158	-
	09/09/09	0.712	0.852	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.0144	BRL	0.0559	BRL	0.0758	BRL	0.339	0.104	BRL	-
	12/14/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	03/21/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	06/12/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	09/26/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	12/14/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
MW-2	09/20/08	0.185	0.213	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.00782	BRL	0.0141	0.00104	0.0210	BRL	0.0747	0.0253	0.00288	-
	09/02/09	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	-
	12/16/11	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	-
MW-3	09/20/08	0.807	0.872	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.0290	0.00121	0.0377	BRL	0.430	0.0445	BRL	-
	03/21/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	I
	06/12/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	I
	09/26/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	I
	12/14/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	I
MW-4	09/19/08	0.0355	0.0351	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.00266	BRL	0.00335	BRL	0.0675	0.00108	BRL	-
	09/03/09	0.0160	0.00812	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.000984	BRL	0.00240	BRL	0.0232	0.000904	BRL	-
	06/16/11	0.00846	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.00594	BRL	BRL	-
	12/14/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	03/21/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	06/12/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	09/26/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	12/14/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	I
MW-5	09/20/08	0.268	0.312	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.00481	BRL	0.0199	0.00119	0.0289	BRL	0.148	0.0336	0.00166	-
	09/03/09	3.05	3.61	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.208	BRL	0.302	BRL	1.47	0.390	BRL	-
	12/14/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	03/21/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	06/12/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	09/26/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	12/14/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
MW-6	09/20/08	0.0228	0.0266	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.000899	BRL	0.00269	BRL	0.00377	BRL	0.0156	0.00430	BRL	-
	09/03/09	0.832	0.992	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.0496	BRL	0.0696	BRL	0.431	0.0934	BRL	-
	12/14/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	03/21/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	06/12/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	09/26/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	12/14/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
MW-7	09/20/08	0.0314	0.0362	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.00280	BRL	0.00403	BRL	0.0422	0.00239	BRL	-
	09/03/09	0.892	1.05	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.0689	BRL	0.0893	BRL	0.435	0.125	BRL	-
	12/14/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	03/21/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	06/12/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	09/26/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	12/14/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A

TALON
"All the Pieces"

Table 3 - Groundwater Contaminant Concentrations - PAH Supplement
Moore to Jal #2
SRS #2002-10273

Sample Designation	Date Sampled	Concentration (mg/L)																			
		1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Notes
MW-8	09/19/08	0.00204	0.000297	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.000203	BRL	BRL	BRL	0.000405	BRL	BRL	-
	09/02/09	0.00735	0.00685	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.000376	BRL	0.000420	BRL	0.0108	BRL	BRL	-
MW-9	09/20/08	0.0702	0.0832	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.000956	BRL	0.00701	0.000219	0.00729	BRL	0.0840	0.00735	0.000350	-
	09/03/09	0.283	0.338	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.00495	BRL	0.0218	BRL	0.0282	BRL	0.142	0.0406	BRL	-
	12/14/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	03/21/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	06/12/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	09/26/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	12/14/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
MW-10	09/19/08	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	-
	09/02/09	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	-
MW-11	09/19/08	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	-
	09/02/09	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	-
MW-12	09/19/08	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	-
	09/02/09	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	-
MW-13	09/19/08	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	-
	09/02/09	0.00396	0.00126	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.000441	BRL	0.000418	BRL	0.00616	BRL	BRL	-
MW-17	12/15/11	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	-
	12/14/12	0.000100	0.000090	0.000120	0.000099	0.000078	0.000100	0.000089	0.000080	0.000079	0.000078	0.000076	0.000084	0.000100	0.000120	0.000099	0.000076	0.000120	0.000082	0.000068	-
MW-18	12/15/11	0.00175	0.00129	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.00272	0.00244	BRL	-
	12/14/12	0.00182	0.000825	0.000120	0.000099	0.000076	0.000100	0.000069	0.000080	0.000079	0.000076	0.000076	0.000084	0.000100	0.000120	0.000099	0.000076	0.002530	0.000082	0.000068	-
MW-19	12/15/11	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	-
	12/14/12	0.000100	0.000091	0.000120	0.000100	0.000079	0.000100	0.000070	0.000080	0.000079	0.000079	0.000076	0.000085	0.000100	0.000120	0.000100	0.000077	0.000120	0.000082	0.000069	-

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes, analyzed by EPA Method 8021
C6-C12, >C12-C28, >C28-C35, and C6-C35 analyzed by Method TX1005
A = Not sampled due to PSH
I = Not sampled - well dry

APPENDIX C

Laboratory Analytical Data Reports and Chains of Custody Documentation

Summary Report

Steve Killingsworth
Talon LPE-Midland
2901 State Highway 349
Midland, TX 79706

Report Date: March 27, 2012

Work Order: 12032303

Project Location: Hobbs, NM
Project Name: Jal #2
Project Number: 700376.045.01
SRS #: 2002-10273

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
292131	MW2	water	2012-03-21	10:00	2012-03-22
292132	MW8	water	2012-03-21	10:05	2012-03-22
292133	MW10	water	2012-03-21	10:10	2012-03-22
292134	MW11	water	2012-03-21	10:15	2012-03-22
292135	MW12	water	2012-03-21	10:20	2012-03-22
292136	MW13	water	2012-03-21	10:25	2012-03-22
292137	MW14	water	2012-03-21	10:30	2012-03-22
292138	MW15	water	2012-03-21	10:35	2012-03-22
292139	MW16	water	2012-03-21	10:40	2012-03-22
292140	MW17	water	2012-03-21	10:45	2012-03-22
292141	MW18	water	2012-03-21	10:50	2012-03-22
292142	MW19	water	2012-03-21	10:55	2012-03-22
292143	MW20	water	2012-03-21	11:00	2012-03-22
292144	MW21	water	2012-03-21	11:05	2012-03-22

	BTEX				MTBE
Sample - Field Code	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	MTBE (mg/L)
292131 - MW2	**0.00890** [1]	**0.0112**	<0.00500	**0.0124**	
292132 - MW8	**12.2**	<0.0500	**0.192**	**0.155**	
292133 - MW10	**0.00130**	<0.00100	<0.00100	<0.00100	
292134 - MW11	<0.00100	<0.00100	<0.00100	<0.00100	
292135 - MW12	<0.00100	<0.00100	<0.00100	<0.00100	
292136 - MW13	**33.2**	<0.200 Qr	**0.409** Qr	**0.540** Qr	
292137 - MW14	<0.00100	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	
292138 - MW15	**1.05**	<0.0100 Qr	<0.0100 Qr	**0.0252** Qr	
292139 - MW16	**0.0675**	<0.00100	<0.00100	**0.00380**	

continued ...

[1] Sample dilution due to soil in the voa.

This is only a summary. Please, refer to the complete report package for quality control data.

... continued

	BTEX				MTBE
Sample - Field Code	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	MTBE (mg/L)
292140 - MW17	<0.00100	<0.00100	<0.00100	<0.00100	
292141 - MW18	<0.00100	<0.00100	<0.00100	**0.00390**	
292142 - MW19	**0.0341**	<0.00100	<0.00100	**0.00100**	
292143 - MW20	<0.00100	<0.00100	<0.00100	<0.00100	
292144 - MW21	<0.00100	<0.00100	<0.00100	<0.00100	

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298
200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Steve Killingsworth
Talon LPE-Midland
2901 State Highway 349
Midland, TX, 79706

Report Date: March 27, 2012

Work Order: 12032303

Project Location: Hobbs, NM
Project Name: Jal #2
Project Number: 700376.045.01
SRS #: 2002-10273

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
292131	MW2	water	2012-03-21	10:00	2012-03-22
292132	MW8	water	2012-03-21	10:05	2012-03-22
292133	MW10	water	2012-03-21	10:10	2012-03-22
292134	MW11	water	2012-03-21	10:15	2012-03-22
292135	MW12	water	2012-03-21	10:20	2012-03-22
292136	MW13	water	2012-03-21	10:25	2012-03-22
292137	MW14	water	2012-03-21	10:30	2012-03-22
292138	MW15	water	2012-03-21	10:35	2012-03-22
292139	MW16	water	2012-03-21	10:40	2012-03-22
292140	MW17	water	2012-03-21	10:45	2012-03-22
292141	MW18	water	2012-03-21	10:50	2012-03-22
292142	MW19	water	2012-03-21	10:55	2012-03-22
292143	MW20	water	2012-03-21	11:00	2012-03-22
292144	MW21	water	2012-03-21	11:05	2012-03-22

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.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Report Contents

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Case Narrative

Samples for project Jal #2 were received by TraceAnalysis, Inc. on 2012-03-22 and assigned to work order 12032303. Samples for work order 12032303 were received intact at a temperature of 2.3 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	76103	2012-03-23 at 09:06	89652	2012-03-23 at 09:06
BTEX	S 8021B	76142	2012-03-26 at 14:24	89704	2012-03-26 at 14:24

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 12032303 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.

Analytical Report

Sample: 292131 - MW2

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89652	Date Analyzed:	2012-03-23	Analyzed By:	MT
Prep Batch:	76103	Sample Preparation:	2012-03-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.00890**	mg/L	5	0.00100
Toluene		1	**0.0112**	mg/L	5	0.00100
Ethylbenzene	U	1	<0.00500	mg/L	5	0.00100
Xylene	B	1	**0.0124**	mg/L	5	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.456	mg/L	5	0.500	91	70 - 130
4-Bromofluorobenzene (4-BFB)			0.437	mg/L	5	0.500	87	70 - 130

Sample: 292132 - MW8

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89652	Date Analyzed:	2012-03-23	Analyzed By:	MT
Prep Batch:	76103	Sample Preparation:	2012-03-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**12.2**	mg/L	50	0.00100
Toluene		1	<0.0500	mg/L	50	0.00100
Ethylbenzene		1	**0.192**	mg/L	50	0.00100
Xylene	B	1	**0.155**	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.99	mg/L	50	5.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			4.46	mg/L	50	5.00	89	70 - 130

Sample: 292133 - MW10

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89652	Date Analyzed:	2012-03-23	Analyzed By:	MT
Prep Batch:	76103	Sample Preparation:	2012-03-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.00130**	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0895	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0872	mg/L	1	0.100	87	70 - 130

Sample: 292134 - MW11

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89652	Date Analyzed:	2012-03-23	Analyzed By:	MT
Prep Batch:	76103	Sample Preparation:	2012-03-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0891	mg/L	1	0.100	89	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0870	mg/L	1	0.100	87	70 - 130

Sample: 292135 - MW12

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89652	Date Analyzed:	2012-03-23	Analyzed By:	MT
Prep Batch:	76103	Sample Preparation:	2012-03-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0886	mg/L	1	0.100	89	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0865	mg/L	1	0.100	86	70 - 130

Sample: 292136 - MW13

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89704	Date Analyzed:	2012-03-26	Analyzed By:	ZLM
Prep Batch:	76142	Sample Preparation:	2012-03-26	Prepared By:	ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**33.2**	mg/L	200	0.00100
Toluene	Qr,U	1	<0.200	mg/L	200	0.00100
Ethylbenzene	B,Qr	1	**0.409**	mg/L	200	0.00100
Xylene	B,Qr	1	**0.540**	mg/L	200	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			20.1	mg/L	200	20.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)			19.4	mg/L	200	20.0	97	70 - 130

Sample: 292137 - MW14

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89704	Date Analyzed:	2012-03-26	Analyzed By:	ZLM
Prep Batch:	76142	Sample Preparation:	2012-03-26	Prepared By:	ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0951	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0963	mg/L	1	0.100	96	70 - 130

Sample: 292138 - MW15

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89704	Date Analyzed:	2012-03-26	Analyzed By:	ZLM
Prep Batch:	76142	Sample Preparation:	2012-03-26	Prepared By:	ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**1.05**	mg/L	10	0.00100
Toluene	Qr,U	1	<0.0100	mg/L	10	0.00100
Ethylbenzene	Qr,U	1	<0.0100	mg/L	10	0.00100
Xylene	B,Qr	1	**0.0252**	mg/L	10	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.991	mg/L	10	1.00	99	70 - 130
4-Bromofluorobenzene (4-BFB)			0.988	mg/L	10	1.00	99	70 - 130

Sample: 292139 - MW16

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89652	Date Analyzed:	2012-03-23	Analyzed By:	MT
Prep Batch:	76103	Sample Preparation:	2012-03-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.0675**	mg/L	1	0.00100
Toluene		1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Jb	1	<0.00100	mg/L	1	0.00100
Xylene	B	1	**0.00380**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0961	mg/L	1	0.100	96	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0882	mg/L	1	0.100	88	70 - 130

Sample: 292140 - MW17

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89652	Date Analyzed:	2012-03-23	Analyzed By:	MT
Prep Batch:	76103	Sample Preparation:	2012-03-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	Jb	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0907	mg/L	1	0.100	91	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0877	mg/L	1	0.100	88	70 - 130

Sample: 292141 - MW18

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89652	Date Analyzed:	2012-03-23	Analyzed By:	MT
Prep Batch:	76103	Sample Preparation:	2012-03-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	B	1	**0.00390**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.102	mg/L	1	0.100	102	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0880	mg/L	1	0.100	88	70 - 130

Sample: 292142 - MW19

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89652	Date Analyzed:	2012-03-23	Analyzed By:	MT
Prep Batch:	76103	Sample Preparation:	2012-03-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.0341**	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	B	1	**0.00100**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0830	mg/L	1	0.100	83	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0894	mg/L	1	0.100	89	70 - 130

Sample: 292143 - MW20

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89652	Date Analyzed:	2012-03-23	Analyzed By:	MT
Prep Batch:	76103	Sample Preparation:	2012-03-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0899	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0864	mg/L	1	0.100	86	70 - 130

Sample: 292144 - MW21

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	89652	Date Analyzed:	2012-03-23	Analyzed By:	MT
Prep Batch:	76103	Sample Preparation:	2012-03-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0900	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0886	mg/L	1	0.100	89	70 - 130

Method Blanks

Method Blank (1) QC Batch: 89652

QC Batch: 89652 | Date Analyzed: 2012-03-23 | Analyzed By: MT
Prep Batch: 76103 | QC Preparation: 2012-03-23 | Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000310	mg/L	0.001
Toluene		1	<0.000259	mg/L	0.001
Ethylbenzene		1	0.000300	mg/L	0.001
Xylene		1	0.000900	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0891	mg/L	1	0.100	89	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0871	mg/L	1	0.100	87	70 - 130

Method Blank (1) QC Batch: 89704

QC Batch: 89704 | Date Analyzed: 2012-03-26 | Analyzed By: ZLM
Prep Batch: 76142 | QC Preparation: 2012-03-26 | Prepared By: ZLM

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000310	mg/L	0.001
Toluene		1	<0.000259	mg/L	0.001
Ethylbenzene		1	0.000400	mg/L	0.001
Xylene		1	0.00100	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0954	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0985	mg/L	1	0.100	98	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 89652 | Date Analyzed: 2012-03-23 | Analyzed By: MT
Prep Batch: 76103 | QC Preparation: 2012-03-23 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0917	mg/L	1	0.100	<0.000310	92	74.2 - 120
Toluene		1	0.0889	mg/L	1	0.100	<0.000259	89	75.8 - 120
Ethylbenzene		1	0.0897	mg/L	1	0.100	0.0003	90	71.8 - 120
Xylene		1	0.270	mg/L	1	0.300	0.0009	90	73.8 - 120

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0916	mg/L	1	0.100	<0.000310	92	74.2 - 120	0	20
Toluene		1	0.0892	mg/L	1	0.100	<0.000259	89	75.8 - 120	0	20
Ethylbenzene		1	0.0899	mg/L	1	0.100	0.0003	90	71.8 - 120	0	20
Xylene		1	0.269	mg/L	1	0.300	0.0009	90	73.8 - 120	0	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0922	0.0919	mg/L	1	0.100	92	92	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0900	0.0901	mg/L	1	0.100	90	90	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 89704 | Date Analyzed: 2012-03-26 | Analyzed By: ZLM
Prep Batch: 76142 | QC Preparation: 2012-03-26 | Prepared By: ZLM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.104	mg/L	1	0.100	<0.000310	104	74.2 - 120
Toluene		1	0.106	mg/L	1	0.100	<0.000259	106	75.8 - 120
Ethylbenzene		1	0.104	mg/L	1	0.100	0.0004	104	71.8 - 120
Xylene		1	0.312	mg/L	1	0.300	0.001	104	73.8 - 120

