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TALON LPE

2019 ANNUAL GROUNDWATER MONITORING REPORT

8” MOORE TO JAL #1
LEA COUNTY, NEW MEXICO
SRS #2002—10270
NMOCD REF. # AP-91

Prepared For:
PLAINS MARKETING, L.P.
333 CLAY STREET, SUITE 1600
HOUSTON, TEXAS

Prepared By:
Lorena Interiano
Talon/LPE
408 Texas Avenue
Artesia, NM 88210

January 29, 2020

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TALON/LPE PROJECT NO. 700376.044.04

Prepared by:

Lorena Interiano
Staff Engineer

Reviewed by:

Paul Santos, P.E.
Senior Engineer

PAUL A. SANTOS
NEW MEXICO
17808
LICENSED PROFESSIONAL ENGINEER
3/24/2020

Talon/LPE
408 Texas Avenue
Artesia, NM 88210

January 29, 2020

Distribution List

Name	Title	Company or Agency	Mailing Address	e-mail
Bradford G. Billings	Hydrologist	NMOCD	1220 South St. Francis Drive Santa Fe, NM 87505	Bradford.Billings@state.nm.us
Ryan Mann	Remediation Specialist	NMSLO	2827 N. Dal Paso, Suite 117 Hobbs, NM 88240	rmann@slo.state.nm.us
Camille Bryant	Remediation Supervisor	Plains Pipeline	577 US Highway 385 North Seminole, TX 79360	cjbryant@paalp.com
David Adkins	District Manager	Talon/LPE	408 Texas Avenue Artesia, NM 88510	dadkins@talonlpe.com

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

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1.0 INTRODUCTION AND OBJECTIVES

1.1 Site Background

The 8" Moore to Jal #1 release site is located approximately 9.2 miles southeast of Lovington, New Mexico in Unit F, Section 16, Township 17 South, and Range 37. The site is located within the West Lovington Oil Field on land owned by the State of New Mexico. No residence or surface water features are located within a 1,000-foot radius of the site.

The site is situated in a physio-geographic area that is on the extreme south-western portion of the Southern High Plains as it grades into the Edwards Plateau to the south and southeast and the Chihuahuan Desert of the Trans-Pecos Region to the southwest.

The topography proximal to the site is typical of the Southern High Plains, essentially flat with shallow depressions, or playa lakes, dotting the landscape. The prominent surface features on the Southern High Plains are the approximately 19,250 ephemeral playa lakes; however, the density of the playa lakes diminishes toward the southern extent of the Southern High Plains. During periods of rainfall, the playas accumulate sheet runoff from watershed areas ranging in size from less than one square mile to several square miles. Only a small portion of drainage from rainfall occurs by streams. Playa lakes that collect storm water runoff can act as a recharge mechanism for groundwater.

The average elevation of the site and surrounding area is approximately 3,770-feet above mean sea level with a slight slope to the southeast. The regional slope of the land surface in the Southern High Plains is approximately 100 feet per mile in a southeasterly direction.

In October 2002, a release of approximately 200 barrels (bbls) occurred from a Plains Pipeline, L.P. (Plains) pipeline at the site. Approximately 8,000 square feet of surface area was impacted by the release. Soil excavation and over-excavation activities were initiated in October 2002 and that activity is documented in the "Soil Over-Excavation Report and Backfill Workplan," dated May 23, 2006.

Talon/LPE (Talon) has been retained by Plains to conduct quarterly groundwater monitoring activities and operation and maintenance of the phase separated hydrocarbon (PSH) recovery system.

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 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 calichification 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 paleo-valley 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, a total of 41 monitor wells have been installed proximal to the release point (see Figure 1). The first monitor well (MW-1), installed July 2004, was completed with a screened interval below the potentiometric surface. The second monitor well (MW-1A) was installed in September 2004, and phase-separated hydrocarbon (PSH) entered the casing immediately upon completion of the well. Subsequently, three (3) additional monitor wells (MW-2, MW-3, and MW-4) were installed in October of 2004, and PSH entered the casing on those wells.

In November 2007, 16 additional groundwater monitor wells were installed as proposed in the "Monitor Well Installation Workplan Moore to Jal #1", dated January 26, 2007. The purpose of the 16 monitor wells (MW-5 through MW-20) was to further delineate the extent of the PSH and dissolved phase plumes. In addition to the new monitor well installations, monitor wells MW-1 and MW-4 were plugged and abandoned (P&A'd) on March 14, 2007, and re-drilled as a new groundwater monitor wells, MW-1A and MW-4A. Of the sixteen monitor wells that were installed, ten (10), (MW-4A, MW-5 through MW-12, and MW-15), were impacted with PSH.

During the year 2010, a total of 11 specific gravity skimmers with bladder pumps were in operation in monitor wells MW-2, MW-3, MW-5, MW-7 through MW-13, and MW-15. In addition, a total of three (3) total fluids pumps were operating in monitor wells MW-1A, MW-4A, and MW-6. Also during 2010, 16 monitor wells were installed at the site (MW-21 through MW-36) to further delineate the PSH and dissolved-phase plumes. Monitor wells MW-24, MW-25, and MW-30 through MW-31 were impacted with PSH. Two (2) skimmers were added to the system in monitor wells MW-24 and MW-25 in October of 2010.

A 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 three (3) inch HDPE line that was installed (slip-lined) into the out of service Moore to Jal 8-inch pipeline from the Moore to Jal #2 site through the Moore to Jal #1 site to the C.S. Caylor site, where it is connected to the HDPE line that runs from the Caylor site to the afore referenced SWD. A five (5) HP transfer pump is used to impel the water down the HDPE line.

During the year 2011, a total of 13 specific gravity skimmers and bladder pumps operated in monitor wells MW-2, MW-3, MW-5, MW-7 through MW-13, MW-15, MW-24, and MW-25. In addition, a total of three (3) total fluids pumps operated in monitor wells MW-1A, MW-4A, and MW-6 during 2011.

During the year 2012, a total of 12 specific gravity skimmers and bladder pumps operated in monitor wells MW-2, MW-3, MW-5, MW-8 through MW-13, MW-15, MW-24, and MW-25. In addition, a total of seven (7) total fluids pumps operated in monitor wells MW-1A, MW-4A, MW-6, MW-7, MW-30, MW-31, and MW-33 during 2012.

During 2013, two (2) additional monitor wells were installed at the site (MW-37 and MW-38) to further delineate the dissolved-phase plume. Additional total fluids pumps were installed in monitor wells MW-5, MW-7, MW-8, MW-9, MW-12, MW-15, MW-16, MW-24, MW-25, MW-30, MW-31, MW-32 and MW-33.

Currently, the PSH recovery system is composed of eleven (11) pneumatic total fluid pumps and six (6) electric total fluids pumps.

For the first time at this facility, three MDPE events were conducted on October 10, 2017, November 1, 2017, and December 7, 2017. A total of 61.7 barrels of PSH were recovered during the quarter consisting of 47.5 bbls of liquid PSH and 14.2 bbls of vapor.

PSH recovery operations have been performed at the site since 2004. During 2017, approximately 221.8 bbls of crude oil and 56,723 bbls of water were recovered by the system and approximately 1943.8 bbls of crude oil has been recovered by the system to date.

During the year 2018, three (3) additional monitor wells were installed at the site (MW-39, MW-40, and MW-41) to further delineate the dissolved-phase plume.