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.104	mg/L	1	0.100	<0.000310	104	74.2 - 120	1	20
Toluene		1	0.107	mg/L	1	0.100	<0.000259	107	75.8 - 120	1	20
Ethylbenzene		1	0.105	mg/L	1	0.100	0.0004	105	71.8 - 120	1	20
Xylene		1	0.314	mg/L	1	0.300	0.001	105	73.8 - 120	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.100	0.0991	mg/L	1	0.100	100	99	70 - 130
4-Bromofluorobenzene (4-BFB)	0.102	0.101	mg/L	1	0.100	102	101	70 - 130

Matrix Spike (MS-1) Spiked Sample: 292118

QC Batch: 89652 | Date Analyzed: 2012-03-23 | Analyzed By: MT
Prep Batch: 76103 | QC Preparation: 2012-03-23 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0777	mg/L	1	0.100	0.0059	72	47 - 131
Toluene		1	0.0752	mg/L	1	0.100	<0.000259	75	52.2 - 128
Ethylbenzene		1	0.0747	mg/L	1	0.100	<0.000291	74	26.5 - 154
Xylene		1	0.224	mg/L	1	0.300	0.0007	74	50.1 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0717	mg/L	1	0.100	0.0059	66	47 - 131	8	20
Toluene		1	0.0683	mg/L	1	0.100	<0.000259	68	52.2 - 128	10	20
Ethylbenzene		1	0.0697	mg/L	1	0.100	<0.000291	70	26.5 - 154	7	20
Xylene		1	0.208	mg/L	1	0.300	0.0007	69	50.1 - 130	7	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0927	0.0905	mg/L	1	0.1	93	90	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0904	0.0899	mg/L	1	0.1	90	90	70 - 130

Matrix Spike (MS-1) Spiked Sample: 292136

QC Batch: 89704 | Date Analyzed: 2012-03-26 | Analyzed By: ZLM
Prep Batch: 76142 | QC Preparation: 2012-03-26 | Prepared By: ZLM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	50.0	mg/L	200	20.0	33.2	84	47 - 131
Toluene		1	17.1	mg/L	200	20.0	<0.0518	86	52.2 - 128
Ethylbenzene		1	17.1	mg/L	200	20.0	0.409	83	26.5 - 154
Xylene		1	50.8	mg/L	200	60.0	0.54	84	50.1 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	49.1	mg/L	200	20.0	33.2	80	47 - 131	2	20
Toluene	Qr Qr	1	21.2	mg/L	200	20.0	<0.0518	106	52.2 - 128	21	20
Ethylbenzene	Qr Qr	1	21.1	mg/L	200	20.0	0.409	103	26.5 - 154	21	20
Xylene	Qr Qr	1	62.8	mg/L	200	60.0	0.54	104	50.1 - 130	21	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	21.9	21.0	mg/L	200	20	110	105	70 - 130
4-Bromofluorobenzene (4-BFB)	20.2	20.3	mg/L	200	20	101	102	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 89652 | Date Analyzed: 2012-03-23 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0929	93	80 - 120	2012-03-23
Toluene		1	mg/L	0.100	0.0911	91	80 - 120	2012-03-23
Ethylbenzene		1	mg/L	0.100	0.0921	92	80 - 120	2012-03-23
Xylene		1	mg/L	0.300	0.276	92	80 - 120	2012-03-23

Standard (CCV-2)

QC Batch: 89652 | Date Analyzed: 2012-03-23 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0894	89	80 - 120	2012-03-23
Toluene		1	mg/L	0.100	0.0877	88	80 - 120	2012-03-23
Ethylbenzene		1	mg/L	0.100	0.0884	88	80 - 120	2012-03-23
Xylene		1	mg/L	0.300	0.266	89	80 - 120	2012-03-23

Standard (CCV-3)

QC Batch: 89652 | Date Analyzed: 2012-03-23 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0908	91	80 - 120	2012-03-23
Toluene		1	mg/L	0.100	0.0883	88	80 - 120	2012-03-23
Ethylbenzene		1	mg/L	0.100	0.0884	88	80 - 120	2012-03-23
Xylene		1	mg/L	0.300	0.266	89	80 - 120	2012-03-23

Standard (CCV-1)

QC Batch: 89704 | Date Analyzed: 2012-03-26 | Analyzed By: ZLM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0976	98	80 - 120	2012-03-26
Toluene		1	mg/L	0.100	0.0978	98	80 - 120	2012-03-26
Ethylbenzene		1	mg/L	0.100	0.0976	98	80 - 120	2012-03-26
Xylene		1	mg/L	0.300	0.292	97	80 - 120	2012-03-26

Standard (CCV-2)

QC Batch: 89704 | Date Analyzed: 2012-03-26 | Analyzed By: ZLM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.102	102	80 - 120	2012-03-26
Toluene		1	mg/L	0.100	0.104	104	80 - 120	2012-03-26
Ethylbenzene		1	mg/L	0.100	0.102	102	80 - 120	2012-03-26
Xylene		1	mg/L	0.300	0.305	102	80 - 120	2012-03-26

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-12-6	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Result Comments

1 Sample dilution due to soil in the voa.

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 12032303

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Talon IPE — **Phone #:**

Address: (Street, City, Zip) 2901 State Hwy 349 79706 — **Fax #:**

Contact Person: Steve Killingsworth — **E-mail:** skillingsworth@talonlpe.com

Invoice to: (If different from above) 2002-10273

Project #: 700376.045.01 — **Project Name:** Moore to Jal #2

Project Location (including state): ~~Eunice~~ Hobbs NM — **Sampler Signature:** Brad Ivy

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity	Na, Ca, Mg, K, TDS, EC						Turn Around Time if different from standard	Hold
29213[illegible]	MW2	3	40z	X				X				X		3/21	1000		X																							
132	MW 8														1005																									
133	MW 10														1010																									
134	MW 11														1015																									
135	MW 12														1020																									
136	MW 13														1025																									
137	MW 14														1030																									
138	MW 15														1035																									
139	MW 16														1040																									
140	MW 17														1045																									
141	MW 19														1050																									

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
Brad Ivy	Talon	3/22/12	4:00pm					INST ___ °C OBS ___ °C COR ___ °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST ___ °C OBS ___ °C COR ___ °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST 1.2 °C OBS 2.4 °C COR 2.3 °C
						3/22/12	4:00	

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:
~~Call Cathy 407-6779~~
~~TPH 1005~~ results to ~~determine PAH~~

- Dry Weight Basis Required
- TRRP Report Required
- Check If Special Reporting Limits Are Needed

Carrier #

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

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LAB Order ID # 12032303

Page _____ of _____

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
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Tel (806) 794-1296
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1 (800) 378-1296

5002 Basin Street, Suite A1
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200 East Sunset Rd., Suite E
El Paso, Texas 79922
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Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Talon LPE — **Phone #:**

Address: (Street, City, Zip) 2901 State HWY 349 79706 — **Fax #:**

Contact Person: Steve Killingsworth — **E-mail:** SKillingsworth@talonlpe.com

Invoice to: (If different from above) 2002-10273

Project #: 700376.045.01 — **Project Name:** Moore to Jal #2

Project Location (including state): Hobbs NM — **Sampler Signature:** Brad Tay

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
142	MW19	3	40z	X				X				X		3/21	1055
143	MW20	↓	↓	↓				↓				↓		↓	1100
144	MW21	↓	↓	↓				↓				↓		↓	1105

MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity	Na, Ca, Mg, K, TDS, EC					Turn Around Time if different from standard	Hold
	X																								
	↓																								
	↓																								

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
Brad Tay	Talon	3/22/12	4:00					INST ____ °C OBS ____ °C COR ____ °C
								INST ____ °C OBS ____ °C COR ____ °C
								INST DRY OBS 2.4 °C COR 2.4 °C

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:
Call Cathy 407-6779
TPH 12-28
Results to determine
PAH

- Dry Weight Basis Required
- TRRP Report Required
- Check If Special Reporting Limits Are Needed

Carrier # _____

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

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Summary Report

Chris Spore
Talon LPE-Midland
2901 State Highway 349
Midland, TX 79706

Report Date: June 20, 2012

Work Order: 12061401

Project Location: Hobbs, NM
Project Name: Jal #2
Project Number: 700376.045.01
SRS #: 2002-10273

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
301025	MW-2	water	2012-06-13	10:30	2012-06-13
301026	MW-8	water	2012-06-13	10:05	2012-06-13
301027	MW-10	water	2012-06-12	13:17	2012-06-13
301028	MW-11	water	2012-06-12	11:15	2012-06-13
301029	MW-12	water	2012-06-12	10:57	2012-06-13
301030	MW-13	water	2012-06-13	10:17	2012-06-13
301031	MW-14	water	2012-06-12	10:45	2012-06-13
301032	MW-15	water	2012-06-13	09:50	2012-06-13
301033	MW-16	water	2012-06-13	09:35	2012-06-13
301034	MW-17	water	2012-06-12	11:35	2012-06-13
301035	MW-18	water	2012-06-12	13:05	2012-06-13
301036	MW-19	water	2012-06-12	13:35	2012-06-13
301037	MW-20	water	2012-06-12	10:05	2012-06-13
301038	MW-21	water	2012-06-12	10:15	2012-06-13

	BTEX				MTBE
Sample - Field Code	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	MTBE (mg/L)
301025 - MW-2	<0.00500 [1]	<0.00500	<0.00500	**0.00550**	
301026 - MW-8	**6.18**	<0.100	**0.380**	<0.100	
301027 - MW-10	<0.00100	<0.00100	<0.00100	<0.00100	
301028 - MW-11	<0.00100	<0.00100	<0.00100	<0.00100	
301029 - MW-12	<0.00100	<0.00100	<0.00100	<0.00100	
301030 - MW-13	**33.6**	<0.200	<0.200	**0.286**	
301031 - MW-14	<0.00100	<0.00100	<0.00100	<0.00100	
301032 - MW-15	**3.14**	<0.100	<0.100	<0.100	
301033 - MW-16	**0.0162**	<0.00100	<0.00100	<0.00100	

continued ...

[1]Sample dilution due to soil.

... continued

	BTEX				MTBE
Sample - Field Code	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	MTBE (mg/L)
301034 - MW-17	<0.00100	<0.00100	<0.00100	<0.00100	
301035 - MW-18	**0.0696**	<0.00100	<0.00100	**0.00750**	
301036 - MW-19	**0.0393**	<0.00100	<0.00100	**0.00170**	
301037 - MW-20	**0.0121**	<0.00100	<0.00100	<0.00100	
301038 - MW-21	<0.00100	<0.00100	<0.00100	<0.00100	

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298
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5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Chris Spore
Talon LPE-Midland
2901 State Highway 349
Midland, TX, 79706

Report Date: June 20, 2012

Work Order: 12061401

Project Location: Hobbs, NM
Project Name: Jal #2
Project Number: 700376.045.01
SRS #: 2002-10273

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
301025	MW-2	water	2012-06-13	10:30	2012-06-13
301026	MW-8	water	2012-06-13	10:05	2012-06-13
301027	MW-10	water	2012-06-12	13:17	2012-06-13
301028	MW-11	water	2012-06-12	11:15	2012-06-13
301029	MW-12	water	2012-06-12	10:57	2012-06-13
301030	MW-13	water	2012-06-13	10:17	2012-06-13
301031	MW-14	water	2012-06-12	10:45	2012-06-13
301032	MW-15	water	2012-06-13	09:50	2012-06-13
301033	MW-16	water	2012-06-13	09:35	2012-06-13
301034	MW-17	water	2012-06-12	11:35	2012-06-13
301035	MW-18	water	2012-06-12	13:05	2012-06-13
301036	MW-19	water	2012-06-12	13:35	2012-06-13
301037	MW-20	water	2012-06-12	10:05	2012-06-13
301038	MW-21	water	2012-06-12	10:15	2012-06-13

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 23 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Jal #2 were received by TraceAnalysis, Inc. on 2012-06-13 and assigned to work order 12061401. Samples for work order 12061401 were received intact without headspace and at a temperature of 4.3 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	78173	2012-06-14 at 16:10	92148	2012-06-14 at 16:10
BTEX	S 8021B	78254	2012-06-18 at 08:29	92249	2012-06-18 at 08:29
BTEX	S 8021B	78256	2012-06-18 at 08:30	92253	2012-06-18 at 08:30

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 12061401 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.

Analytical Report

Sample: 301025 - MW-2

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92249	Date Analyzed:	2012-06-18	Analyzed By:	ZLM
Prep Batch:	78254	Sample Preparation:	2012-06-18	Prepared By:	ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	1	1	<0.00500	mg/L	5	0.00100
Toluene		1	<0.00500	mg/L	5	0.00100
Ethylbenzene	U	1	<0.00500	mg/L	5	0.00100
Xylene		1	**0.00550**	mg/L	5	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.512	mg/L	5	0.500	102	70 - 130
4-Bromofluorobenzene (4-BFB)			0.527	mg/L	5	0.500	105	70 - 130

Sample: 301026 - MW-8

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92249	Date Analyzed:	2012-06-18	Analyzed By:	ZLM
Prep Batch:	78254	Sample Preparation:	2012-06-18	Prepared By:	ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**6.18**	mg/L	100	0.00100
Toluene	U	1	<0.100	mg/L	100	0.00100
Ethylbenzene		1	**0.380**	mg/L	100	0.00100
Xylene	U	1	<0.100	mg/L	100	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			10.1	mg/L	100	10.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)			10.5	mg/L	100	10.0	105	70 - 130

Sample: 301027 - MW-10

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92249	Date Analyzed:	2012-06-18	Analyzed By:	ZLM
Prep Batch:	78254	Sample Preparation:	2012-06-18	Prepared By:	ZLM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.102	mg/L	1	0.100	102	70 - 130
4-Bromofluorobenzene (4-BFB)			0.105	mg/L	1	0.100	105	70 - 130

Sample: 301028 - MW-11

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92249	Date Analyzed:	2012-06-18	Analyzed By:	ZLM
Prep Batch:	78254	Sample Preparation:	2012-06-18	Prepared By:	ZLM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.102	mg/L	1	0.100	102	70 - 130
4-Bromofluorobenzene (4-BFB)			0.105	mg/L	1	0.100	105	70 - 130

Sample: 301029 - MW-12

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92249	Date Analyzed:	2012-06-18	Analyzed By:	ZLM
Prep Batch:	78254	Sample Preparation:	2012-06-18	Prepared By:	ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.102	mg/L	1	0.100	102	70 - 130
4-Bromofluorobenzene (4-BFB)			0.104	mg/L	1	0.100	104	70 - 130

Sample: 301030 - MW-13

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92249	Date Analyzed:	2012-06-18	Analyzed By:	ZLM
Prep Batch:	78254	Sample Preparation:	2012-06-18	Prepared By:	ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**33.6**	mg/L	200	0.00100
Toluene	U	1	<0.200	mg/L	200	0.00100
Ethylbenzene		1	<0.200	mg/L	200	0.00100
Xylene		1	**0.286**	mg/L	200	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			19.4	mg/L	200	20.0	97	70 - 130
4-Bromofluorobenzene (4-BFB)			20.5	mg/L	200	20.0	102	70 - 130

Sample: 301031 - MW-14

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92249	Date Analyzed:	2012-06-18	Analyzed By:	ZLM
Prep Batch:	78254	Sample Preparation:	2012-06-18	Prepared By:	ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.102	mg/L	1	0.100	102	70 - 130
4-Bromofluorobenzene (4-BFB)			0.103	mg/L	1	0.100	103	70 - 130

Sample: 301032 - MW-15

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92253	Date Analyzed:	2012-06-18	Analyzed By:	ZLM
Prep Batch:	78256	Sample Preparation:	2012-06-18	Prepared By:	ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**3.14**	mg/L	100	0.00100
Toluene	U	1	<0.100	mg/L	100	0.00100
Ethylbenzene	Jb	1	<0.100	mg/L	100	0.00100
Xylene	Jb	1	<0.100	mg/L	100	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			8.13	mg/L	100	10.0	81	70 - 130
4-Bromofluorobenzene (4-BFB)			8.69	mg/L	100	10.0	87	70 - 130

Sample: 301033 - MW-16

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92253	Date Analyzed:	2012-06-18	Analyzed By:	ZLM
Prep Batch:	78256	Sample Preparation:	2012-06-18	Prepared By:	ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.0162**	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	Jb	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0814	mg/L	1	0.100	81	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0869	mg/L	1	0.100	87	70 - 130

Sample: 301034 - MW-17

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92253	Date Analyzed:	2012-06-18	Analyzed By:	ZLM
Prep Batch:	78256	Sample Preparation:	2012-06-18	Prepared By:	ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0821	mg/L	1	0.100	82	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0864	mg/L	1	0.100	86	70 - 130

Sample: 301035 - MW-18

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92148	Date Analyzed:	2012-06-14	Analyzed By:	MT
Prep Batch:	78173	Sample Preparation:	2012-06-14	Prepared By:	MT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene		1	**0.0696**	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene		1	**0.00750**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.113	mg/L	1	0.100	113	70 - 130
4-Bromofluorobenzene (4-BFB)			0.104	mg/L	1	0.100	104	70 - 130

Sample: 301036 - MW-19

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92148	Date Analyzed:	2012-06-14	Analyzed By:	MT
Prep Batch:	78173	Sample Preparation:	2012-06-14	Prepared By:	MT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene		1	**0.0393**	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene		1	**0.00170**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0965	mg/L	1	0.100	96	70 - 130
4-Bromofluorobenzene (4-BFB)			0.101	mg/L	1	0.100	101	70 - 130

Sample: 301037 - MW-20

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92148	Date Analyzed:	2012-06-14	Analyzed By:	MT
Prep Batch:	78173	Sample Preparation:	2012-06-14	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.0121**	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene		1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.102	mg/L	1	0.100	102	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0975	mg/L	1	0.100	98	70 - 130

Sample: 301038 - MW-21

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	92148	Date Analyzed:	2012-06-14	Analyzed By:	MT
Prep Batch:	78173	Sample Preparation:	2012-06-14	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.105	mg/L	1	0.100	105	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0956	mg/L	1	0.100	96	70 - 130

Method Blanks

Method Blank (1) QC Batch: 92148

QC Batch: 92148 | Date Analyzed: 2012-06-14 | Analyzed By: MT
Prep Batch: 78173 | QC Preparation: 2012-06-14 | Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000371	mg/L	0.001
Toluene		1	<0.000347	mg/L	0.001
Ethylbenzene		1	<0.000326	mg/L	0.001
Xylene		1	<0.000357	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.102	mg/L	1	0.100	102	70 - 130
4-Bromofluorobenzene (4-BFB)			0.102	mg/L	1	0.100	102	70 - 130

Method Blank (1) QC Batch: 92249

QC Batch: 92249 | Date Analyzed: 2012-06-18 | Analyzed By: ZLM
Prep Batch: 78254 | QC Preparation: 2012-06-18 | Prepared By: ZLM

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000371	mg/L	0.001
Toluene		1	<0.000347	mg/L	0.001
Ethylbenzene		1	<0.000326	mg/L	0.001
Xylene		1	<0.000357	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.102	mg/L	1	0.100	102	70 - 130
4-Bromofluorobenzene (4-BFB)			0.107	mg/L	1	0.100	107	70 - 130

Method Blank (1) QC Batch: 92253

QC Batch: 92253 | Date Analyzed: 2012-06-18 | Analyzed By: ZLM
Prep Batch: 78256 | QC Preparation: 2012-06-18 | Prepared By: ZLM

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000310	mg/L	0.001
Toluene		1	<0.000259	mg/L	0.001
Ethylbenzene		1	0.000400	mg/L	0.001
Xylene		1	0.00110	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0816	mg/L	1	0.100	82	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0875	mg/L	1	0.100	88	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 92148 | Date Analyzed: 2012-06-14 | Analyzed By: MT
Prep Batch: 78173 | QC Preparation: 2012-06-14 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.102	mg/L	1	0.100	<0.000371	102	78.6 - 120
Toluene		1	0.0992	mg/L	1	0.100	<0.000347	99	79.6 - 120
Ethylbenzene		1	0.0986	mg/L	1	0.100	<0.000326	99	80 - 120
Xylene		1	0.286	mg/L	1	0.300	<0.000357	95	79.3 - 120

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.100	mg/L	1	0.100	<0.000371	100	78.6 - 120	2	20
Toluene		1	0.0992	mg/L	1	0.100	<0.000347	99	79.6 - 120	0	20
Ethylbenzene		1	0.0979	mg/L	1	0.100	<0.000326	98	80 - 120	1	20
Xylene		1	0.288	mg/L	1	0.300	<0.000357	96	79.3 - 120	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0967	0.0965	mg/L	1	0.100	97	96	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0948	0.0964	mg/L	1	0.100	95	96	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 92249 | Date Analyzed: 2012-06-18 | Analyzed By: ZLM
Prep Batch: 78254 | QC Preparation: 2012-06-18 | Prepared By: ZLM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.100	mg/L	1	0.100	<0.000371	100	78.6 - 120
Toluene		1	0.0988	mg/L	1	0.100	<0.000347	99	79.6 - 120
Ethylbenzene		1	0.0974	mg/L	1	0.100	<0.000326	97	80 - 120
Xylene		1	0.280	mg/L	1	0.300	<0.000357	93	79.3 - 120

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.100	mg/L	1	0.100	<0.000371	100	78.6 - 120	0	20
Toluene		1	0.0991	mg/L	1	0.100	<0.000347	99	79.6 - 120	0	20
Ethylbenzene		1	0.0975	mg/L	1	0.100	<0.000326	98	80 - 120	0	20
Xylene		1	0.283	mg/L	1	0.300	<0.000357	94	79.3 - 120	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0978	0.0985	mg/L	1	0.100	98	98	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0980	0.0987	mg/L	1	0.100	98	99	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 92253 | Date Analyzed: 2012-06-18 | Analyzed By: ZLM
Prep Batch: 78256 | QC Preparation: 2012-06-18 | Prepared By: ZLM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0858	mg/L	1	0.100	<0.000310	86	74.2 - 120
Toluene		1	0.0882	mg/L	1	0.100	<0.000259	88	75.8 - 120
Ethylbenzene		1	0.0864	mg/L	1	0.100	0.0004	86	71.8 - 120
Xylene		1	0.262	mg/L	1	0.300	0.0011	87	73.8 - 120

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0872	mg/L	1	0.100	<0.000310	87	74.2 - 120	2	20
Toluene		1	0.0892	mg/L	1	0.100	<0.000259	89	75.8 - 120	1	20
Ethylbenzene		1	0.0883	mg/L	1	0.100	0.0004	88	71.8 - 120	2	20
Xylene		1	0.268	mg/L	1	0.300	0.0011	89	73.8 - 120	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0832	0.0829	mg/L	1	0.100	83	83	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0895	0.0901	mg/L	1	0.100	90	90	70 - 130

Matrix Spike (MS-1) Spiked Sample: 301083

QC Batch: 92148 | Date Analyzed: 2012-06-14 | Analyzed By: MT
Prep Batch: 78173 | QC Preparation: 2012-06-14 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.117	mg/L	1	0.100	0.0152	102	42.2 - 136
Toluene		1	0.102	mg/L	1	0.100	0.0012	101	44.3 - 133
Ethylbenzene		1	0.102	mg/L	1	0.100	0.0009	101	45.6 - 132
Xylene		1	0.301	mg/L	1	0.300	0.0076	98	44.7 - 128

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.116	mg/L	1	0.100	0.0152	101	42.2 - 136	1	20
Toluene		1	0.103	mg/L	1	0.100	0.0012	102	44.3 - 133	1	20
Ethylbenzene		1	0.103	mg/L	1	0.100	0.0009	102	45.6 - 132	1	20
Xylene		1	0.303	mg/L	1	0.300	0.0076	98	44.7 - 128	1	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0972	0.0959	mg/L	1	0.1	97	96	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0958	0.0959	mg/L	1	0.1	96	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 300776

QC Batch: 92249 | Date Analyzed: 2012-06-18 | Analyzed By: ZLM
Prep Batch: 78254 | QC Preparation: 2012-06-18 | Prepared By: ZLM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.67	mg/L	10	1.00	0.6	107	42.2 - 136
Toluene		1	1.18	mg/L	10	1.00	0.165	102	44.3 - 133
Ethylbenzene		1	1.09	mg/L	10	1.00	0.104	99	45.6 - 132
Xylene		1	2.88	mg/L	10	3.00	0.0589	94	44.7 - 128

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	1.66	mg/L	10	1.00	0.6	106	42.2 - 136	1	20
Toluene		1	1.17	mg/L	10	1.00	0.165	100	44.3 - 133	1	20

continued ...

matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Ethylbenzene		1	1.09	mg/L	10	1.00	0.104	99	45.6 - 132	0	20
Xylene		1	2.87	mg/L	10	3.00	0.0589	94	44.7 - 128	0	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.977	0.960	mg/L	10	1	98	96	70 - 130
4-Bromofluorobenzene (4-BFB)	0.996	0.988	mg/L	10	1	100	99	70 - 130

Matrix Spike (MS-1) Spiked Sample: 301180

QC Batch: 92253 | Date Analyzed: 2012-06-18 | Analyzed By: ZLM
Prep Batch: 78256 | QC Preparation: 2012-06-18 | Prepared By: ZLM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0865	mg/L	1	0.100	<0.000310	86	47 - 131
Toluene		1	0.0891	mg/L	1	0.100	<0.000259	89	52.2 - 128
Ethylbenzene		1	0.0852	mg/L	1	0.100	<0.000291	85	26.5 - 154
Xylene		1	0.252	mg/L	1	0.300	0.0007	84	50.1 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0841	mg/L	1	0.100	<0.000310	84	47 - 131	3	20
Toluene		1	0.0853	mg/L	1	0.100	<0.000259	85	52.2 - 128	4	20
Ethylbenzene		1	0.0832	mg/L	1	0.100	<0.000291	83	26.5 - 154	2	20
Xylene		1	0.247	mg/L	1	0.300	0.0007	82	50.1 - 130	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0820	0.0810	mg/L	1	0.1	82	81	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0883	0.0881	mg/L	1	0.1	88	88	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 92148 | Date Analyzed: 2012-06-14 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0985	98	80 - 120	2012-06-14
Toluene		1	mg/L	0.100	0.0970	97	80 - 120	2012-06-14
Ethylbenzene		1	mg/L	0.100	0.0972	97	80 - 120	2012-06-14
Xylene		1	mg/L	0.300	0.283	94	80 - 120	2012-06-14

Standard (CCV-2)

QC Batch: 92148 | Date Analyzed: 2012-06-14 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0979	98	80 - 120	2012-06-14
Toluene		1	mg/L	0.100	0.0971	97	80 - 120	2012-06-14
Ethylbenzene		1	mg/L	0.100	0.0965	96	80 - 120	2012-06-14
Xylene		1	mg/L	0.300	0.280	93	80 - 120	2012-06-14

Standard (CCV-3)

QC Batch: 92148 | Date Analyzed: 2012-06-14 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.101	101	80 - 120	2012-06-14
Toluene		1	mg/L	0.100	0.0986	99	80 - 120	2012-06-14
Ethylbenzene		1	mg/L	0.100	0.0980	98	80 - 120	2012-06-14
Xylene		1	mg/L	0.300	0.284	95	80 - 120	2012-06-14

Standard (CCV-1)

QC Batch: 92249 | Date Analyzed: 2012-06-18 | Analyzed By: ZLM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0986	99	80 - 120	2012-06-18
Toluene		1	mg/L	0.100	0.0984	98	80 - 120	2012-06-18
Ethylbenzene		1	mg/L	0.100	0.0969	97	80 - 120	2012-06-18
Xylene		1	mg/L	0.300	0.281	94	80 - 120	2012-06-18

Standard (CCV-2)

QC Batch: 92249 | Date Analyzed: 2012-06-18 | Analyzed By: ZLM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.101	101	80 - 120	2012-06-18
Toluene		1	mg/L	0.100	0.0994	99	80 - 120	2012-06-18
Ethylbenzene		1	mg/L	0.100	0.0973	97	80 - 120	2012-06-18
Xylene		1	mg/L	0.300	0.282	94	80 - 120	2012-06-18

Standard (CCV-3)

QC Batch: 92249 | Date Analyzed: 2012-06-18 | Analyzed By: ZLM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0997	100	80 - 120	2012-06-18
Toluene		1	mg/L	0.100	0.0977	98	80 - 120	2012-06-18
Ethylbenzene		1	mg/L	0.100	0.0971	97	80 - 120	2012-06-18
Xylene		1	mg/L	0.300	0.275	92	80 - 120	2012-06-18

Standard (CCV-1)

QC Batch: 92253 | Date Analyzed: 2012-06-18 | Analyzed By: ZLM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0870	87	80 - 120	2012-06-18
Toluene		1	mg/L	0.100	0.0900	90	80 - 120	2012-06-18
Ethylbenzene		1	mg/L	0.100	0.0878	88	80 - 120	2012-06-18
Xylene		1	mg/L	0.300	0.267	89	80 - 120	2012-06-18

Standard (CCV-2)

QC Batch: 92253 Date Analyzed: 2012-06-18 Analyzed By: ZLM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0843	84	80 - 120	2012-06-18
Toluene		1	mg/L	0.100	0.0862	86	80 - 120	2012-06-18
Ethylbenzene		1	mg/L	0.100	0.0853	85	80 - 120	2012-06-18
Xylene		1	mg/L	0.300	0.260	87	80 - 120	2012-06-18

Standard (CCV-3)

QC Batch: 92253 Date Analyzed: 2012-06-18 Analyzed By: ZLM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0847	85	80 - 120	2012-06-18
Toluene		1	mg/L	0.100	0.0866	87	80 - 120	2012-06-18
Ethylbenzene		1	mg/L	0.100	0.0847	85	80 - 120	2012-06-18
Xylene		1	mg/L	0.300	0.258	86	80 - 120	2012-06-18

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-12-8	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Result Comments

1 Sample dilution due to soil.

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 12061401

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Talon — **Phone #:**

Address: (Street, City, Zip) 2901 State HWY 349 Midland — **Fax #:**

Contact Person: Chris Spore — **E-mail:** cspore@talonlpe.com

Invoice to: (If different from above) 2002-10273

Project #: 700376.045.01 — **Project Name:** Jal #2

Project Location (including state): Hobbs NM — **Sampler Signature:**

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity	Na, Ca, Mg, K, TDS, EC							Turn Around Time if different from standard	Hold
301025	MW2	3	40z	X				X				X		6.13.12	1030		X																								
026	MW 8													6.13	1085																										
027	MW 10													6.12	1317																										
028	MW 11													6.12	1115																										
029	MW 12													6.12	1057																										
030	MW 13													6.13	1017																										
031	MW 14													6.12	1045																										
032	MW 15													6.13	0950																										
033	MW 16													6.13	0935																										
034	MW 17													6.12	1135																										
035	MW 18													6.12	1305																										

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
	Talon	6-13-12	1535					INST ____ OBS ____ °C COR ____ °C
								INST ____ OBS ____ °C COR ____ °C
				Brandal Ward	Trace Lubbock	6/13/12	15:35	INST IR-2 OBS 4.4 °C COR 4.3 °C

LAB USE ONLY
Intact Y N
Headspace Y N NA
Log-in-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Campbell

ORIGINAL COPY

LAB Order ID # 12061401

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
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Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Talon — **Phone #:**

Address: (Street, City, Zip) 2901 State HWY 349 Midland — **Fax #:**

Contact Person: Chris Spore — **E-mail:** CSpore@talonlpe.com

Invoice to: (If different from above) 2002-1073

Project #: 700376.045.01 — **Project Name:** Jal #2

Project Location (including state): Hobbs NM — **Sampler Signature:**

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
301036	MW 19	3	40z	X				X				X		6.12	1335
037	MW 20	↓	↓	↓				↓				↓		↓	1005
038	MW 21	↓	↓	↓				↓				↓		↓	1015

MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity	Na, Ca, Mg, K, TDS, EC						Turn Around Time if different from standard	Hold
	X																									
	↓																									
	↓																									

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
	Talon	6.13.12	1535					INST ____ °C OBS ____ °C COR ____ °C
								INST ____ °C OBS ____ °C COR ____ °C
				Brenda Leal	Trace Lubbock	6/13/12	15:35	INST IR-2 °C OBS 4.4 °C COR 4.3 °C

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review MM

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry In

ORIGINAL COPY

Summary Report

Chris Spore
Talon LPE-Midland
2901 State Highway 349
Midland, TX 79706

Report Date: October 4, 2012

Work Order: 12092825

Project Location: Hobbs, NM
Project Name: Jal #2
Project Number: 700376.045.01
SRS #: 2002-10273

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
310502	MW-8	water	2012-09-27	13:45	2012-09-28
310503	MW-10	water	2012-09-26	11:20	2012-09-28
310504	MW-11	water	2012-09-26	11:30	2012-09-28
310505	MW-12	water	2012-09-26	11:40	2012-09-28
310506	MW-13	water	2012-09-27	14:00	2012-09-28
310507	MW-14	water	2012-09-27	10:05	2012-09-28
310508	MW-15	water	2012-09-27	11:40	2012-09-28
310509	MW-16	water	2012-09-27	11:30	2012-09-28
310510	MW-17	water	2012-09-27	10:15	2012-09-28
310511	MW-18	water	2012-09-27	10:30	2012-09-28
310512	MW-19	water	2012-09-27	10:45	2012-09-28
310513	MW-20	water	2012-09-26	13:15	2012-09-28
310514	MW-21	water	2012-09-26	13:00	2012-09-28

	BTEX				MTBE
Sample - Field Code	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	MTBE (mg/L)
310502 - MW-8	**3.50**	<0.0500	**0.401**	<0.0500	<0.0500
310503 - MW-10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
310504 - MW-11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
310505 - MW-12	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
310506 - MW-13	**17.1**	<0.0500	**0.102**	**0.187**	<0.0500
310507 - MW-14	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
310508 - MW-15	**7.89**	<0.0500	**0.141**	**0.113**	<0.0500
310509 - MW-16	**0.0114**	<0.00100	<0.00100	<0.00100	<0.00100
310510 - MW-17	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
310511 - MW-18	**0.308**	<0.00100	<0.00100	**0.0226**	<0.00100
310512 - MW-19	**0.0501**	<0.00100	<0.00100	**0.00260**	<0.00100

continued ...