In 2019, the recovery system extracted a total of 96.82 bbls of PSH and 6,678.1 bbls of groundwater.

A total of twelve (12) MDPE events were conducted in 2019 on January 9, February 13, March 12, April 16, May 16, June 5, July 23, August 13, September 4, October 15, November 12, and December 17, 2019. A total of 203.48 bbls of PSH were recovered during the past 4 quarters consisting of 149.99 bbls of liquid PSH and 53.49 bbls of vapor.

1.4 Regulatory Framework

Groundwater analytical data collected from this site was 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

The sections that follow provide summaries of the four quarterly groundwater monitoring events conducted at the subject site as well as analytical results from each groundwater sampling event of 2019. Analytical results for the four (4) sampling events are summarized in Table 2 in Appendix B, and Figures 3a through 3d in Appendix A. Laboratory analytical data reports and chain of custody documentation are included in Appendix C. Historic fluid level measurements are included on Table 1 in Appendix B and gradient maps are provided as Figures 2a through 2d in Appendix A.

2.0 SITE ACTIVITIES

The sections that follow summarize groundwater monitoring and PSH recovery activities conducted at the subject site during 2019. The primary focus of groundwater monitoring activities is to obtain depth to fluid measurements and 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 performance and efficiency.

2.1 Ground water Monitoring Activities

A total of four groundwater monitoring events were conducted by Talon during this twelve month period: March 2019; June 2019; September 2019; and December 2019.

During the March 2019 groundwater monitoring event, all recovery/monitor wells were gauged. Twenty-two (22) monitor wells (MW-13, MW-14, MW-16 through MW-23, MW-26 through MW-29, and MW-34 through MW-41) were purged and sampled. Seventeen (17) monitor wells (MW-2, MW-4A, MW-5 through MW-12, MW-15, MW-24, MW-25, and MW-30 through MW-33) were not sampled due to the presence of PSH. Two (2) monitor wells (MW-1A and MW-3) were gauged dry; therefore, the wells were not purged or sampled. Details of the gauging, purging, and sampling activities are presented in Section 2.2.

During the June 2019 groundwater monitoring event, all recovery/monitor wells were gauged, except MW-30. Twenty-one (21) monitor wells (MW-13, MW-14, MW-16, MW-17, MW-19 through MW-23, MW-26 through MW-29, and MW-34 through MW-41) were purged and sampled. Sixteen (16) monitor wells (MW-2, MW-4A, MW-5 through MW-12, MW-15, MW-24, MW-25, MW-31 through MW-33) were not sampled due to the presence of PSH. Two (2) monitor wells (MW-1A and MW-3) were dry when gauged and one (1) monitor well (MW-30) was not gauged or sampled due to the pump being stuck in the well. Monitor well MW-18 was purged dry and remained dry during the monitoring event; therefore, it was not sampled. Details of the gauging, purging, and sampling activities are presented in Section 2.2.

During the September 2019 groundwater monitoring event, all recovery/monitor wells were gauged, except MW-9 and MW-30. Twenty (20) monitor wells (MW-14, MW-17 through MW-23, MW-26 through MW-29, MW-34 through MW-41) were purged and sampled. Seventeen (17) monitor wells (MW-2, MW-4A, MW-5, MW-6, MW-7, MW-8, MW-10, MW-13, MW-15, MW-16, MW-24, MW-25, MW-31 through MW-33) were not sampled due to the presence of PSH. Two (2) monitor wells (MW-1A and MW-3) were dry when gauged and two (2) monitor wells (MW-9 and MW-30) were not gauged or sampled due to the pump being stuck in the well. Details of the gauging, purging, and sampling activities are presented in Section 2.2.

During the December 2019 groundwater monitoring event, all recovery/monitor wells were gauged, except MW-9. Nineteen (19) monitor wells (MW-14, MW-17, MW-19 through MW-23, MW-26 through MW-29, MW-34 through MW-41) were purged and sampled. Seventeen

(17) monitor wells (MW-2, MW-4A, MW-5 through MW-8, MW-10 through MW-12, MW-15, MW-16, MW-24, MW-25, MW-30 through MW-33) were not sampled due to the presence of PSH. Three (3) monitor wells (MW-1A, MW-3, MW-13) were dry when gauged and one (1) monitor well (MW-9) was blocked when gauged therefore no data was obtained for that well during the groundwater event. Details of the gauging, purging, and sampling activities are presented 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 each of 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 on-site 55-gallon drums. After the groundwater monitoring event, all retained water was deposited into recovery tank, and sent to the disposal facility via the onsite transfer system.

Groundwater samples were collected from all monitor wells that were not impacted with PSH using dedicated disposable polyethylene bailers. The groundwater samples were contained in laboratory supplied 40-ml VOA sample vials with the appropriate preservative required for the analysis requested. The groundwater samples were maintained on ice, in the custody of Talon personnel, until they were delivered to Xenco Laboratories, Inc. in Midland, Texas for analyses.

The groundwater samples collected during all four events were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method SW-846 8021B. Groundwater samples collected from MW-27, MW-28, MW-29, MW-34, MW-35, MW-36, MW-37, and MW-38, during March 2019 were also analyzed for polyaromatic hydrocarbons (PAH) by EPA Method 8270D.

2.3 Phase Separated Hydrocarbon Recovery

PSH recovery has been conducted at the site since 2004, initially by hand bailing and then by using pneumatic pumps. In October of 2008, Talon installed a pneumatic skimmer system at the site. In October 2017, Talon started conducting MDPE events at the site.

During the year 2019, eighteen (18) monitor wells were pumped for PSH; MW-2, MW-4A, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-15, MW-24, MW-25, MW-30, MW-31, MW-32, and MW-33.

The discharge and recharge cycles for the total fluids pumps were set on timers in order to maximize PSH recovery in relation to groundwater volumes recovered. The system has been effective for increasing PSH recovery and inhibiting PSH plume and dissolved-phase

migration. Talon personnel performed a minimum of weekly maintenance to the remediation system to ensure efficient operation and to minimize down time.

Currently, PSH recovered by the total fluids pumps is discharged to an on-site frac tank, which is gauged for the accumulation of water and PSH on a weekly basis. The PSH and recovered water upon reaching an established level in the holding tank, engages a head pressure switch which in turn operates a fluid transfer pump. When the pump is engaged the recovered fluids are transferred to 4-inch HDPE line co-mingling with recovered fluids from the Moore to Jal #2 and C.S. Caylor groundwater recovery systems. A five (5) HP transfer pump then moves water to the Apollo SWD System for disposal.