... continued

	BTEX				MTBE
Sample - Field Code	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	MTBE (mg/L)
310513 - MW-20	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
310514 - MW-21	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298
200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Chris Spore
Talon LPE-Midland
2901 State Highway 349
Midland, TX, 79706

Report Date: October 4, 2012

Work Order: 12092825

Project Location: Hobbs, NM
Project Name: Jal #2
Project Number: 700376.045.01
SRS #: 2002-10273

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
310502	MW-8	water	2012-09-27	13:45	2012-09-28
310503	MW-10	water	2012-09-26	11:20	2012-09-28
310504	MW-11	water	2012-09-26	11:30	2012-09-28
310505	MW-12	water	2012-09-26	11:40	2012-09-28
310506	MW-13	water	2012-09-27	14:00	2012-09-28
310507	MW-14	water	2012-09-27	10:05	2012-09-28
310508	MW-15	water	2012-09-27	11:40	2012-09-28
310509	MW-16	water	2012-09-27	11:30	2012-09-28
310510	MW-17	water	2012-09-27	10:15	2012-09-28
310511	MW-18	water	2012-09-27	10:30	2012-09-28
310512	MW-19	water	2012-09-27	10:45	2012-09-28
310513	MW-20	water	2012-09-26	13:15	2012-09-28
310514	MW-21	water	2012-09-26	13:00	2012-09-28

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 22 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Jal #2 were received by TraceAnalysis, Inc. on 2012-09-28 and assigned to work order 12092825. Samples for work order 12092825 were received intact without headspace and at a temperature of 5.3 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	80800	2012-10-01 at 13:50	95349	2012-10-01 at 13:50
BTEX	S 8021B	80801	2012-10-01 at 13:50	95350	2012-10-01 at 13:50
BTEX	S 8021B	80859	2012-10-03 at 14:59	95425	2012-10-03 at 14:59
MTBE	S 8021B	80800	2012-10-01 at 13:50	95349	2012-10-01 at 13:50
MTBE	S 8021B	80801	2012-10-01 at 13:50	95350	2012-10-01 at 13:50
MTBE	S 8021B	80859	2012-10-03 at 14:59	95425	2012-10-03 at 14:59

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 12092825 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.

Analytical Report

Sample: 310502 - MW-8

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95349	Date Analyzed:	2012-10-01	Analyzed By:	MT
Prep Batch:	80800	Sample Preparation:	2012-10-01	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
MTBE	U	1	<0.0500	mg/L	50	0.00100
Benzene		1	**3.50**	mg/L	50	0.00100
Toluene	U	1	<0.0500	mg/L	50	0.00100
Ethylbenzene		1	**0.401**	mg/L	50	0.00100
Xylene	U	1	<0.0500	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.57	mg/L	50	5.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)			5.10	mg/L	50	5.00	102	70 - 130

Sample: 310503 - MW-10

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95349	Date Analyzed:	2012-10-01	Analyzed By:	MT
Prep Batch:	80800	Sample Preparation:	2012-10-01	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
MTBE	U	1	<0.00100	mg/L	1	0.00100
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0919	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)			0.102	mg/L	1	0.100	102	70 - 130

Sample: 310504 - MW-11

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95349	Date Analyzed:	2012-10-01	Analyzed By:	MT
Prep Batch:	80800	Sample Preparation:	2012-10-01	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
MTBE	U	1	<0.00100	mg/L	1	0.00100
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0920	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)			0.103	mg/L	1	0.100	103	70 - 130

Sample: 310505 - MW-12

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95349	Date Analyzed:	2012-10-01	Analyzed By:	MT
Prep Batch:	80800	Sample Preparation:	2012-10-01	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
MTBE	U	1	<0.00100	mg/L	1	0.00100
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0925	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)			0.101	mg/L	1	0.100	101	70 - 130

Sample: 310506 - MW-13

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95350	Date Analyzed:	2012-10-01	Analyzed By:	MT
Prep Batch:	80801	Sample Preparation:	2012-10-01	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
MTBE	U	1	<0.0500	mg/L	50	0.00100
Benzene		1	**17.1**	mg/L	50	0.00100
Toluene	U	1	<0.0500	mg/L	50	0.00100
Ethylbenzene		1	**0.102**	mg/L	50	0.00100
Xylene		1	**0.187**	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.30	mg/L	50	5.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)			4.95	mg/L	50	5.00	99	70 - 130

Sample: 310507 - MW-14

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95350	Date Analyzed:	2012-10-01	Analyzed By:	MT
Prep Batch:	80801	Sample Preparation:	2012-10-01	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
MTBE	U	1	<0.00100	mg/L	1	0.00100
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0891	mg/L	1	0.100	89	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0996	mg/L	1	0.100	100	70 - 130

Sample: 310508 - MW-15

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95350	Date Analyzed:	2012-10-01	Analyzed By:	MT
Prep Batch:	80801	Sample Preparation:	2012-10-01	Prepared By:	MT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
MTBE	U	1	<0.0500	mg/L	50	0.00100
Benzene		1	**7.89**	mg/L	50	0.00100
Toluene	U	1	<0.0500	mg/L	50	0.00100
Ethylbenzene		1	**0.141**	mg/L	50	0.00100
Xylene		1	**0.113**	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.53	mg/L	50	5.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)			4.97	mg/L	50	5.00	99	70 - 130

Sample: 310509 - MW-16

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95350	Date Analyzed:	2012-10-01	Analyzed By:	MT
Prep Batch:	80801	Sample Preparation:	2012-10-01	Prepared By:	MT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
MTBE	U	1	<0.00100	mg/L	1	0.00100
Benzene		1	**0.0114**	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene		1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0950	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0991	mg/L	1	0.100	99	70 - 130

Sample: 310510 - MW-17

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95350	Date Analyzed:	2012-10-01	Analyzed By:	MT
Prep Batch:	80801	Sample Preparation:	2012-10-01	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
MTBE	U	1	<0.00100	mg/L	1	0.00100
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0901	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)			0.100	mg/L	1	0.100	100	70 - 130

Sample: 310511 - MW-18

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95350	Date Analyzed:	2012-10-01	Analyzed By:	MT
Prep Batch:	80801	Sample Preparation:	2012-10-01	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
MTBE	U	1	<0.00100	mg/L	1	0.00100
Benzene		1	**0.308**	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene		1	**0.0226**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0833	mg/L	1	0.100	83	70 - 130
4-Bromofluorobenzene (4-BFB)			0.100	mg/L	1	0.100	100	70 - 130

Sample: 310512 - MW-19

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95425	Date Analyzed:	2012-10-03	Analyzed By:	MT
Prep Batch:	80859	Sample Preparation:	2012-10-03	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
MTBE	U	1	<0.00100	mg/L	1	0.00100
Benzene		1	**0.0501**	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	B	1	**0.00260**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0889	mg/L	1	0.100	89	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0971	mg/L	1	0.100	97	70 - 130

Sample: 310513 - MW-20

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95350	Date Analyzed:	2012-10-01	Analyzed By:	MT
Prep Batch:	80801	Sample Preparation:	2012-10-01	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
MTBE	U	1	<0.00100	mg/L	1	0.00100
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0910	mg/L	1	0.100	91	70 - 130
4-Bromofluorobenzene (4-BFB)			0.101	mg/L	1	0.100	101	70 - 130

Sample: 310514 - MW-21

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	95350	Date Analyzed:	2012-10-01	Analyzed By:	MT
Prep Batch:	80801	Sample Preparation:	2012-10-01	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
MTBE	U	1	<0.00100	mg/L	1	0.00100
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0923	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)			0.102	mg/L	1	0.100	102	70 - 130

Method Blanks

Method Blank (1) QC Batch: 95349

QC Batch: 95349 | Date Analyzed: 2012-10-01 | Analyzed By: MT
Prep Batch: 80800 | QC Preparation: 2012-10-01 | Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
MTBE		1	<0.000954	mg/L	0.001
Benzene		1	<0.000371	mg/L	0.001
Toluene		1	<0.000347	mg/L	0.001
Ethylbenzene		1	<0.000326	mg/L	0.001
Xylene		1	<0.000357	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0923	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)			0.101	mg/L	1	0.100	101	70 - 130

Method Blank (1) QC Batch: 95350

QC Batch: 95350 | Date Analyzed: 2012-10-01 | Analyzed By: MT
Prep Batch: 80801 | QC Preparation: 2012-10-01 | Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
MTBE		1	<0.000954	mg/L	0.001
Benzene		1	<0.000371	mg/L	0.001
Toluene		1	<0.000347	mg/L	0.001
Ethylbenzene		1	<0.000326	mg/L	0.001
Xylene		1	<0.000357	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0909	mg/L	1	0.100	91	70 - 130
4-Bromofluorobenzene (4-BFB)			0.100	mg/L	1	0.100	100	70 - 130

Method Blank (1) QC Batch: 95425

QC Batch:	95425	Date Analyzed:	2012-10-03	Analyzed By:	MT
Prep Batch:	80859	QC Preparation:	2012-10-03	Prepared By:	MT

Parameter	Flag	Cert	MDL Result	Units	RL
MTBE		1	<0.000331	mg/L	0.001
Benzene		1	<0.000310	mg/L	0.001
Toluene		1	<0.000259	mg/L	0.001
Ethylbenzene		1	<0.000291	mg/L	0.001
Xylene		1	0.000400	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0943	mg/L	1	0.100	94	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0969	mg/L	1	0.100	97	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 95349 | Date Analyzed: 2012-10-01 | Analyzed By: MT
Prep Batch: 80800 | QC Preparation: 2012-10-01 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
MTBE		1	0.0917	mg/L	1	0.100	<0.000954	92	69.9 - 120
Benzene		1	0.0931	mg/L	1	0.100	<0.000371	93	78.6 - 120
Toluene		1	0.0974	mg/L	1	0.100	<0.000347	97	79.6 - 120
Ethylbenzene		1	0.100	mg/L	1	0.100	<0.000326	100	80 - 120
Xylene		1	0.298	mg/L	1	0.300	<0.000357	99	79.3 - 120

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
MTBE		1	0.0895	mg/L	1	0.100	<0.000954	90	69.9 - 120	2	20
Benzene		1	0.0916	mg/L	1	0.100	<0.000371	92	78.6 - 120	2	20
Toluene		1	0.0951	mg/L	1	0.100	<0.000347	95	79.6 - 120	2	20
Ethylbenzene		1	0.0991	mg/L	1	0.100	<0.000326	99	80 - 120	1	20
Xylene		1	0.292	mg/L	1	0.300	<0.000357	97	79.3 - 120	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0888	0.0884	mg/L	1	0.100	89	88	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0941	0.0928	mg/L	1	0.100	94	93	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 95350 | Date Analyzed: 2012-10-01 | Analyzed By: MT
Prep Batch: 80801 | QC Preparation: 2012-10-01 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
MTBE		1	0.0911	mg/L	1	0.100	<0.000954	91	69.9 - 120
Benzene		1	0.0908	mg/L	1	0.100	<0.000371	91	78.6 - 120
Toluene		1	0.0985	mg/L	1	0.100	<0.000347	98	79.6 - 120

continued ...

control spikes continued ...

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Ethylbenzene		1	0.103	mg/L	1	0.100	<0.000326	103	80 - 120
Xylene		1	0.304	mg/L	1	0.300	<0.000357	101	79.3 - 120

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
MTBE		1	0.0900	mg/L	1	0.100	<0.000954	90	69.9 - 120	1	20
Benzene		1	0.0904	mg/L	1	0.100	<0.000371	90	78.6 - 120	0	20
Toluene		1	0.0966	mg/L	1	0.100	<0.000347	97	79.6 - 120	2	20
Ethylbenzene		1	0.100	mg/L	1	0.100	<0.000326	100	80 - 120	3	20
Xylene		1	0.296	mg/L	1	0.300	<0.000357	99	79.3 - 120	3	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0891	0.0869	mg/L	1	0.100	89	87	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0955	0.0930	mg/L	1	0.100	96	93	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 95425 | Date Analyzed: 2012-10-03 | Analyzed By: MT
Prep Batch: 80859 | QC Preparation: 2012-10-03 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
MTBE		1	0.0969	mg/L	1	0.100	<0.000331	97	70.9 - 120
Benzene		1	0.0898	mg/L	1	0.100	<0.000310	90	74.2 - 120
Toluene		1	0.0954	mg/L	1	0.100	<0.000259	95	75.8 - 120
Ethylbenzene		1	0.0955	mg/L	1	0.100	<0.000291	96	71.8 - 120
Xylene		1	0.296	mg/L	1	0.300	0.0004	99	73.8 - 120

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
MTBE		1	0.0978	mg/L	1	0.100	<0.000331	98	70.9 - 120	1	20
Benzene		1	0.0896	mg/L	1	0.100	<0.000310	90	74.2 - 120	0	20
Toluene		1	0.0947	mg/L	1	0.100	<0.000259	95	75.8 - 120	1	20
Ethylbenzene		1	0.0946	mg/L	1	0.100	<0.000291	95	71.8 - 120	1	20
Xylene		1	0.293	mg/L	1	0.300	0.0004	98	73.8 - 120	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0940	0.0918	mg/L	1	0.100	94	92	70 - 130
4-Bromofluorobenzene (4-BFB)	0.100	0.0965	mg/L	1	0.100	100	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 310545

QC Batch: 95349 | Date Analyzed: 2012-10-01 | Analyzed By: MT
Prep Batch: 80800 | QC Preparation: 2012-10-01 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
MTBE		1	0.0930	mg/L	1	0.100	<0.000954	93	43.8 - 128
Benzene		1	0.0931	mg/L	1	0.100	<0.000371	93	42.2 - 136
Toluene		1	0.100	mg/L	1	0.100	<0.000347	100	44.3 - 133
Ethylbenzene		1	0.103	mg/L	1	0.100	<0.000326	103	45.6 - 132
Xylene		1	0.304	mg/L	1	0.300	<0.000357	101	44.7 - 128

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
MTBE		1	0.0893	mg/L	1	0.100	<0.000954	89	43.8 - 128	4	20
Benzene		1	0.0891	mg/L	1	0.100	<0.000371	89	42.2 - 136	4	20
Toluene		1	0.0958	mg/L	1	0.100	<0.000347	96	44.3 - 133	4	20
Ethylbenzene		1	0.0992	mg/L	1	0.100	<0.000326	99	45.6 - 132	4	20
Xylene		1	0.293	mg/L	1	0.300	<0.000357	98	44.7 - 128	4	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0921	0.0893	mg/L	1	0.1	92	89	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0978	0.0958	mg/L	1	0.1	98	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 310550

QC Batch: 95350 | Date Analyzed: 2012-10-01 | Analyzed By: MT
Prep Batch: 80801 | QC Preparation: 2012-10-01 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
MTBE		1	0.0931	mg/L	1	0.100	<0.000954	93	43.8 - 128

continued ...

matrix spikes continued ...

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0940	mg/L	1	0.100	<0.000371	94	42.2 - 136
Toluene		1	0.101	mg/L	1	0.100	<0.000347	101	44.3 - 133
Ethylbenzene		1	0.104	mg/L	1	0.100	<0.000326	104	45.6 - 132
Xylene		1	0.307	mg/L	1	0.300	<0.000357	102	44.7 - 128

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
MTBE		1	0.0899	mg/L	1	0.100	<0.000954	90	43.8 - 128	4	20
Benzene		1	0.0904	mg/L	1	0.100	<0.000371	90	42.2 - 136	4	20
Toluene		1	0.0979	mg/L	1	0.100	<0.000347	98	44.3 - 133	3	20
Ethylbenzene		1	0.102	mg/L	1	0.100	<0.000326	102	45.6 - 132	2	20
Xylene		1	0.302	mg/L	1	0.300	<0.000357	101	44.7 - 128	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0903	0.0884	mg/L	1	0.1	90	88	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0961	0.0961	mg/L	1	0.1	96	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 310677

QC Batch: 95425 | Date Analyzed: 2012-10-03 | Analyzed By: MT
Prep Batch: 80859 | QC Preparation: 2012-10-03 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
MTBE		1	0.0752	mg/L	1	0.100	<0.000331	75	51.9 - 132
Benzene		1	0.0686	mg/L	1	0.100	<0.000310	69	47 - 131
Toluene		1	0.0726	mg/L	1	0.100	0.0003	72	52.2 - 128
Ethylbenzene		1	0.0742	mg/L	1	0.100	<0.000291	74	26.5 - 154
Xylene		1	0.226	mg/L	1	0.300	<0.000268	75	50.1 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
MTBE		1	0.0842	mg/L	1	0.100	<0.000331	84	51.9 - 132	11	20
Benzene		1	0.0774	mg/L	1	0.100	<0.000310	77	47 - 131	12	20
Toluene		1	0.0820	mg/L	1	0.100	0.0003	82	52.2 - 128	12	20
Ethylbenzene		1	0.0832	mg/L	1	0.100	<0.000291	83	26.5 - 154	11	20
Xylene		1	0.255	mg/L	1	0.300	<0.000268	85	50.1 - 130	12	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.111	0.109	mg/L	1	0.1	111	109	70 - 130
4-Bromofluorobenzene (4-BFB)	0.098(	0.106	mg/L	1	0.1	98	106	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 95349 | Date Analyzed: 2012-10-01 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		1	mg/L	0.100	0.0929	93	80 - 120	2012-10-01
Benzene		1	mg/L	0.100	0.0950	95	80 - 120	2012-10-01
Toluene		1	mg/L	0.100	0.0991	99	80 - 120	2012-10-01
Ethylbenzene		1	mg/L	0.100	0.102	102	80 - 120	2012-10-01
Xylene		1	mg/L	0.300	0.301	100	80 - 120	2012-10-01

Standard (CCV-2)

QC Batch: 95349 | Date Analyzed: 2012-10-01 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		1	mg/L	0.100	0.0982	98	80 - 120	2012-10-01
Benzene		1	mg/L	0.100	0.0967	97	80 - 120	2012-10-01
Toluene		1	mg/L	0.100	0.103	103	80 - 120	2012-10-01
Ethylbenzene		1	mg/L	0.100	0.106	106	80 - 120	2012-10-01
Xylene		1	mg/L	0.300	0.313	104	80 - 120	2012-10-01

Standard (CCV-3)

QC Batch: 95349 | Date Analyzed: 2012-10-01 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		1	mg/L	0.100	0.0922	92	80 - 120	2012-10-01
Benzene		1	mg/L	0.100	0.0922	92	80 - 120	2012-10-01
Toluene		1	mg/L	0.100	0.0991	99	80 - 120	2012-10-01
Ethylbenzene		1	mg/L	0.100	0.103	103	80 - 120	2012-10-01
Xylene		1	mg/L	0.300	0.304	101	80 - 120	2012-10-01

Standard (CCV-1)

QC Batch: 95350 Date Analyzed: 2012-10-01 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		1	mg/L	0.100	0.0913	91	80 - 120	2012-10-01
Benzene		1	mg/L	0.100	0.0899	90	80 - 120	2012-10-01
Toluene		1	mg/L	0.100	0.0961	96	80 - 120	2012-10-01
Ethylbenzene		1	mg/L	0.100	0.0993	99	80 - 120	2012-10-01
Xylene		1	mg/L	0.300	0.293	98	80 - 120	2012-10-01

Standard (CCV-2)

QC Batch: 95350 Date Analyzed: 2012-10-01 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		1	mg/L	0.100	0.0937	94	80 - 120	2012-10-01
Benzene		1	mg/L	0.100	0.0915	92	80 - 120	2012-10-01
Toluene		1	mg/L	0.100	0.0988	99	80 - 120	2012-10-01
Ethylbenzene		1	mg/L	0.100	0.103	103	80 - 120	2012-10-01
Xylene		1	mg/L	0.300	0.301	100	80 - 120	2012-10-01

Standard (CCV-3)

QC Batch: 95350 Date Analyzed: 2012-10-01 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		1	mg/L	0.100	0.0929	93	80 - 120	2012-10-01
Benzene		1	mg/L	0.100	0.0930	93	80 - 120	2012-10-01
Toluene		1	mg/L	0.100	0.0985	98	80 - 120	2012-10-01
Ethylbenzene		1	mg/L	0.100	0.102	102	80 - 120	2012-10-01
Xylene		1	mg/L	0.300	0.298	99	80 - 120	2012-10-01

Standard (CCV-1)

QC Batch: 95425 Date Analyzed: 2012-10-03 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		1	mg/L	0.100	0.0987	99	80 - 120	2012-10-03
Benzene		1	mg/L	0.100	0.0896	90	80 - 120	2012-10-03
Toluene		1	mg/L	0.100	0.0943	94	80 - 120	2012-10-03
Ethylbenzene		1	mg/L	0.100	0.0942	94	80 - 120	2012-10-03
Xylene		1	mg/L	0.300	0.293	98	80 - 120	2012-10-03

Standard (CCV-2)

QC Batch: 95425 Date Analyzed: 2012-10-03 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		1	mg/L	0.100	0.0981	98	80 - 120	2012-10-03
Benzene		1	mg/L	0.100	0.0936	94	80 - 120	2012-10-03
Toluene		1	mg/L	0.100	0.0972	97	80 - 120	2012-10-03
Ethylbenzene		1	mg/L	0.100	0.0961	96	80 - 120	2012-10-03
Xylene		1	mg/L	0.300	0.298	99	80 - 120	2012-10-03

Standard (CCV-3)

QC Batch: 95425 Date Analyzed: 2012-10-03 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		1	mg/L	0.100	0.0967	97	80 - 120	2012-10-03
Benzene		1	mg/L	0.100	0.0898	90	80 - 120	2012-10-03
Toluene		1	mg/L	0.100	0.0954	95	80 - 120	2012-10-03
Ethylbenzene		1	mg/L	0.100	0.0949	95	80 - 120	2012-10-03
Xylene		1	mg/L	0.300	0.293	98	80 - 120	2012-10-03

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-12-8	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 12092825

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TraceAnalysis, Inc.

email: lab@traceanalysis.com

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Fax (806) 794-1298
1 (800) 378-1296

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200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Talon LPE — Phone #:

Address: (Street, City, Zip) 2901 State HWY 349 Midland 79706 — Fax #:

Contact Person: Brad Tay Chris Spore — Email: cspore@talonlpe.com; btay@talonlpe.com

Invoice to: (If different from above) 2002-10273

Project #: 700376.045.01 — Project Name: Jal #2

Project Location (including state): Hobbs NM — Sampler Signature: Brad Tay

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
310502	MW 8	3	40z	X				X				X		9/27	1345
503	MW 10													9/26	1120
504	MW 11														1130
505	MW 12														1140
506	MW 13													9/27	1400
507	MW 14														1005
508	MW 15														1140
509	MW 16														1130
510	MW 17														1015
511	MW 18														1030
512	MW 19														1045
513	MW 20													9/26	1315
514	MW 21													9/26	1300

ANALYSIS REQUEST (Circle or Specify Method No.)	
MTBE 8021 / 602 / 8260 / 624	
BTEX 8021 / 602 / 8260 / 624	X
TPH 418.1 / TX1005 / TX1005 Ext(C35)	
TPH 8015 GRO / DRO / TVHC	
PAH 8270 / 625	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
TCLP Pesticides	
RCI	
GC/MS Vol. 8260 / 624	
GC/MS Semi. Vol. 8270 / 625	
PCB's 8082 / 608	
Pesticides 8081 / 608	
BOD, TSS, pH	
Moisture Content	
Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity	
Na, Ca, Mg, K, TDS, EC	
Turn Around Time if different from standard	
Hold	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Brad Tay	Talon	9/28	11:58				
				Received by:	Company:	Date:	Time:
				Received by:	Company:	Date:	Time:

INST ____ °C
OBS ____ °C
COR ____ °C

INST 1.8 °C
OBS 5.8 °C
COR 5.8 °C

LAB USE ONLY

Intact Y / N

Headspace Y / N / NA

Log-in-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

ORIGINAL COPY

Summary Report

Brad Ivy
Talon LPE-Midland
2901 State Highway 349
Midland, TX 79706

Report Date: December 26, 2012

Work Order: 12121702

Project Location: Hobbs, NM
Project Name: Jal #2
Project Number: 700376.045.01
SRS #: 2002-10273

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
316854	MW-8	water	2012-12-14	12:30	2012-12-14
316855	MW-10	water	2012-12-14	11:45	2012-12-14
316856	MW-11	water	2012-12-14	11:40	2012-12-14
316857	MW-12	water	2012-12-14	12:45	2012-12-14
316858	MW-13	water	2012-12-14	12:35	2012-12-14
316859	MW-14	water	2012-12-14	11:25	2012-12-14
316860	MW-15	water	2012-12-14	11:30	2012-12-14
316861	MW-16	water	2012-12-14	11:35	2012-12-14
316862	MW-17	water	2012-12-14	12:20	2012-12-14
316863	MW-18	water	2012-12-14	12:10	2012-12-14
316864	MW-19	water	2012-12-14	11:55	2012-12-14
316865	MW-20	water	2012-12-14	09:10	2012-12-14
316866	MW-21	water	2012-12-14	09:15	2012-12-14

	BTEX				MTBE
Sample - Field Code	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	MTBE (mg/L)
316854 - MW-8	**0.210** Qs	<0.00100 Qs	**0.0317** Qs	**0.00200** Qs	
316855 - MW-10	<0.00100 Qs	<0.00100 Qs	<0.00100 Qs	<0.00100 Qs	
316856 - MW-11	<0.00100 Qs	<0.00100 Qs	<0.00100 Qs	<0.00100 Qs	
316857 - MW-12	<0.00100	**0.00140**	<0.00100	**0.00100**	
316858 - MW-13	**10.7**	<0.0500	**0.0690**	<0.0500	
316859 - MW-14	<0.00100	<0.00100	<0.00100	<0.00100	
316860 - MW-15	**9.63**	<0.0500	**0.122**	**0.279**	
316861 - MW-16	**0.0546**	<0.00100	<0.00100	**0.00420**	
316862 - MW-17	<0.00100	**0.00120**	<0.00100	**0.00240**	
316863 - MW-18	**0.0465**	<0.00100	<0.00100	**0.00410**	
316864 - MW-19	**0.00980**	<0.00100	<0.00100	<0.00100	

continued ...

... continued

Sample - Field Code	BTEX Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	MTBE MTBE (mg/L)
316865 - MW-20	<0.00100	<0.00100	<0.00100	<0.00100	
316866 - MW-21	<0.00100	<0.00100	<0.00100	<0.00100	

Sample: 316862 - MW-17

Param	Flag	Result	Units	RL
Naphthalene		<0.000199	mg/L	0.0002
2-Methylnaphthalene		<0.000199	mg/L	0.0002
1-Methylnaphthalene		<0.000199	mg/L	0.0002
Acenaphthylene		<0.000199	mg/L	0.0002
Acenaphthene		<0.000199	mg/L	0.0002
Dibenzofuran		<0.000199	mg/L	0.0002
Fluorene		<0.000199	mg/L	0.0002
Anthracene		<0.000199	mg/L	0.0002
Phenanthrene		<0.000199	mg/L	0.0002
Fluoranthene		<0.000199	mg/L	0.0002
Pyrene		<0.000199	mg/L	0.0002
Benzo(a)anthracene		<0.000199	mg/L	0.0002
Chrysene	Qs	<0.000199	mg/L	0.0002
Benzo(b)fluoranthene		<0.000199	mg/L	0.0002
Benzo(k)fluoranthene		<0.000199	mg/L	0.0002
Benzo(a)pyrene	Qs	<0.000199	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.000199	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.000199	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000199	mg/L	0.0002

Sample: 316863 - MW-18

Param	Flag	Result	Units	RL
Naphthalene		**0.00253**	mg/L	0.0002
2-Methylnaphthalene		**0.000825**	mg/L	0.0002
1-Methylnaphthalene		**0.00182**	mg/L	0.0002
Acenaphthylene		<0.000199	mg/L	0.0002
Acenaphthene		<0.000199	mg/L	0.0002
Dibenzofuran		<0.000199	mg/L	0.0002
Fluorene		<0.000199	mg/L	0.0002
Anthracene		<0.000199	mg/L	0.0002
Phenanthrene		<0.000199	mg/L	0.0002
Fluoranthene		<0.000199	mg/L	0.0002
Pyrene		<0.000199	mg/L	0.0002
Benzo(a)anthracene		<0.000199	mg/L	0.0002
Chrysene	Qs	<0.000199	mg/L	0.0002
Benzo(b)fluoranthene		<0.000199	mg/L	0.0002

continued ...

sample 316863 continued ...

Param	Flag	Result	Units	RL
Benzo(k)fluoranthene		<0.000199	mg/L	0.0002
Benzo(a)pyrene	Qs	<0.000199	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.000199	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.000199	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000199	mg/L	0.0002

Sample: 316864 - MW-19

Param	Flag	Result	Units	RL
Naphthalene		<0.000200	mg/L	0.0002
2-Methylnaphthalene		<0.000200	mg/L	0.0002
1-Methylnaphthalene		<0.000200	mg/L	0.0002
Acenaphthylene		<0.000200	mg/L	0.0002
Acenaphthene		<0.000200	mg/L	0.0002
Dibenzofuran		<0.000200	mg/L	0.0002
Fluorene		<0.000200	mg/L	0.0002
Anthracene		<0.000200	mg/L	0.0002
Phenanthrene		<0.000200	mg/L	0.0002
Fluoranthene		<0.000200	mg/L	0.0002
Pyrene		<0.000200	mg/L	0.0002
Benzo(a)anthracene		<0.000200	mg/L	0.0002
Chrysene	Qs	<0.000200	mg/L	0.0002
Benzo(b)fluoranthene		<0.000200	mg/L	0.0002
Benzo(k)fluoranthene		<0.000200	mg/L	0.0002
Benzo(a)pyrene	Qs	<0.000200	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.000200	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000200	mg/L	0.0002

TRACEANALYSIS, INC.

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Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Brad Ivy
Talon LPE-Midland
2901 State Highway 349
Midland, TX, 79706

Report Date: December 26, 2012

Work Order: 12121702

Project Location: Hobbs, NM
Project Name: Jal #2
Project Number: 700376.045.01
SRS #: 2002-10273

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
316854	MW-8	water	2012-12-14	12:30	2012-12-14
316855	MW-10	water	2012-12-14	11:45	2012-12-14
316856	MW-11	water	2012-12-14	11:40	2012-12-14
316857	MW-12	water	2012-12-14	12:45	2012-12-14
316858	MW-13	water	2012-12-14	12:35	2012-12-14
316859	MW-14	water	2012-12-14	11:25	2012-12-14
316860	MW-15	water	2012-12-14	11:30	2012-12-14
316861	MW-16	water	2012-12-14	11:35	2012-12-14
316862	MW-17	water	2012-12-14	12:20	2012-12-14
316863	MW-18	water	2012-12-14	12:10	2012-12-14
316864	MW-19	water	2012-12-14	11:55	2012-12-14
316865	MW-20	water	2012-12-14	09:10	2012-12-14
316866	MW-21	water	2012-12-14	09:15	2012-12-14

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.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Jal #2 were received by TraceAnalysis, Inc. on 2012-12-14 and assigned to work order 12121702. Samples for work order 12121702 were received intact without headspace and at a temperature of 2.0 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	82620	2012-12-17 at 14:19	97499	2012-12-17 at 14:19
BTEX	S 8021B	82621	2012-12-17 at 14:45	97501	2012-12-17 at 14:45
PAH	S 8270D	82752	2012-12-19 at 15:00	97677	2012-12-26 at 10:06

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 12121702 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.