During 2019, the quarterly PSH and groundwater recovery totals from the system are as follows:

- 1st Quarter – 34.24 bbls crude oil and 2,090 bbls of groundwater
- 2nd Quarter – 28.1 bbls crude oil and 2,067 bbls of groundwater
- 3rd Quarter – 17.73 bbls crude oil and 1,345 bbls of groundwater
- 4th Quarter – 16.75 bbls of crude oil and 1,264 bbls of groundwater

In addition to system recovery, 12 mobile dual phase extraction (MDPE) events, in which liquid and vapor PSH were recovered, were conducted on site during 2019. The MDPE event recovery totals are as follows:

- January 9, 2019 – 3.47 bbls vapor, 12.4 bbls liquid
- February 13, 2019– 6.06 bbls vapor, 10.2 bbls liquid
- March 12, 2019 – 4.43 bbls vapor, 11.7 bbls liquid
- April 16, 2019– 5.16 bbls vapor, 5.56 bbls liquid
- May 16, 2019– 6.24 bbls vapor, 38.17 bbls liquid
- June 5, 2019– 4.84 bbls vapor, 5.42 bbls liquid
- July 23, 2019– 3.89 bbls vapor, 26.11 bbls liquid
- August 13, 2019– 2.58 bbls vapor, 10.39 bbls liquid
- September 4, 2019– 5.40 bbls vapor, 9.63 bbls liquid
- October 15, 2019– 5.01 bbls vapor, 5.2 bbls liquid
- November 12, 2019– 3.51 bbls vapor, 10.04 bbls liquid
- December 17, 2019– 2.97 bbls vapor, 5.17 bbls liquid

Approximately 300.3 bbls of PSH were recovered in 2019 and a total of approximately 2,727.3 bbls of PSH have been recovered at the subject site to date.

3.0 GROUNDWATER ASSESSMENT AND MONITORING RESULTS

The results of the laboratory analyses are summarized in Table 2 – Summary of Groundwater Analytical Data in Appendix B. Laboratory analytical data reports and chains of custody documentation are provided in Appendix C.

3.1 Groundwater Monitoring Results

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

3.1.1 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 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 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 Ogallala Aquifer is generally unconfined and the poteniometric surface generally mirrors the land surface elevation with the regional flow direction 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 depth to groundwater at the site has historically ranged from 64 to 72 feet below ground surface, and the groundwater flow direction is to the southeast at an average of 20 feet per mile.

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 with an average pH of 7.3.

3.1.2 Groundwater Gradient and Flow Direction

The depth to fluid measurements were collected during each of the four (4) groundwater monitoring events during the year 2019. The results of the fluid level measurements are summarized in Table 1 - Summary of Historical Fluid Level Measurements in Appendix B.

The collected data were 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 that the groundwater flow direction is to the southeast at an average gradient of 0.0043 feet/foot or approximately 22.7 feet/mile. Groundwater levels at the subject site have exhibited a steady decrease of an average of 1.11 feet for the year 2019.

3.1.3 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 2019, PSH was observed in 17 monitor wells MW-2, MW-4A, MW-5 through MW-12, MW-15, MW-24, MW-25, and MW-30 through MW-33. PSH thicknesses ranged from 0.01 feet to 6.95 feet. Monitor wells MW-1A and MW-3 were dry.
- In June 2019, PSH was observed in 16 monitor wells MW-2, MW-4A, MW-5 through MW-12, MW-15, MW-24, MW-25, and MW-31 through MW-33. PSH thicknesses ranged from 0.06 feet to 7.03 feet. Monitor wells MW-1A and MW-3 were dry and MW-30 was blocked.
- In September 2019, PSH was observed in 17 monitor wells MW-2, MW-4A, MW-5 through MW-8, MW-10 through MW-13, MW-15, MW-16, MW-24, MW-25, and MW-31 through 33. PSH thicknesses ranged from 0.05 feet to 6.59 feet. Monitor wells MW-1A and MW-3 were dry and wells MW-9 and MW-30 were blocked
- In December 2019, PSH was observed in 17 monitor wells MW-2, MW-4A, MW-5 through MW-8, MW-10 through MW-12, MW-15, MW-16, MW-24, MW-25, and MW-30 through MW-33. PSH thicknesses ranged from 0.03 feet to 3.70 feet. Monitor wells MW-1A, MW-3, and MW-13 were dry and well MW-9 was blocked.

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. As Figure 3d illustrates, the PSH plume is currently delineated by the current monitor well array.

3.1.4 Groundwater Analytical Results

During the March 2019 event, groundwater samples were collected from twenty (22) monitor wells: MW-13, MW-14, MW-16 through MW-23, MW-26 through MW-29, and MW-34 through MW-41. Groundwater samples were not collected from seventeen (17) monitor wells due to the presence of PSH (MW-2, MW-4A, MW-5 through MW-12, MW-15, MW-24, MW-25, and MW-30 through MW-33) and dry wells (MW-1A and MW-33).

- Benzene concentrations ranged from less than the laboratory method detection limit (MDL) in wells MW-18 through MW-23, MW-26, MW-27, and MW-36 to 9.85 in MW-16. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-13, MW-14, MW-16, MW-37, MW-38, MW-40, and MW-41.
- Toluene concentrations ranged from less than the laboratory MDL in wells MW-14, MW-16 through MW-23, MW-26 through MW-29, MW-36, MW-37, MW-38, and MW-40, to 0.0111 mg/L in MW-13. Toluene concentrations did not exceed the

NMWQCC groundwater standard of 0.750 mg/L in any of the monitor wells sampled during the quarter.

- Ethylbenzene concentrations ranged from less than the laboratory MDL in wells MW-14, MW-17 through MW-23, MW-26 through MW-29, and MW-34 through MW-40, to 0.350 mg/L in MW-16. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the monitor wells sampled during the quarter.
- Xylene concentrations ranged from less than the laboratory MDL in wells MW-14, MW-17 though MW-23, MW-26 through MW-29, and MW-34 through MW-38, to 0.259 mg/L in MW-16. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any of the monitor wells sampled during the quarter.
- PAH was less than the laboratory MDL for all analytes except for dibenzofuran, fluorene, naphthalene and phenanthrene found in trace amounts in MW-27, MW-28, MW-29, MW-34, MW-35, MW-37, and MW-38. PAH constituents were not detected in MW-36 for the second consecutive year. Therefore, MW-36 will be dropped from the PAH sampling regime in 2020.

During the June 2019 event, groundwater samples were collected from twenty (21) monitor wells: MW-13, MW-14, MW-16, MW-17, MW-19, MW-23, MW-26 through MW-29, and MW-34 through MW-41. Groundwater samples were not collected from twenty (20) monitor wells due to the presence of PSH (MW-2, MW-4A, MW-5 through MW-12, MW-15, MW-24, MW-25, and MW-31 through MW-33), dry wells (MW-1A and MW-3), blockage (MW-30), or not enough water present after purging (MW-18).

- Benzene concentrations were less than the laboratory MDL in wells MW-13, MW-14, MW-17, MW-19 through MW-23, MW-26, MW-27, MW-29, MW-34 through MW-37, MW-39 through MW-41 to 3.54 mg/L in MW-16. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-16 and MW-38.
- Toluene concentrations were less than the laboratory MDL in all wells. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the monitor wells sampled during the quarter.
- Ethylbenzene concentrations ranged from less than the laboratory MDL in wells MW-14, MW-17, MW-19 through MW-23, MW-26 through MW-29, MW-34 through MW-41, to 0.165 mg/L in MW-16. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the monitor wells sampled during the quarter.
- Xylene concentrations were less than the laboratory MDL in all wells except, MW-13 and MW-16, with concentrations 0.00640 mg/L and 0.190 mg/L, respectively. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any of the monitor well sampled this quarter.

During the September 2019 event, groundwater samples were collected from twenty (20) monitor wells: MW-14, MW-17 though MW-23, MW-26 through MW-29, MW-34 through MW-41. Groundwater samples were not collected from twenty-one (21) monitor wells due to the presence of PSH (MW-2, MW-4A, MW-5 through MW-8, MW-10 through 13, MW-15,

MW-16, MW-24, MW-25, and MW-31 through 33), dry wells, (MW-1A and MW-3), and blockage (MW-9 and MW-30).