Analytical Report

Sample: 316854 - MW-8

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97501	Date Analyzed:	2012-12-17	Analyzed By:	MT
Prep Batch:	82621	Sample Preparation:	2012-12-17	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qs	1	**0.210**	mg/L	1	0.00100
Toluene	Qs,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qs	1	**0.0317**	mg/L	1	0.00100
Xylene	Qs	1	**0.00200**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0930	mg/L	1	0.100	93	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0956	mg/L	1	0.100	96	80 - 120

Sample: 316855 - MW-10

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97501	Date Analyzed:	2012-12-17	Analyzed By:	MT
Prep Batch:	82621	Sample Preparation:	2012-12-17	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qs,U	1	<0.00100	mg/L	1	0.00100
Toluene	Qs,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qs,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qs,U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0946	mg/L	1	0.100	95	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0896	mg/L	1	0.100	90	80 - 120

Sample: 316856 - MW-11

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97501	Date Analyzed:	2012-12-17	Analyzed By:	MT
Prep Batch:	82621	Sample Preparation:	2012-12-17	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qs,U	1	<0.00100	mg/L	1	0.00100
Toluene	Qs,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qs,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qs,U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0957	mg/L	1	0.100	96	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0961	mg/L	1	0.100	96	80 - 120

Sample: 316857 - MW-12

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97499	Date Analyzed:	2012-12-17	Analyzed By:	JS
Prep Batch:	82620	Sample Preparation:	2012-12-17	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	<0.00100	mg/L	1	0.00100
Toluene	B	1	**0.00140**	mg/L	1	0.00100
Ethylbenzene	Jb	1	<0.00100	mg/L	1	0.00100
Xylene	B	1	**0.00100**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0779	mg/L	1	0.100	78	69.2 - 120
4-Bromofluorobenzene (4-BFB)			0.0803	mg/L	1	0.100	80	67.1 - 120

Sample: 316858 - MW-13

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97499	Date Analyzed:	2012-12-17	Analyzed By:	JS
Prep Batch:	82620	Sample Preparation:	2012-12-17	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene		1	**10.7**	mg/L	50	0.00100
Toluene	U	1	<0.0500	mg/L	50	0.00100
Ethylbenzene	B	1	**0.0690**	mg/L	50	0.00100
Xylene	U	1	<0.0500	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			3.91	mg/L	50	5.00	78	69.2 - 120
4-Bromofluorobenzene (4-BFB)			3.91	mg/L	50	5.00	78	67.1 - 120

Sample: 316859 - MW-14

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97499	Date Analyzed:	2012-12-17	Analyzed By:	JS
Prep Batch:	82620	Sample Preparation:	2012-12-17	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Jb	1	<0.00100	mg/L	1	0.00100
Xylene	Jb	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0748	mg/L	1	0.100	75	69.2 - 120
4-Bromofluorobenzene (4-BFB)			0.0799	mg/L	1	0.100	80	67.1 - 120

Sample: 316860 - MW-15

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97499	Date Analyzed:	2012-12-17	Analyzed By:	JS
Prep Batch:	82620	Sample Preparation:	2012-12-17	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**9.63**	mg/L	50	0.00100
Toluene	U	1	<0.0500	mg/L	50	0.00100
Ethylbenzene	B	1	**0.122**	mg/L	50	0.00100
Xylene		1	**0.279**	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			3.75	mg/L	50	5.00	75	69.2 - 120
4-Bromofluorobenzene (4-BFB)			3.96	mg/L	50	5.00	79	67.1 - 120

Sample: 316861 - MW-16

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97499	Date Analyzed:	2012-12-17	Analyzed By:	JS
Prep Batch:	82620	Sample Preparation:	2012-12-17	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.0546**	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Jb	1	<0.00100	mg/L	1	0.00100
Xylene		1	**0.00420**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0766	mg/L	1	0.100	77	69.2 - 120
4-Bromofluorobenzene (4-BFB)			0.0807	mg/L	1	0.100	81	67.1 - 120

Sample: 316862 - MW-17

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97499	Date Analyzed:	2012-12-17	Analyzed By:	JS
Prep Batch:	82620	Sample Preparation:	2012-12-17	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	B	1	**0.00120**	mg/L	1	0.00100
Ethylbenzene	Jb	1	<0.00100	mg/L	1	0.00100
Xylene	B	1	**0.00240**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0786	mg/L	1	0.100	79	69.2 - 120
4-Bromofluorobenzene (4-BFB)			0.0748	mg/L	1	0.100	75	67.1 - 120

Sample: 316862 - MW-17

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270D	Prep Method:	S 3510C
QC Batch:	97677	Date Analyzed:	2012-12-26	Analyzed By:	MN
Prep Batch:	82752	Sample Preparation:	2012-12-19	Prepared By:	MN

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	U	1	<0.000199	mg/L	0.995	0.000200
2-Methylnaphthalene	U	1	<0.000199	mg/L	0.995	0.000200
1-Methylnaphthalene	U		<0.000199	mg/L	0.995	0.000200
Acenaphthylene	U	1	<0.000199	mg/L	0.995	0.000200
Acenaphthene	U	1	<0.000199	mg/L	0.995	0.000200
Dibenzofuran	U	1	<0.000199	mg/L	0.995	0.000200
Fluorene	U	1	<0.000199	mg/L	0.995	0.000200
Anthracene	U	1	<0.000199	mg/L	0.995	0.000200
Phenanthrene	U	1	<0.000199	mg/L	0.995	0.000200
Fluoranthene	U	1	<0.000199	mg/L	0.995	0.000200
Pyrene	U	1	<0.000199	mg/L	0.995	0.000200
Benzo(a)anthracene	U	1	<0.000199	mg/L	0.995	0.000200
Chrysene	Qs,U	1	<0.000199	mg/L	0.995	0.000200
Benzo(b)fluoranthene	U	1	<0.000199	mg/L	0.995	0.000200
Benzo(k)fluoranthene	U	1	<0.000199	mg/L	0.995	0.000200
Benzo(a)pyrene	Qs,U	1	<0.000199	mg/L	0.995	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000199	mg/L	0.995	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000199	mg/L	0.995	0.000200

continued ...

sample 316862 continued ...

Parameter	Flag	Cert	Result	RL Result	Units	Dilution	RL
Benzo(g,h,i)perylene	U	1		<0.000199	mg/L	0.995	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0695	mg/L	0.995	0.0800	87	40 - 110
2-Fluorobiphenyl			0.0651	mg/L	0.995	0.0800	81	50 - 110
Terphenyl-d14			0.0701	mg/L	0.995	0.0800	88	50 - 135

Sample: 316863 - MW-18

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97499	Date Analyzed:	2012-12-17	Analyzed By:	JS
Prep Batch:	82620	Sample Preparation:	2012-12-17	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Result	Units	Dilution	RL
Benzene		1		**0.0465**	mg/L	1	0.00100
Toluene	U	1		<0.00100	mg/L	1	0.00100
Ethylbenzene	Jb	1		<0.00100	mg/L	1	0.00100
Xylene		1		**0.00410**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0703	mg/L	1	0.100	70	69.2 - 120
4-Bromofluorobenzene (4-BFB)			0.0769	mg/L	1	0.100	77	67.1 - 120

Sample: 316863 - MW-18

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270D	Prep Method:	S 3510C
QC Batch:	97677	Date Analyzed:	2012-12-26	Analyzed By:	MN
Prep Batch:	82752	Sample Preparation:	2012-12-19	Prepared By:	MN

Parameter	Flag	Cert	Result	RL Result	Units	Dilution	RL
Naphthalene		1		**0.00253**	mg/L	0.995	0.000200
2-Methylnaphthalene		1		**0.000825**	mg/L	0.995	0.000200
1-Methylnaphthalene				**0.00182**	mg/L	0.995	0.000200

continued ...

sample 316863 continued ...

Parameter	Flag	Cert	Result	RL	Units	Dilution	RL
Acenaphthylene	U	1	<0.000199		mg/L	0.995	0.000200
Acenaphthene	U	1	<0.000199		mg/L	0.995	0.000200
Dibenzofuran	U	1	<0.000199		mg/L	0.995	0.000200
Fluorene	U	1	<0.000199		mg/L	0.995	0.000200
Anthracene	U	1	<0.000199		mg/L	0.995	0.000200
Phenanthrene	U	1	<0.000199		mg/L	0.995	0.000200
Fluoranthene	U	1	<0.000199		mg/L	0.995	0.000200
Pyrene	U	1	<0.000199		mg/L	0.995	0.000200
Benzo(a)anthracene	U	1	<0.000199		mg/L	0.995	0.000200
Chrysene	Qs,U	1	<0.000199		mg/L	0.995	0.000200
Benzo(b)fluoranthene	U	1	<0.000199		mg/L	0.995	0.000200
Benzo(k)fluoranthene	U	1	<0.000199		mg/L	0.995	0.000200
Benzo(a)pyrene	Qs,U	1	<0.000199		mg/L	0.995	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000199		mg/L	0.995	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000199		mg/L	0.995	0.000200
Benzo(g,h,i)perylene	U	1	<0.000199		mg/L	0.995	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0619	mg/L	0.995	0.0800	77	40 - 110
2-Fluorobiphenyl			0.0626	mg/L	0.995	0.0800	78	50 - 110
Terphenyl-d14			0.0655	mg/L	0.995	0.0800	82	50 - 135

Sample: 316864 - MW-19

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97499	Date Analyzed:	2012-12-17	Analyzed By:	JS
Prep Batch:	82620	Sample Preparation:	2012-12-17	Prepared By:	JS

Parameter	Flag	Cert	Result	RL	Units	Dilution	RL
Benzene		1	**0.00980**		mg/L	1	0.00100
Toluene	U	1	<0.00100		mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100		mg/L	1	0.00100
Xylene	U	1	<0.00100		mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0793	mg/L	1	0.100	79	69.2 - 120

continued ...

sample continued ...

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)			0.0754	mg/L	1	0.100	75	67.1 - 120

Sample: 316864 - MW-19

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270D	Prep Method:	S 3510C
QC Batch:	97677	Date Analyzed:	2012-12-26	Analyzed By:	MN
Prep Batch:	82752	Sample Preparation:	2012-12-19	Prepared By:	MN

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	U	1	<0.000200	mg/L	1	0.000200
2-Methylnaphthalene	U	1	<0.000200	mg/L	1	0.000200
1-Methylnaphthalene	U		<0.000200	mg/L	1	0.000200
Acenaphthylene	U	1	<0.000200	mg/L	1	0.000200
Acenaphthene	U	1	<0.000200	mg/L	1	0.000200
Dibenzofuran	U	1	<0.000200	mg/L	1	0.000200
Fluorene	U	1	<0.000200	mg/L	1	0.000200
Anthracene	U	1	<0.000200	mg/L	1	0.000200
Phenanthrene	U	1	<0.000200	mg/L	1	0.000200
Fluoranthene	U	1	<0.000200	mg/L	1	0.000200
Pyrene	U	1	<0.000200	mg/L	1	0.000200
Benzo(a)anthracene	U	1	<0.000200	mg/L	1	0.000200
Chrysene	Qs,U	1	<0.000200	mg/L	1	0.000200
Benzo(b)fluoranthene	U	1	<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene	U	1	<0.000200	mg/L	1	0.000200
Benzo(a)pyrene	Qs,U	1	<0.000200	mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000200	mg/L	1	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000200	mg/L	1	0.000200
Benzo(g,h,i)perylene	U	1	<0.000200	mg/L	1	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0733	mg/L	1	0.0800	92	40 - 110
2-Fluorobiphenyl			0.0734	mg/L	1	0.0800	92	50 - 110
Terphenyl-d14			0.0897	mg/L	1	0.0800	112	50 - 135

Sample: 316865 - MW-20

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97499	Date Analyzed:	2012-12-17	Analyzed By:	JS
Prep Batch:	82620	Sample Preparation:	2012-12-17	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0770	mg/L	1	0.100	77	69.2 - 120
4-Bromofluorobenzene (4-BFB)			0.0799	mg/L	1	0.100	80	67.1 - 120

Sample: 316866 - MW-21

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	97499	Date Analyzed:	2012-12-17	Analyzed By:	JS
Prep Batch:	82620	Sample Preparation:	2012-12-17	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	Jb	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0713	mg/L	1	0.100	71	69.2 - 120
4-Bromofluorobenzene (4-BFB)			0.0796	mg/L	1	0.100	80	67.1 - 120

Method Blanks

Method Blank (1) QC Batch: 97499

QC Batch: 97499 | Date Analyzed: 2012-12-17 | Analyzed By: JS
Prep Batch: 82620 | QC Preparation: 2012-12-17 | Prepared By: JS

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000310	mg/L	0.001
Toluene		1	0.000300	mg/L	0.001
Ethylbenzene		1	0.000600	mg/L	0.001
Xylene		1	0.000400	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0782	mg/L	1	0.100	78	69.2 - 120
4-Bromofluorobenzene (4-BFB)			0.0790	mg/L	1	0.100	79	67.1 - 120

Method Blank (1) QC Batch: 97501

QC Batch: 97501 | Date Analyzed: 2012-12-17 | Analyzed By: MT
Prep Batch: 82621 | QC Preparation: 2012-12-17 | Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000371	mg/L	0.001
Toluene		1	<0.000347	mg/L	0.001
Ethylbenzene		1	<0.000326	mg/L	0.001
Xylene		1	<0.000357	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.100	mg/L	1	0.100	100	80 - 120
4-Bromofluorobenzene (4-BFB)			0.104	mg/L	1	0.100	104	80 - 120

Method Blank (1) QC Batch: 97677

QC Batch: 97677 | Date Analyzed: 2012-12-26 | Analyzed By: MN
Prep Batch: 82752 | QC Preparation: 2012-12-19 | Prepared By: MN

Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.000121	mg/L	0.0002
2-Methylnaphthalene		1	<0.0000913	mg/L	0.0002
1-Methylnaphthalene			<0.000109	mg/L	0.0002
Acenaphthylene		1	<0.000100	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000108	mg/L	0.0002
Fluorene		1	<0.000100	mg/L	0.0002
Anthracene		1	<0.0000791	mg/L	0.0002
Phenanthrene		1	<0.0000824	mg/L	0.0002
Fluoranthene		1	<0.000124	mg/L	0.0002
Pyrene		1	<0.0000691	mg/L	0.0002
Benzo(a)anthracene		1	<0.000101	mg/L	0.0002
Chrysene		1	<0.0000769	mg/L	0.0002
Benzo(b)fluoranthene		1	<0.0000813	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.0000790	mg/L	0.0002
Benzo(a)pyrene		1	<0.0000701	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		1	<0.0000770	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.0000851	mg/L	0.0002
Benzo(g,h,i)perylene		1	<0.0000798	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0744	mg/L	1	0.0800	93	40 - 110
2-Fluorobiphenyl			0.0744	mg/L	1	0.0800	93	50 - 110
Terphenyl-d14			0.0765	mg/L	1	0.0800	96	50 - 135

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 97499 | Date Analyzed: 2012-12-17 | Analyzed By: JS
Prep Batch: 82620 | QC Preparation: 2012-12-17 | Prepared By: JS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0815	mg/L	1	0.100	<0.000310	82	71.7 - 120
Toluene		1	0.0870	mg/L	1	0.100	0.0003	87	73.3 - 120
Ethylbenzene		1	0.0875	mg/L	1	0.100	0.0006	87	72.8 - 120
Xylene		1	0.263	mg/L	1	0.300	0.0004	88	72.7 - 120

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0823	mg/L	1	0.100	<0.000310	82	71.7 - 120	1	20
Toluene		1	0.0872	mg/L	1	0.100	0.0003	87	73.3 - 120	0	20
Ethylbenzene		1	0.0862	mg/L	1	0.100	0.0006	86	72.8 - 120	2	20
Xylene		1	0.257	mg/L	1	0.300	0.0004	86	72.7 - 120	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0768	0.0745	mg/L	1	0.100	77	74	69.2 - 120
4-Bromofluorobenzene (4-BFB)	0.0836	0.0813	mg/L	1	0.100	84	81	67.1 - 120

Laboratory Control Spike (LCS-1)

QC Batch: 97501 | Date Analyzed: 2012-12-17 | Analyzed By: MT
Prep Batch: 82621 | QC Preparation: 2012-12-17 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0990	mg/L	1	0.100	<0.000371	99	80 - 120
Toluene		1	0.102	mg/L	1	0.100	<0.000347	102	80 - 120
Ethylbenzene		1	0.102	mg/L	1	0.100	<0.000326	102	80 - 120
Xylene		1	0.305	mg/L	1	0.300	<0.000357	102	80 - 120

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0988	mg/L	1	0.100	<0.000371	99	80 - 120	0	20
Toluene		1	0.102	mg/L	1	0.100	<0.000347	102	80 - 120	0	20
Ethylbenzene		1	0.101	mg/L	1	0.100	<0.000326	101	80 - 120	0	20
Xylene		1	0.303	mg/L	1	0.300	<0.000357	101	80 - 120	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0965	0.0984	mg/L	1	0.100	96	98	80 - 120
4-Bromofluorobenzene (4-BFB)	0.0976	0.0990	mg/L	1	0.100	98	99	80 - 120

Laboratory Control Spike (LCS-1)

QC Batch: 97677 | Date Analyzed: 2012-12-26 | Analyzed By: MN
Prep Batch: 82752 | QC Preparation: 2012-12-19 | Prepared By: MN

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene		1	0.0663	mg/L	1	0.0800	<0.000121	83	40 - 100
2-Methylnaphthalene		1	0.0636	mg/L	1	0.0800	<0.0000913	80	45 - 105
1-Methylnaphthalene			0.0618	mg/L	1	0.0800	<0.000109	77	70 - 130
Acenaphthylene		1	0.0711	mg/L	1	0.0800	<0.000100	89	50 - 105
Acenaphthene		1	0.0680	mg/L	1	0.0800	<0.000122	85	45 - 110
Dibenzofuran		1	0.0608	mg/L	1	0.0800	<0.000108	76	55 - 105
Fluorene		1	0.0702	mg/L	1	0.0800	<0.000100	88	50 - 110
Anthracene		1	0.0637	mg/L	1	0.0800	<0.0000791	80	55 - 110
Phenanthrene		1	0.0699	mg/L	1	0.0800	<0.0000824	87	50 - 115
Fluoranthene		1	0.0633	mg/L	1	0.0800	<0.000124	79	55 - 115
Pyrene		1	0.0527	mg/L	1	0.0800	<0.0000691	66	50 - 130
Benzo(a)anthracene		1	0.0533	mg/L	1	0.0800	<0.000101	67	55 - 110
Chrysene	Qs	Qs	1	0.0889	mg/L	1	0.0800	<0.0000769	111	55 - 110
Benzo(b)fluoranthene			1	0.0389	mg/L	1	0.0800	<0.0000813	49	45 - 120
Benzo(k)fluoranthene			1	0.0443	mg/L	1	0.0800	<0.0000790	55	45 - 125
Benzo(a)pyrene	Qs	Qs	1	0.0423	mg/L	1	0.0800	<0.0000701	53	55 - 110
Indeno(1,2,3-cd)pyrene			1	0.0470	mg/L	1	0.0800	<0.0000770	59	45 - 125
Dibenzo(a,h)anthracene			1	0.0709	mg/L	1	0.0800	<0.0000851	89	40 - 125
Benzo(g,h,i)perylene			1	0.0454	mg/L	1	0.0800	<0.0000798	57	40 - 125

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Naphthalene		1	0.0670	mg/L	1	0.0800	<0.000121	84	40 - 100	1	20

continued ...

control spikes continued ...

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
2-Methylnaphthalene		1	0.0654	mg/L	1	0.0800	<0.0000913	82	45 - 105	3	20
1-Methylnaphthalene			0.0640	mg/L	1	0.0800	<0.000109	80	70 - 130	4	20
Acenaphthylene		1	0.0707	mg/L	1	0.0800	<0.000100	88	50 - 105	1	20
Acenaphthene		1	0.0672	mg/L	1	0.0800	<0.000122	84	45 - 110	1	20
Dibenzofuran		1	0.0601	mg/L	1	0.0800	<0.000108	75	55 - 105	1	20
Fluorene		1	0.0696	mg/L	1	0.0800	<0.000100	87	50 - 110	1	20
Anthracene		1	0.0624	mg/L	1	0.0800	<0.0000791	78	55 - 110	2	20
Phenanthrene		1	0.0694	mg/L	1	0.0800	<0.0000824	87	50 - 115	1	20
Fluoranthene		1	0.0622	mg/L	1	0.0800	<0.000124	78	55 - 115	2	20
Pyrene		1	0.0609	mg/L	1	0.0800	<0.0000691	76	50 - 130	14	20
Benzo(a)anthracene		1	0.0614	mg/L	1	0.0800	<0.000101	77	55 - 110	14	20
Chrysene	Qs	Qs 1	0.102	mg/L	1	0.0800	<0.0000769	128	55 - 110	14	20
Benzo(b)fluoranthene		1	0.0378	mg/L	1	0.0800	<0.0000813	47	45 - 120	3	20
Benzo(k)fluoranthene		1	0.0439	mg/L	1	0.0800	<0.0000790	55	45 - 125	1	20
Benzo(a)pyrene	Qs	Qs 1	0.0419	mg/L	1	0.0800	<0.0000701	52	55 - 110	1	20
Indeno(1,2,3-cd)pyrene		1	0.0471	mg/L	1	0.0800	<0.0000770	59	45 - 125	0	20
Dibenzo(a,h)anthracene		1	0.0685	mg/L	1	0.0800	<0.0000851	86	40 - 125	3	20
Benzo(g,h,i)perylene		1	0.0444	mg/L	1	0.0800	<0.0000798	56	40 - 125	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Nitrobenzene-d5	0.0510	0.0524	mg/L	1	0.0800	64	66	40 - 110
2-Fluorobiphenyl	0.0570	0.0569	mg/L	1	0.0800	71	71	50 - 110
Terphenyl-d14	0.0460	0.0534	mg/L	1	0.0800	58	67	50 - 135

Matrix Spike (MS-1) Spiked Sample: 316857

QC Batch: 97499 | Date Analyzed: 2012-12-17 | Analyzed By: JS
Prep Batch: 82620 | QC Preparation: 2012-12-17 | Prepared By: JS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0816	mg/L	1	0.100	0.0006	81	56.8 - 127
Toluene		1	0.0851	mg/L	1	0.100	0.0014	84	57.6 - 125
Ethylbenzene		1	0.0836	mg/L	1	0.100	0.0006	83	60.4 - 121
Xylene		1	0.253	mg/L	1	0.300	0.001	84	60.3 - 125

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

continued ...

matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0825	mg/L	1	0.100	0.0006	82	56.8 - 127	1	20
Toluene		1	0.0860	mg/L	1	0.100	0.0014	85	57.6 - 125	1	20
Ethylbenzene		1	0.0848	mg/L	1	0.100	0.0006	84	60.4 - 121	1	20
Xylene		1	0.257	mg/L	1	0.300	0.001	85	60.3 - 125	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0745	0.0748	mg/L	1	0.1	74	75	69.2 - 120
4-Bromofluorobenzene (4-BFB)	0.0790	0.0808	mg/L	1	0.1	79	81	67.1 - 120

Matrix Spike (MS-1) Spiked Sample: 316839

QC Batch: 97501 | Date Analyzed: 2012-12-17 | Analyzed By: MT
Prep Batch: 82621 | QC Preparation: 2012-12-17 | Prepared By: MT

Param		F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	Qs	Qs	1	2.31	mg/L	1	0.100	2.3289	-17	61.3 - 124
Toluene	Qs	Qs	1	0.522	mg/L	1	0.100	0.4531	69	62 - 126
Ethylbenzene	Qs	Qs	1	0.183	mg/L	1	0.100	0.0958	87	61.6 - 127
Xylene	Qs	Qs	1	0.444	mg/L	1	0.300	0.1744	90	57.3 - 126

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.33	mg/L	1	0.100	2.3289	1	61.3 - 124	1	20
Toluene		1	0.530	mg/L	1	0.100	0.4531	77	62 - 126	2	20
Ethylbenzene		1	0.186	mg/L	1	0.100	0.0958	90	61.6 - 127	2	20
Xylene		1	0.451	mg/L	1	0.300	0.1744	92	57.3 - 126	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0914	0.0908	mg/L	1	0.1	91	91	80 - 120
4-Bromofluorobenzene (4-BFB)	0.0968	0.0950	mg/L	1	0.1	97	95	80 - 120

Calibration Standards

Standard (CCV-1)

QC Batch: 97499 | Date Analyzed: 2012-12-17 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0815	82	80 - 120	2012-12-17
Toluene		1	mg/L	0.100	0.0891	89	80 - 120	2012-12-17
Ethylbenzene		1	mg/L	0.100	0.0879	88	80 - 120	2012-12-17
Xylene		1	mg/L	0.300	0.256	85	80 - 120	2012-12-17

Standard (CCV-2)

QC Batch: 97499 | Date Analyzed: 2012-12-17 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0806	81	80 - 120	2012-12-17
Toluene		1	mg/L	0.100	0.0831	83	80 - 120	2012-12-17
Ethylbenzene		1	mg/L	0.100	0.0838	84	80 - 120	2012-12-17
Xylene		1	mg/L	0.300	0.252	84	80 - 120	2012-12-17

Standard (CCV-3)

QC Batch: 97499 | Date Analyzed: 2012-12-17 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0822	82	80 - 120	2012-12-17
Toluene		1	mg/L	0.100	0.0855	86	80 - 120	2012-12-17
Ethylbenzene		1	mg/L	0.100	0.0839	84	80 - 120	2012-12-17
Xylene		1	mg/L	0.300	0.255	85	80 - 120	2012-12-17

Standard (CCV-1)

QC Batch: 97501 | Date Analyzed: 2012-12-17 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0979	98	80 - 120	2012-12-17
Toluene		1	mg/L	0.100	0.101	101	80 - 120	2012-12-17
Ethylbenzene		1	mg/L	0.100	0.101	101	80 - 120	2012-12-17
Xylene		1	mg/L	0.300	0.303	101	80 - 120	2012-12-17

Standard (CCV-2)

QC Batch: 97501 | Date Analyzed: 2012-12-17 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.101	101	80 - 120	2012-12-17
Toluene		1	mg/L	0.100	0.104	104	80 - 120	2012-12-17
Ethylbenzene		1	mg/L	0.100	0.103	103	80 - 120	2012-12-17
Xylene		1	mg/L	0.300	0.307	102	80 - 120	2012-12-17

Standard (CCV-3)

QC Batch: 97501 | Date Analyzed: 2012-12-17 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0950	95	80 - 120	2012-12-17
Toluene		1	mg/L	0.100	0.0974	97	80 - 120	2012-12-17
Ethylbenzene		1	mg/L	0.100	0.0945	94	80 - 120	2012-12-17
Xylene		1	mg/L	0.300	0.283	94	80 - 120	2012-12-17

Standard (CCV-2)

QC Batch: 97677 | Date Analyzed: 2012-12-26 | Analyzed By: MN

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		1	mg/L	60.0	60.8	101	80 - 120	2012-12-26
2-Methylnaphthalene		1	mg/L	60.0	58.2	97	80 - 120	2012-12-26
1-Methylnaphthalene			mg/L	60.0	58.2	97	80 - 120	2012-12-26
Acenaphthylene		1	mg/L	60.0	53.9	90	80 - 120	2012-12-26
Acenaphthene		1	mg/L	60.0	55.7	93	80 - 120	2012-12-26
Dibenzofuran		1	mg/L	60.0	59.4	99	80 - 120	2012-12-26
Fluorene		1	mg/L	60.0	57.3	96	80 - 120	2012-12-26
Anthracene		1	mg/L	60.0	54.4	91	80 - 120	2012-12-26
Phenanthrene		1	mg/L	60.0	58.4	97	80 - 120	2012-12-26
Fluoranthene		1	mg/L	60.0	57.7	96	80 - 120	2012-12-26
Pyrene		1	mg/L	60.0	60.7	101	80 - 120	2012-12-26
Benzo(a)anthracene		1	mg/L	60.0	59.9	100	80 - 120	2012-12-26
Chrysene		1	mg/L	60.0	58.6	98	80 - 120	2012-12-26
Benzo(b)fluoranthene		1	mg/L	60.0	53.8	90	80 - 120	2012-12-26
Benzo(k)fluoranthene		1	mg/L	60.0	55.7	93	80 - 120	2012-12-26
Benzo(a)pyrene		1	mg/L	60.0	57.8	96	80 - 120	2012-12-26
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	61.5	102	80 - 120	2012-12-26
Dibenzo(a,h)anthracene		1	mg/L	60.0	60.9	102	80 - 120	2012-12-26
Benzo(g,h,i)perylene		1	mg/L	60.0	61.0	102	80 - 120	2012-12-26

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			61.6	mg/L	1	60.0	103	-
2-Fluorobiphenyl			58.6	mg/L	1	60.0	98	-
Terphenyl-d14			63.2	mg/L	1	60.0	105	-

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-12-8	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 121702

Page 1 of 2

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Tolar LPC — Phone #: 432-522-2133

Address: (Street, City, Zip) 2901 S Stock Hwy Hobbs, Tx — Fax #: 432-522-2180

Contact Person: Brad Ivy — E-mail: Bivy@tolar2pc.com

Invoice to: (If different from above)

Project #: 700376.045.01 — Project Name: JDL #2

Project Location (including state): Hobbs, NM — Sampler Signature: Brad Ivy

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity	Na, Ca, Mg, K, TDS, EC					Turn Around Time if different from standard	Hold
31684	MW-8	3	VOA	X				X				X		12/14/12	1230		X																							
855	MW-10	3		X				X				X			1145		X																							
856	MW-11	3		X				X				X			1140		X																							
857	MW-12	3		X				X				X			1245		X																							
858	MW-13	3		X				X				X			1235		X																							
859	MW-14	3		X				X				X			1125		X																							
860	MW-15	3		X				X				X			1130		X																							
861	MW-16	3		X				X				X			1135		X																							
862	MW-17	3	VOA	X				X				X			1220		X			X																				
863	MW-18	3	VOA	X				X				X			1210		X			X																				
864	MW-19	3	VOA	X				X				X		↓	1155		X			X																				

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
Brad Ivy	Tolar	12/14/12	1600					INST ___ °C OBS ___ °C COR ___ °C
								INST ___ °C OBS ___ °C COR ___ °C
				Brandi Ward	Trace Lubbock	12/14/12	16:00	INST 1.2 °C OBS 2.3 °C COR 2.0 °C

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-In-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry In

ORIGINAL COPY

LAB Order ID # 12121702

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9, **Lubbock, Texas 79424**, **Tel (806) 794-1296**, Fax (806) 794-1298, 1 (800) 378-1296

5002 Basin Street, Suite A1, **Midland, Texas 79703**, Tel (432) 689-6301, Fax (432) 689-6313

200 East Sunset Rd., Suite E, **El Paso, Texas 79922**, Tel (915) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443

BioAquatic Testing, 2501 Mayes Rd., Ste 100, **Carrollton, Texas 75006**, Tel (972) 242-7750

Company Name: Tolow LPC **Phone #:** 432-522-2133

Address: (Street, City, Zip) 2901 S. State Hwy 349 Midland TX **Fax #:** 432-522-2180

Contact Person: Brod Ivy **E-mail:** Bivy@tolowlpc.com

Invoice to: (If different from above)

Project #: 700 376. 045.01 **Project Name:** SOL #2

Project Location (including state): Hobbs, NM **Sampler Signature:** Thomas Cortes

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity	Na, Ca, Mg, K, TDS, EC						Turn Around Time if different from standard	Hold
316865	MW-20	3	VOA	X				X				X		12/14/12	0910		X																								
866	MW-21	3	VOA	X				X				X		12/14/12	0915		X																								