- Benzene concentrations ranged from less than the laboratory MDL in wells MW-14, MW-17 through MW-23, MW-26 through MW-29, and MW-34 through MW-36, MW-39, and MW-41 to 6.19 mg/L in MW-38. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-38 and MW-40.
- Toluene concentrations ranged from less than the laboratory MDL in wells MW-14, MW-17 through MW-23, MW-26, MW-28, MW-29, MW-34 through MW-41 to 0.00771 mg/L in MW-14. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the monitor wells sampled during the quarter.
- Ethylbenzene concentrations were less than the laboratory MDL in all wells except, MW-38 and MW-40, with concentrations of 0.00669 mg/L and 0.00221 mg/L, respectively. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the monitor wells sampled during the quarter.
- Xylene concentrations were less than the laboratory MDL in all wells except, MW-40, with a concentration of 0.0394 mg/L. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any of the monitor wells sampled during the quarter.

During the December 2019 event, groundwater samples were collected from nineteen (19) monitor wells: MW-14, MW-17, MW-19 through MW-23, MW-26 through MW-29, and MW-34 through MW-41. Groundwater samples were not collected from twenty-one (21) monitor wells due to the presence of PSH (MW-2, MW-4A, MW-5 through MW-8, MW-10 through MW-12, MW-15, MW-16, MW-24, MW-25, and MW-30 through MW-33), dry wells (MW-1A, MW-3, and MW-13) or blockage (MW-9).

- Benzene concentrations ranged from less than the laboratory MDL in wells MW-17, MW-19 through MW-21, MW-29, and MW-37, to 5.14 mg/L in MW-40. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor well MW-27, MW-28, MW-38, and MW-40.
- Toluene concentrations ranged from below the laboratory MDL in wells MW-17, MW-19 through MW-23, MW-26 through MW-28, MW-34 through MW-37, MW-39, and MW-41, to 0.00576 mg/L in MW-40. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the groundwater monitoring wells sampled during the quarter.
- Ethylbenzene concentrations were below the laboratory MDL in all wells except for MW-27, MW-38, and MW-40 with concentrations of 0.000850 mg/L, 0.000970 mg/L, and 0.0156 mg/L, respectively. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the monitor wells sampled during the quarter.
- Xylene concentrations were below the laboratory MDL in all wells except for MW-27 and MW-40. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any of the monitor wells sampled during the quarter.

Laboratory analyses are summarized in Table 2 – Summary of Groundwater Analytical Results in Appendix B. Laboratory analytical data reports and chain of custody documentation for all samples are provided in Appendix C.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The following section presents a summary of findings in regards to the four (4) groundwater monitoring events and provides recommendations for future corrective action.

4.1 Summary of Findings

- The groundwater flow direction is to southeast at an approximate gradient of 0.0043 feet/foot.
- Groundwater levels at the subject site have exhibited a slight decrease for the year 2019.
- Generally, PSH thicknesses demonstrated decreasing trends during the year 2019.
- Dissolved-phase concentrations decreased slightly in monitor wells MW-13, MW-14, MW-16, MW-37, and MW-38.
- The PSH recovery system and twelve (12) MDPE events removed 300.3 bbls of crude oil from the groundwater during 2019.

4.2 Recommendations

Based upon the results of the four (4) quarterly groundwater monitoring events and PSH recovery efforts, Talon proposes the following actions:

- Continue operation and maintenance of the total fluid pumps recovery system.
- Continue MDPE events.
- Perform groundwater monitoring events in accordance with NMOCD directives.
- Continue PAH sampling.

APPENDIX A

Figures

TALON LPE	Drafted: 11/20/2018 1 in = 150 ft Drafted By: IJM	8" Moore to Jal #1 SRS # 2002-10270, NMOCD REF. # AP-91 9.2 Miles SE of Lovington, NM, Lea County, New Mexico Figure 1 - Site Plan

TALON LPE

Drafted: 4/19/2019
1 in = 150 ft
Drafted By: IJM

8" Moore to Jal #1
SRS # 2002-10270, NMOCD REF. # AP-91
9.2 Miles SE of Lovington, NM, Lea County, New Mexico
Figure 2a - Groundwater Gradient Map (03/21/2019)

TALON LPE

Drafted: 7/22/2019
1 in = 150 ft
Drafted By: IJM

8" Moore to Jal #1
SRS # 2002-10270, NMOCD REF. # AP-91
9.2 Miles SE of Lovington, NM, Lea County, New Mexico
Figure 2b - Groundwater Gradient Map (06/24/2019)

TALON LPE

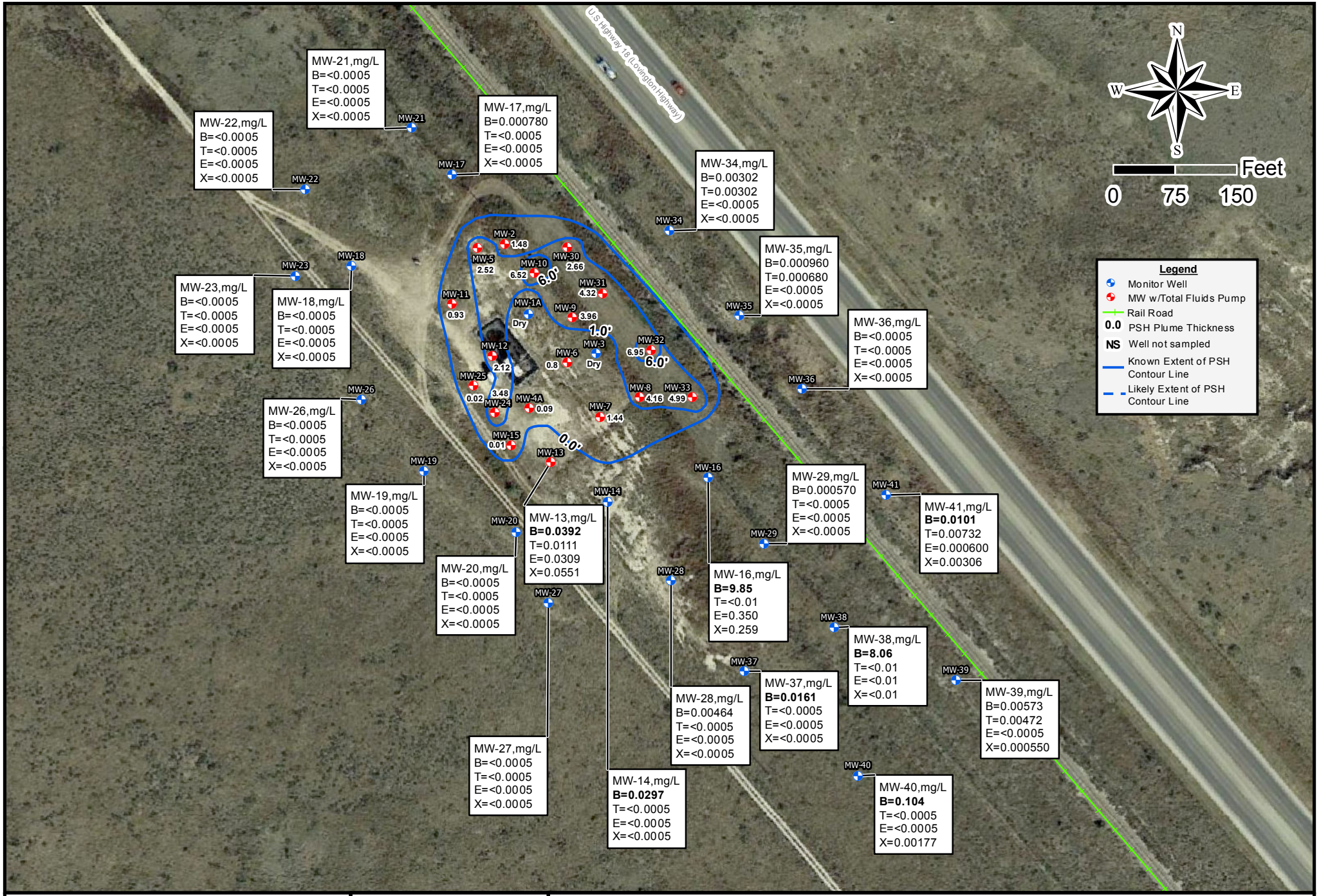
Drafted: 3/13/2020
1 in = 150 ft
Drafted By: NRC

8" Moore to Jal #1
SRS # 2002-10270, NMOCD REF. # AP-91
9.2 Miles SE of Lovington, NM, Lea County, New Mexico
Figure 2c - Groundwater Gradient Map (09/11&16-17/2019)

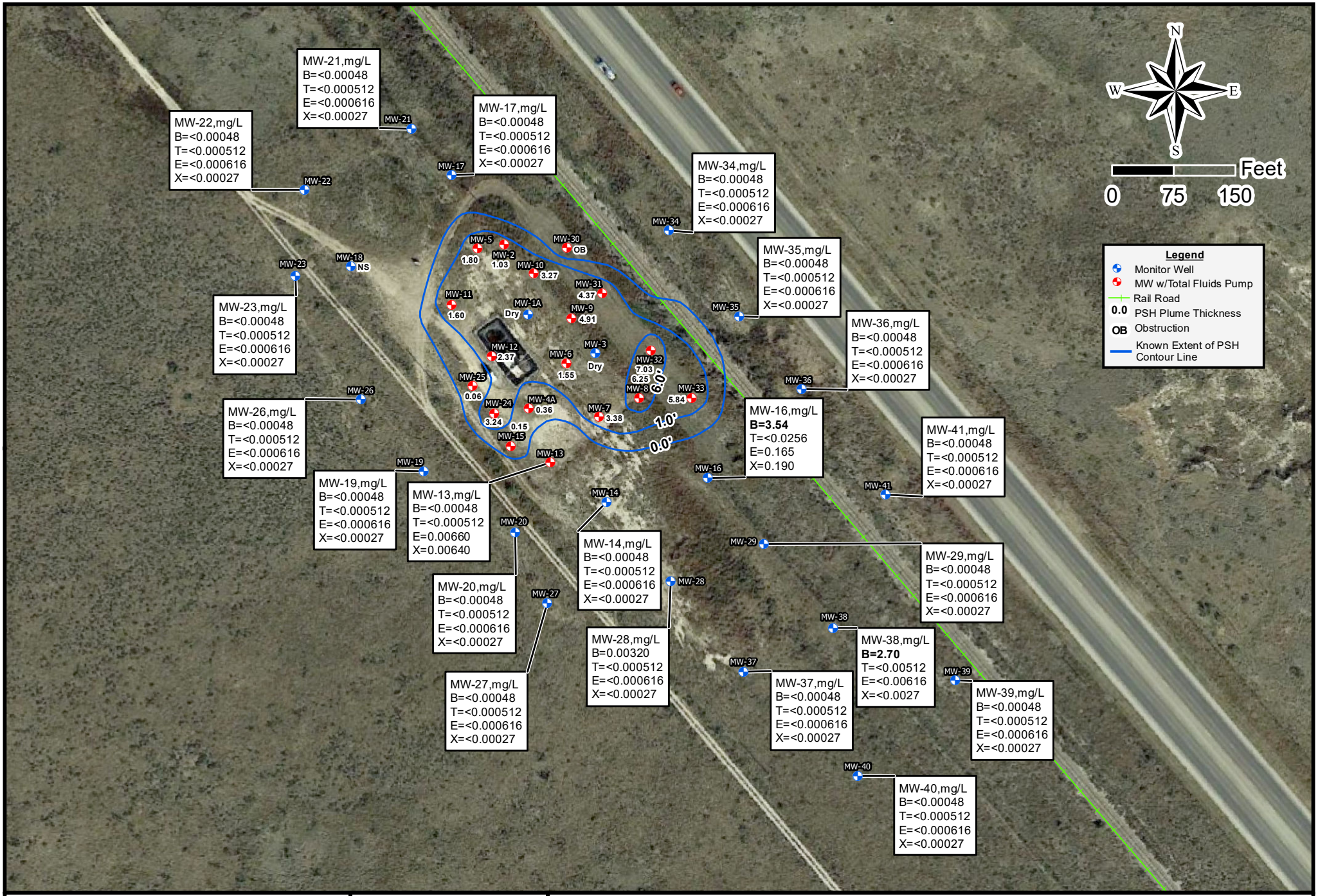
TALON LPE

Drafted: 1/27/2020
1 in = 150 ft
Drafted By: JAI

8" Moore to Jal #1
SRS # 2002-10270, NMOCD REF. # AP-91
9.2 Miles SE of Lovington, NM, Lea County, New Mexico
Figure 2d - Groundwater Gradient Map (12/12/2019)



TALON LPE	Drafted: 4/19/2019 1 in = 150 ft Drafted By: IJM	8" Moore to Jal #1 SRS # 2002-10270, NMOCD REF. # AP-91 9.2 Miles SE of Lovington, NM, Lea County, New Mexico Figure 3a - PSH Thickness & Groundwater Concentration Map - (03/21/2019)



TALON LPE

Drafted: 3/13/2020
1 in = 150 ft
Drafted By: NRC

8" Moore to Jal #1
SRS # 2002-10270, NMOCD REF. # AP-91
9.2 Miles SE of Lovington, NM, Lea County, New Mexico
Figure 3b - PSH Thickness & Groundwater Concentration Map - (06/25-27/2019)

TALON LPE	Drafted: 10/22/2019 1 in = 150 ft Drafted By: JAI	8" Moore to Jal #1 SRS # 2002-10270, NMOCD REF. # AP-91 9.2 Miles SE of Lovington, NM, Lea County, New Mexico Figure 3c - PSH Thickness & Groundwater Concentration Map - (09/16-18/2019)

TALON LPE

Drafted: 2/11/2020
1 in = 150 ft
Drafted By: JAI

8" Moore to Jal #1
SRS # 2002-10270, NMOCD REF. # AP-91
9.2 Miles SE of Lovington, NM, Lea County, New Mexico
Figure 3d - PSH Thickness & Groundwater Concentration Map (12/13 & 15/2019)