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
Thomas Cortes	Tolow	12/14/12	1600					INST °C OBS °C COR °C
								INST °C OBS °C COR °C
				Brenda Ward	Trace Lubbock	12/14/12	16:00	INST R2 OBS 2.3 °C COR 2.0 °C

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:
- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

Carrier # Courier

APPENDIX D

NMOCD C-141

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company **EOTT**	Contact **Frank Hernandez**
Address PO Box 1660 5805 East Highway 80 Midland, Texas 79702	Telephone No. 915.638.3799
Facility Name 8" Moore to Jal #2	Facility Type 8" Steel Pipeline

Surface Owner	Mineral Owner	Lease No.
State of New Mexico		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea Lat. 32 49' 56.61"N Lon. 103 15' 08.47"W
16	16	T17S	R37E					

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 25 bbls barrels	Volume Recovered 0 bbls barrels
Source of Release 8" Steel Pipeline	Date and Hour of Occurrence EOTT	Date and Hour of Discovery 10-22-02 @ 7:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Larry Johnson	
By Whom? Pat McCasland, EPI	Date and Hour 10-23-02 @ 7:00 AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.*
NA

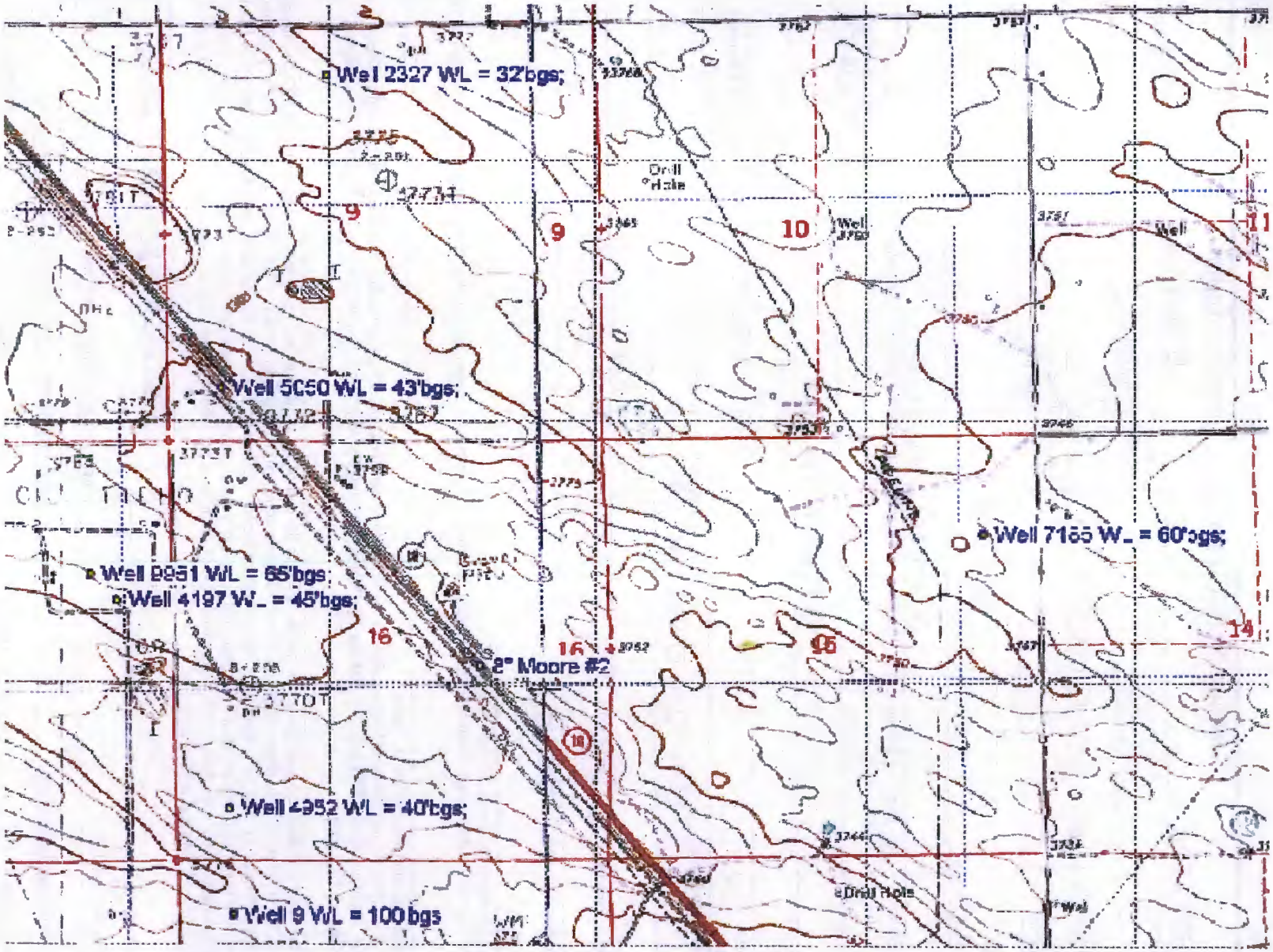
Describe Cause of Problem and Remedial Action Taken.*
8" Steel Pipeline Site will be delineated to determine the vertical and horizontal extents of contamination. Contaminated soil will be blended on site or disposed of.

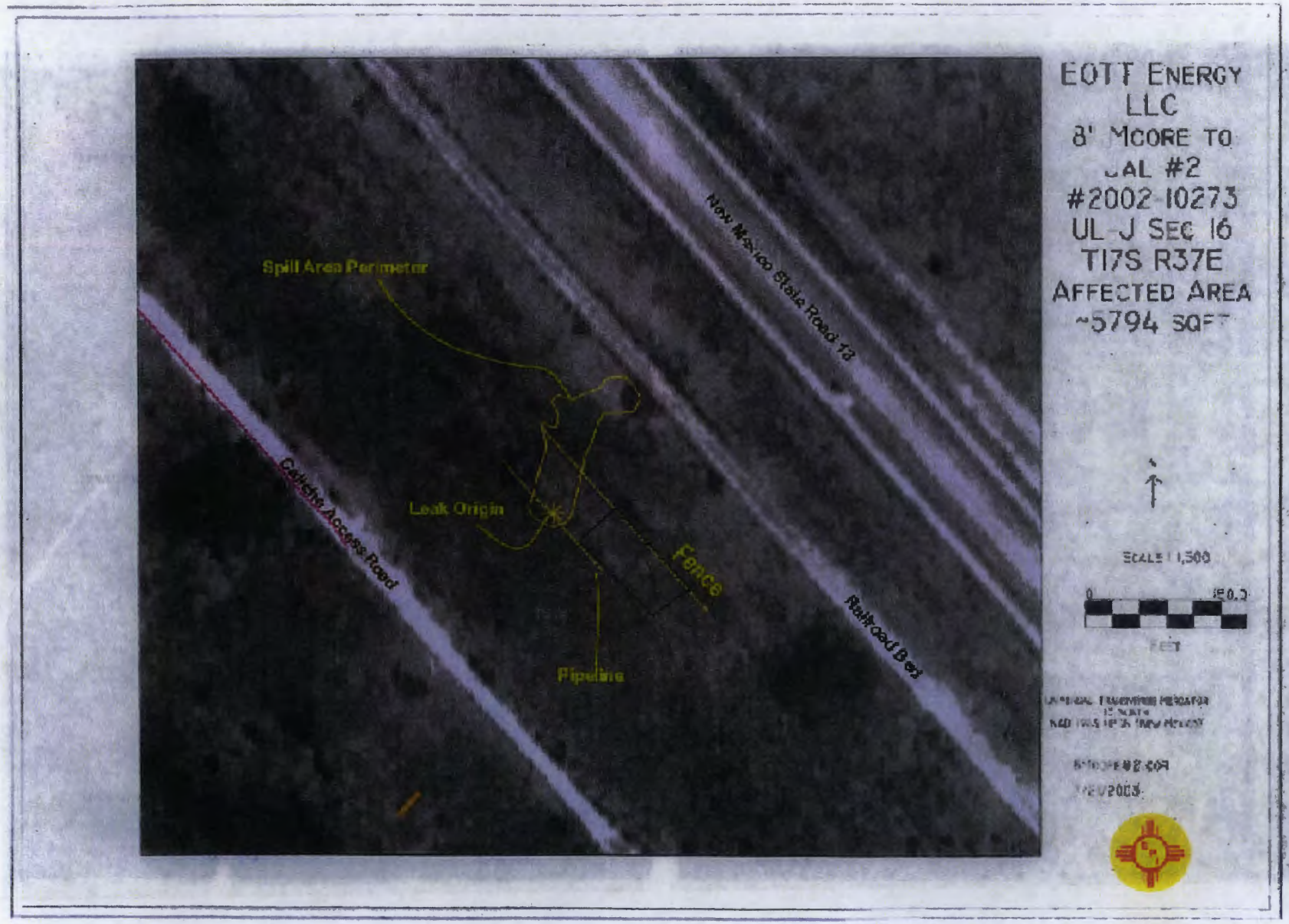
Describe Area Affected and Cleanup Action Taken.*
5,794 sqft ~160' x 40' Site will be delineated to determine the vertical and horizontal extents of contamination. Contaminated soil will be blended on site or disposed of. Remedial Goals: TPH 8015m = 100 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg.

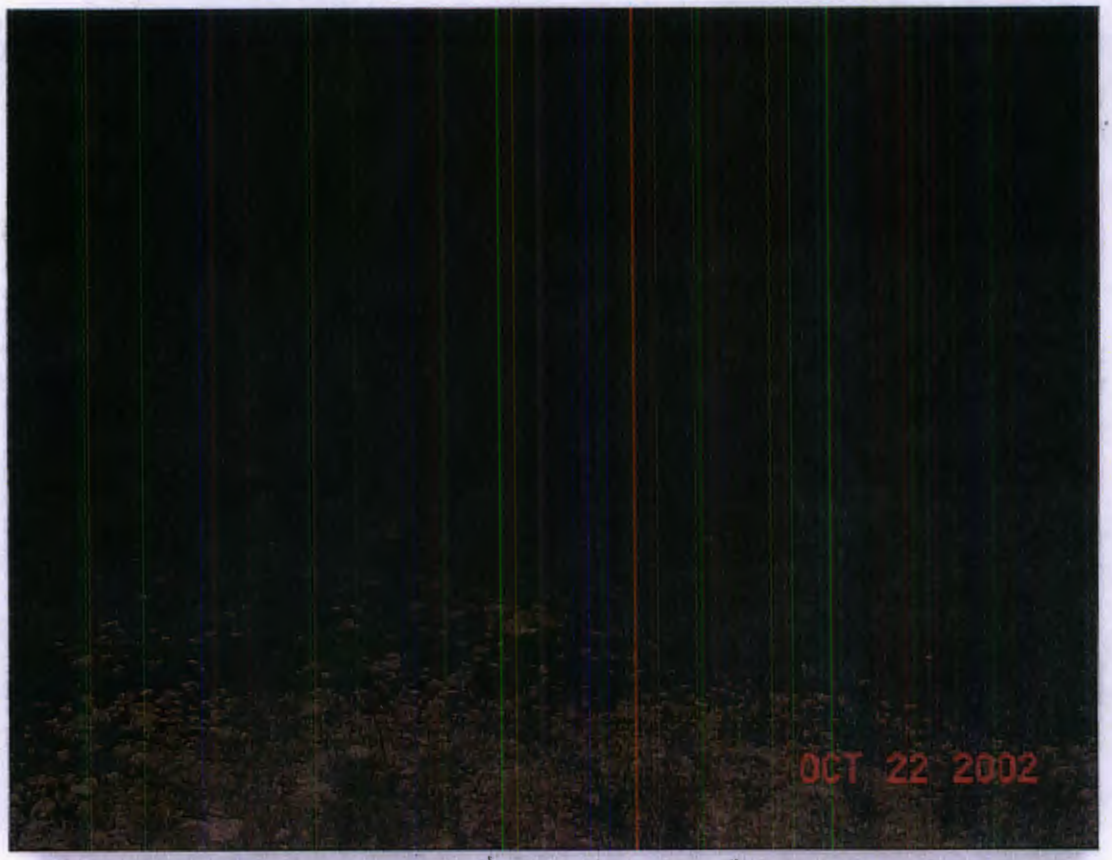
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger 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.

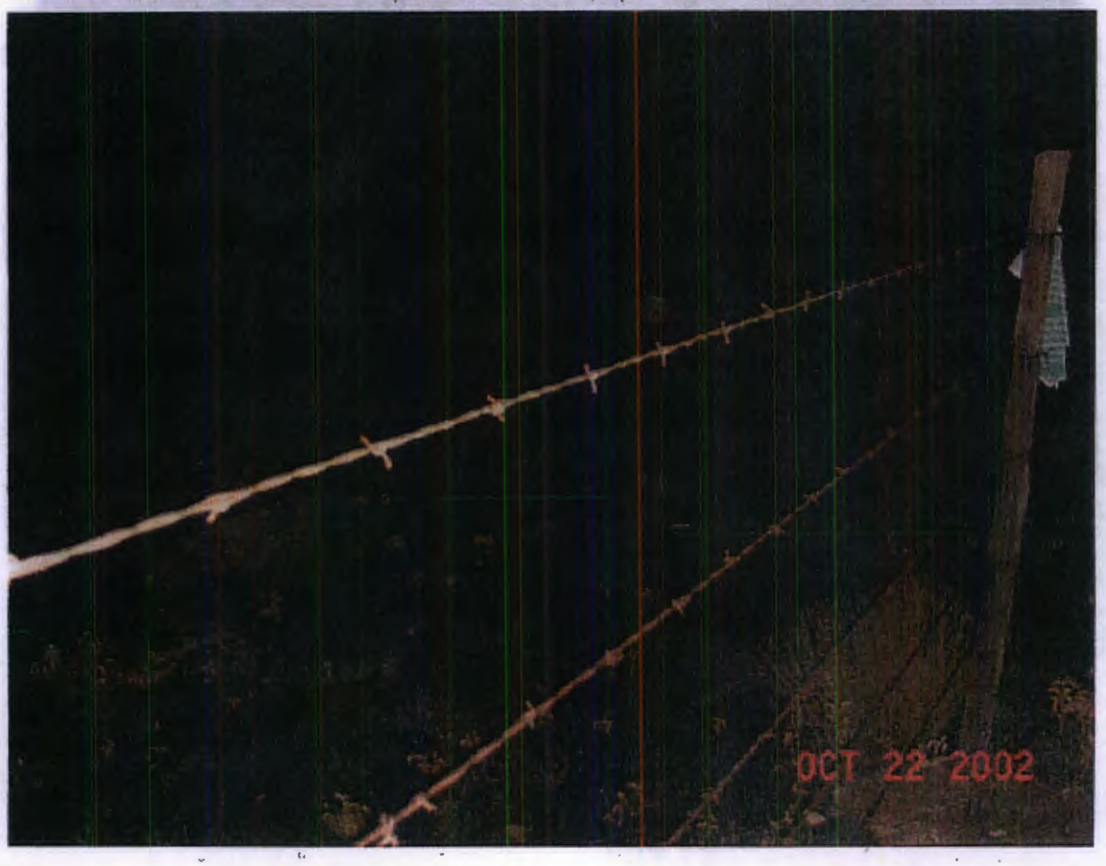
Signature:	**OIL CONSERVATION DIVISION**	
Printed Name: Frank Hernandez	Approved by District Supervisor:	
Title: District Environmental Supervisor	Approval Date:	Expiration Date:
Date: October 23, 2003 Phone: 915.638.3799	Conditions of Approval:	Attached ☐

* Attach Additional Sheets If Necessary


Well 2327 WL = 32'bgs;
Well 5050 WL = 43'bgs;
Well 8851 WL = 65'bgs;
Well 4197 WL = 45'bgs;
Well 7165 WL = 60'bgs;
2" Moore #2
Well 4352 WL = 40'bgs;
Well 9 WL = 100 bgs
Drill Hole
9
10
16
15
14


Spill Area Perimeter
New Mexico State Road 18
Caliche Access Road
Leak Origin
Fence
Railroad Bed
Pipeline
EOTT ENERGY
LLC
8" MOORE TO
JAL #2
#2002-10273
UL-J SEC 16
T17S R37E
AFFECTED AREA
~5794 SQFT
SCALE 1:500
0
FEET


OCT 22 2002


OCT 22 2002