APPENDIX B

Tables

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-1A 4"	3,768.36	63	83	03/24/2016	NL	-	-	-
				06/20/2016	NL	-	-	-
				09/28/2016	NL	-	-	-
				12/13/2016	NL	-	-	-
				03/16/2017	NL	-	-	-
				06/05/2017	NL	-	-	-
				09/19/2017	NL	-	-	-
				12/13/2017	NL	-	-	-
				03/23/2018	NL	-	-	-
				06/14/2018	DR	-	-	-
				09/24/2018	73.69	73.68	0.01	3,694.68
				12/17/2018	DR	-	-	-
				03/21/2019	DR	-	-	-
				06/24/2019	DR	-	-	-
				09/16/2019	DR	-	-	-
				12/12/2019	DR	-	-	-
MW-2 4"	3,768.35	63	83	03/24/2016	83.50	77.21	6.29	3,690.10
				06/20/2016	83.60	77.70	5.9	3,689.68
				09/28/2016	83.63	78.31	5.32	3,689.16
				12/13/2016	82.48	78.70	3.78	3,689.03
				03/16/2017	85.39	78.95	6.44	3,688.34
				06/05/2017	83.00	79.30	3.7	3,688.44
				09/19/2017	83.49	79.79	3.7	3,687.95
				12/13/2017	83.60	80.24	3.36	3,687.56
				03/23/2018	83.60	80.59	3.01	3,687.26
				06/14/2018	83.67	80.94	2.73	3,686.96
				09/24/2018	84.15	81.48	2.67	3,686.43
				12/17/2018	85.00	81.95	3.05	3,685.90
				03/21/2019	83.68	82.20	1.48	3,685.91
				06/24/2019	83.63	82.60	1.03	3,685.58
				09/16/2019	83.66	83.10	0.56	3,685.16
				12/12/2019	83.67	83.60	0.07	3,684.74
MW-3 4"	3,767.24	61	81	03/24/2016	80.90	76.06	4.84	3,690.38
				06/20/2016	80.88	77.10	3.78	3,689.52
				09/28/2016	80.92	77.85	3.07	3,688.88
				12/13/2016	81.06	78.15	2.91	3,688.61
				03/16/2017	79.95	78.50	1.45	3,688.50
				06/05/2017	81.00	78.75	2.25	3,688.12
				09/19/2017	81.09	79.20	1.89	3,687.73
				12/13/2017	79.70	79.63	0.07	3,687.60
				03/23/2018	81.09	79.95	1.14	3,687.10
				06/14/2018	81.05	80.40	0.65	3,686.73
				09/24/2018	80.86	80.85	0.01	3,686.39
				12/17/2018	DR	-	-	-
				03/21/2019	DR	-	-	-
				06/24/2019	DR	-	-	-
				09/16/2019	DR	-	-	-
				12/12/2019	DR	-	-	-

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-4A 4"	3,770.64	55	95	03/24/2016	86.93	80.38	6.55	3,689.18
				06/20/2016	87.91	80.75	7.16	3,688.71
				09/28/2016	85.53	82.09	3.44	3,687.98
				12/13/2016	84.82	82.70	2.12	3,687.59
				03/16/2017	87.90	82.25	5.65	3,687.46
				06/05/2017	84.06	83.55	0.51	3,687.01
				09/19/2017	86.73	83.56	3.17	3,686.56
				12/13/2017	86.54	84.03	2.51	3,686.20
				03/23/2018	85.25	84.65	0.6	3,685.89
				06/14/2018	86.20	81.80	4.4	3,688.11
				09/24/2018	85.65	85.64	0.01	3,685.00
				12/17/2018	86.54	86.03	0.51	3,684.53
				03/21/2019	86.40	86.31	0.09	3,684.32
				06/24/2019	87.02	86.66	0.36	3,683.92
				09/16/2019	87.40	87.15	0.25	3,683.45
				12/12/2019	88.55	87.60	0.95	3,682.88
MW-5 4"	3,768.85	57	97	03/24/2016	84.32	77.78	6.54	3,689.99
				06/20/2016	84.62	78.21	6.41	3,689.58
				09/28/2016	82.42	79.54	2.88	3,688.83
				12/13/2016	83.17	79.82	3.35	3,688.48
				03/16/2017	NL	-	-	-
				06/05/2017	NL	-	-	-
				09/19/2017	90.50	80.32	10.18	3,686.85
				12/13/2017	82.00	81.81	0.19	3,687.01
				03/23/2018	82.45	82.07	0.38	3,686.72
				06/14/2018	82.75	82.55	0.2	3,686.27
				09/24/2018	83.30	83.00	0.3	3,685.80
				12/17/2018	85.10	83.15	1.95	3,685.38
				03/21/2019	85.82	83.30	2.52	3,685.13
				06/24/2019	85.60	83.80	1.8	3,684.75
				09/16/2019	86.12	84.20	1.92	3,684.33
				12/12/2019	86.05	85.03	1.02	3,683.65
MW-6 4"	3,769.50	52	92	03/24/2016	87.85	78.80	9.05	3,689.21
				06/20/2016	87.75	79.28	8.47	3,688.82
				09/28/2016	88.51	79.97	8.54	3,688.12
				12/13/2016	88.08	80.45	7.63	3,687.79
				03/16/2017	89.05	80.55	8.5	3,687.55
				06/05/2017	88.65	81.05	7.6	3,687.20
				09/19/2017	87.73	81.62	6.11	3,686.87
				12/13/2017	86.40	82.60	3.8	3,686.27
				03/23/2018	85.00	83.23	1.77	3,685.98
				06/14/2018	90.00	82.80	7.2	3,685.51
				09/24/2018	84.50	84.33	0.17	3,685.14
				12/17/2018	88.25	84.40	3.85	3,684.46
				03/21/2019	85.73	84.93	0.8	3,684.44
				06/24/2019	86.80	85.25	1.55	3,683.99
				09/16/2019	86.52	85.85	0.67	3,683.54
				12/12/2019	89.55	85.85	3.7	3,683.04

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-7 4"	3,770.20	46	86	03/24/2016	85.95	80.00	5.95	3,689.22
				06/20/2016	83.60	81.32	2.28	3,688.50
				09/28/2016	84.88	81.87	3.01	3,687.83
				12/13/2016	84.43	82.34	2.09	3,687.52
				03/16/2017	85.90	81.69	4.21	3,687.82
				06/05/2017	85.98	82.19	3.79	3,687.38
				09/19/2017	85.85	82.59	3.26	3,687.07
				12/13/2017	85.60	83.85	1.75	3,686.06
				03/23/2018	85.97	83.97	2	3,685.90
				06/14/2018	86.00	84.24	1.76	3,685.67
				09/24/2018	86.31	84.31	2	3,685.56
				12/17/2018	86.50	84.81	1.69	3,685.11
				03/21/2019	86.38	84.94	1.44	3,685.02
				06/24/2019	88.75	85.37	3.38	3,684.27
				09/16/2019	86.47	85.90	0.57	3,684.21
				12/12/2019	86.48	86.45	0.03	3,683.75
MW-8 4"	3,768.09	53	93	03/24/2016	84.18	78.08	6.1	3,689.00
				06/20/2016	84.61	78.60	6.01	3,688.50
				09/28/2016	85.33	79.29	6.04	3,687.80
				12/13/2016	85.01	79.76	5.25	3,687.46
				03/16/2017	86.40	79.75	6.65	3,687.24
				06/05/2017	85.05	80.46	4.59	3,686.87
				09/19/2017	87.65	80.40	7.25	3,686.49
				12/13/2017	83.53	81.84	1.69	3,685.97
				03/23/2018	86.07	81.63	4.44	3,685.73
				06/14/2018	82.30	82.22	0.08	3,685.86
				09/24/2018	89.11	82.20	6.91	3,684.75
				12/17/2018	89.06	82.71	6.35	3,684.33
				03/21/2019	87.34	83.18	4.16	3,684.22
				06/24/2019	89.57	83.32	6.25	3,683.74
				09/16/2019	84.95	84.72	0.23	3,683.33
				12/12/2019	85.70	85.35	0.35	3,682.68
MW-9 4"	3,767.64	50	90	03/24/2016	85.20	76.70	8.5	3,689.54
				06/20/2016	83.13	77.71	5.42	3,689.04
				09/28/2016	83.88	78.36	5.52	3,688.37
				12/13/2016	85.24	78.50	6.74	3,688.03
				03/16/2017	85.47	78.70	6.77	3,687.82
				06/05/2017	85.66	79.14	6.52	3,687.42
				09/19/2017	82.02	79.52	2.5	3,687.71
				12/13/2017	84.38	80.45	3.93	3,686.54
				03/23/2018	83.55	81.98	1.57	3,685.40
				06/14/2018	84.60	81.30	3.3	3,685.80
				09/24/2018	85.50	82.20	3.3	3,684.90
				03/21/2019	86.16	82.20	3.96	3,684.79
				06/24/2019	87.94	83.03	4.91	3,683.80
				09/16/2019	OB	-	-	-
				12/12/2019	OB	-	-	-

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-10 4"	3,767.51	50	90	03/24/2016	84.70	76.35	8.35	3,689.78
				06/20/2016	85.18	76.82	8.36	3,689.31
				09/28/2016	85.68	77.52	8.16	3,688.64
				12/13/2016	85.27	78.03	7.24	3,688.29
				03/16/2017	85.83	78.20	7.63	3,688.05
				06/05/2017	86.20	78.56	7.64	3,687.69
				09/19/2017	86.09	79.16	6.93	3,687.21
				12/13/2017	82.87	80.30	2.57	3,686.79
				03/23/2018	84.32	80.35	3.97	3,686.50
				06/14/2018	84.75	80.64	4.11	3,686.19
				09/24/2018	88.35	80.69	7.66	3,685.56
				12/17/2018	88.30	81.15	7.15	3,685.18
				03/21/2019	88.06	81.54	6.52	3,684.89
				06/24/2019	85.73	82.46	3.27	3,684.51
				09/16/2019	84.37	83.22	1.15	3,684.10
				12/12/2019	84.35	83.90	0.45	3,683.54
MW-11 4"	3,769.37	53	93	03/24/2016	85.00	78.40	6.6	3,689.88
				06/20/2016	85.60	78.85	6.75	3,689.41
				09/28/2016	86.19	79.57	6.62	3,688.71
				12/13/2016	86.35	79.96	6.39	3,688.36
				03/16/2017	86.83	80.14	6.69	3,688.13
				06/05/2017	86.95	80.55	6.4	3,687.76
				09/19/2017	87.39	81.04	6.35	3,687.28
				12/13/2017	83.65	82.26	1.39	3,686.88
				03/23/2018	85.06	82.34	2.72	3,686.58
				06/14/2018	85.87	82.75	3.12	3,686.11
				09/24/2018	83.22	83.21	0.01	3,686.16
				12/17/2018	86.60	83.68	2.92	3,685.21
				03/21/2019	85.15	84.22	0.93	3,685.00
				06/24/2019	86.03	84.43	1.6	3,684.68
				09/16/2019	86.90	84.85	2.05	3,684.18
				12/12/2019	87.48	85.42	2.06	3,683.61
MW-12 4"	3,769.68	51	91	03/24/2016	86.60	78.84	7.76	3,689.56
				06/20/2016	87.30	79.35	7.95	3,689.02
				09/28/2016	87.31	80.24	7.07	3,688.27
				12/13/2016	88.31	80.40	7.91	3,687.97
				03/16/2017	88.90	80.57	8.33	3,687.74
				06/05/2017	88.86	81.01	7.85	3,687.37
				09/19/2017	89.31	81.50	7.81	3,686.89
				12/13/2017	83.85	83.01	0.84	3,686.53
				03/23/2018	84.67	83.17	1.5	3,686.26
				06/14/2018	86.35	83.38	2.97	3,685.81
				09/24/2018	84.06	84.05	0.01	3,685.63
				12/17/2018	85.06	85.05	0.01	3,684.63
				03/21/2019	86.58	84.46	2.12	3,684.87
				06/24/2019	87.37	85.00	2.37	3,684.29
				09/16/2019	89.65	85.10	4.55	3,683.83
				12/12/2019	87.30	86.28	1.02	3,683.23

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-13	3,771.14	56	96	03/24/2016	82.85	82.20	0.65	3,688.83
4"				06/20/2016	82.78	82.77	0.01	3,688.37
				09/28/2016	83.51	-	-	3,687.63
				12/13/2016	83.83	-	-	3,687.31
				03/16/2017	84.05	-	-	3,687.09
				06/05/2017	84.42	-	-	3,686.72
				09/19/2017	84.88	-	-	3,686.26
				12/13/2017	85.23	-	-	3,685.91
				03/23/2018	85.50	-	-	3,685.64
				06/14/2018	85.98	-	-	3,685.16
				09/24/2018	86.50	86.49	0.01	3,684.65
				12/17/2018	86.92	86.91	0.01	3,684.23
				03/21/2019	87.31	-	-	3,683.83
				06/24/2019	87.51	-	-	3,683.63
				09/16/2019	88.03	87.98	0.05	3,683.15
				12/12/2019	DR	-	-	-
MW-14	3,771.62	55	95	03/24/2016	83.18	-	-	3,688.44
4"				06/20/2016	83.66	-	-	3,687.96
				09/28/2016	84.31	-	-	3,687.31
				12/13/2016	84.64	-	-	3,686.98
				03/16/2017	84.92	-	-	3,686.70
				06/05/2017	85.28	-	-	3,686.34
				09/19/2017	85.78	-	-	3,685.84
				12/13/2017	86.13	-	-	3,685.49
				03/23/2018	86.38	-	-	3,685.24
				06/14/2018	86.82	-	-	3,684.80
				09/24/2018	87.36	-	-	3,684.26
				12/17/2018	87.82	-	-	3,683.80
				03/21/2019	87.92	-	-	3,683.70
				06/24/2019	88.37	-	-	3,683.25
				09/11/2019	88.78	-	-	3,682.84
				12/12/2019	89.31	-	-	3,682.31
MW-15	3,771.49	53	93	03/24/2016	82.82	82.54	0.28	3,688.90
4"				06/20/2016	82.19	81.98	0.21	3,689.48
				09/28/2016	83.73	-	-	3,687.76
				12/13/2016	84.05	-	-	3,687.44
				03/16/2017	84.25	-	-	3,687.24
				06/05/2017	84.63	-	-	3,686.86
				09/19/2017	85.09	-	-	3,686.40
				12/13/2017	85.42	-	-	3,686.07
				03/23/2018	85.70	85.69	0.01	3,685.80
				06/14/2018	86.20	86.15	0.05	3,685.33
				09/24/2018	86.69	86.68	0.01	3,684.81
				12/17/2018	87.12	87.11	0.01	3,684.38
				03/21/2019	87.31	87.30	0.01	3,684.19
				06/24/2019	87.85	87.70	0.15	3,683.77
				09/16/2019	88.26	88.20	0.06	3,683.28
				12/12/2019	88.77	88.73	0.04	3,682.75

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-16	3,769.23	55	95	03/24/2016	85.60	79.90	5.7	3,688.39
4"				06/20/2016	81.88	81.30	0.58	3,687.83
				09/28/2016	82.28	81.99	0.29	3,687.19
				12/13/2016	82.43	82.39	0.04	3,686.83
				03/16/2017	82.75	82.58	0.17	3,686.62
				06/05/2017	82.98	-	-	3,686.25
				09/19/2017	83.45	-	-	3,685.78
				12/13/2017	83.81	-	-	3,685.42
				03/23/2018	84.09	-	-	3,685.14
				06/14/2018	84.53	-	-	3,684.70
				09/24/2018	85.06	-	-	3,684.17
				12/17/2018	85.50	-	-	3,683.73
				03/21/2019	85.69	-	-	3,683.54
				06/24/2019	86.10	-	-	3,683.13
				09/11/2019	86.52	86.44	0.08	3,682.78
				12/12/2019	87.41	87.00	0.41	3,682.16
MW-17	3,767.45	48	88	03/24/2016	77.18	-	-	3,690.27
4"				06/20/2016	77.62	-	-	3,689.83
				09/28/2016	78.25	-	-	3,689.20
				12/13/2016	78.60	-	-	3,688.85
				03/16/2017	78.92	-	-	3,688.53
				06/05/2017	79.25	-	-	3,688.20
				09/19/2017	79.71	-	-	3,687.74
				12/13/2017	80.14	-	-	3,687.31
				03/23/2018	80.41	-	-	3,687.04
				06/14/2018	80.80	-	-	3,686.65
				09/24/2018	81.28	-	-	3,686.17
				12/17/2018	81.74	-	-	3,685.71
				03/21/2019	81.95	-	-	3,685.50
				06/24/2019	82.34	-	-	3,685.11
				09/11/2019	82.69	-	-	3,684.76
				12/12/2019	83.25	-	-	3,684.20
MW-18	3,769.79	48	88	03/24/2016	79.70	-	-	3,690.09
4"				06/20/2016	80.18	-	-	3,689.61
				09/28/2016	80.80	-	-	3,688.99
				12/13/2016	81.16	-	-	3,688.63
				03/16/2017	81.46	-	-	3,688.33
				06/05/2017	81.79	-	-	3,688.00
				09/19/2017	82.26	-	-	3,687.53
				12/13/2017	82.64	-	-	3,687.15
				03/23/2018	82.90	-	-	3,686.89
				06/14/2018	83.31	-	-	3,686.48
				09/24/2018	83.84	-	-	3,685.95
				12/17/2018	84.32	-	-	3,685.47
				03/21/2019	84.44	-	-	3,685.35
				06/24/2019	84.86	-	-	3,684.93
				09/11/2019	85.26	-	-	3,684.53
				12/12/2019	85.80	-	-	3,683.99

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-19	3,773.35	48	88	03/24/2016	84.20	-	-	3,689.15
4"				06/20/2016	84.70	-	-	3,688.65
				09/28/2016	85.38	-	-	3,687.97
				12/13/2016	85.67	-	-	3,687.68
				03/16/2017	85.95	-	-	3,687.40
				06/05/2017	86.35	-	-	3,687.00
				09/19/2017	86.81	-	-	3,686.54
				12/13/2017	87.18	-	-	3,686.17
				03/23/2018	87.40	-	-	3,685.95
				06/14/2018	87.85	-	-	3,685.50
				09/24/2018	88.41	-	-	3,684.94
				12/17/2018	88.86	-	-	3,684.49
				03/21/2019	88.95	-	-	3,684.40
				06/24/2019	89.40	-	-	3,683.95
				09/11/2019	89.78	-	-	3,683.57
				12/12/2019	90.33	-	-	3,683.02
MW-20	3,773.11	54	94	03/24/2016	84.47	-	-	3,688.64
4"				06/20/2016	84.96	-	-	3,688.15
				09/28/2016	85.64	-	-	3,687.47
				12/13/2016	85.92	-	-	3,687.19
				03/16/2017	86.20	-	-	3,686.91
				06/05/2017	86.60	-	-	3,686.51
				09/19/2017	87.09	-	-	3,686.02
				12/13/2017	87.43	-	-	3,685.68
				03/23/2018	87.69	-	-	3,685.42
				06/14/2018	88.11	-	-	3,685.00
				09/24/2018	88.68	-	-	3,684.43
				12/17/2018	89.14	-	-	3,683.97
				03/21/2019	89.22	-	-	3,683.89
				06/24/2019	89.67	-	-	3,683.44
				09/11/2019	90.07	-	-	3,683.04
				12/12/2019	90.63	-	-	3,682.48
MW-21	3,767.35	50	90	03/24/2016	76.76	-	-	3,690.59
4"				06/20/2016	77.22	-	-	3,690.13
				09/28/2016	77.85	-	-	3,689.50
				12/13/2016	78.21	-	-	3,689.14
				03/16/2017	78.55	-	-	3,688.80
				06/05/2017	78.86	-	-	3,688.49
				09/19/2017	79.31	-	-	3,688.04
				12/13/2017	79.73	-	-	3,687.62
				03/23/2018	80.02	-	-	3,687.33
				06/14/2018	80.41	-	-	3,686.94
				09/24/2018	80.89	-	-	3,686.46
				12/17/2018	81.41	-	-	3,685.94
				03/21/2019	81.56	-	-	3,685.79
				06/24/2019	81.95	-	-	3,685.40
				09/11/2019	82.32	-	-	3,685.03
				12/12/2019	82.86	-	-	3,684.49

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-22	3,769.17	50	90	03/24/2016	78.61	-	-	3,690.56
4"				06/20/2016	79.06	-	-	3,690.11
				09/28/2016	79.67	-	-	3,689.50
				12/13/2016	80.02	-	-	3,689.15
				03/16/2017	80.32	-	-	3,688.85
				06/05/2017	80.67	-	-	3,688.50
				09/19/2017	81.15	-	-	3,688.02
				12/13/2017	81.54	-	-	3,687.63
				03/23/2018	81.80	-	-	3,687.37
				06/14/2018	82.22	-	-	3,686.95
				09/24/2018	82.71	-	-	3,686.46
				12/17/2018	83.15	-	-	3,686.02
				03/21/2019	83.35	-	-	3,685.82
				06/24/2019	83.74	-	-	3,685.43
				09/11/2019	84.14	-	-	3,685.03
				12/12/2019	84.68	-	-	3,684.49
MW-23	3,771.00	55	95	03/24/2016	80.75	-	-	3,690.25
4"				06/20/2016	81.22	-	-	3,689.78
				09/28/2016	81.87	-	-	3,689.13
				12/13/2016	82.20	-	-	3,688.80
				03/16/2017	82.51	-	-	3,688.49
				06/05/2017	82.87	-	-	3,688.13
				09/19/2017	83.32	-	-	3,687.68
				12/13/2017	83.71	-	-	3,687.29
				03/23/2018	83.97	-	-	3,687.03
				06/14/2018	84.20	-	-	3,686.80
				09/24/2018	84.92	-	-	3,686.08
				12/17/2018	85.35	-	-	3,685.65
				03/21/2019	85.52	-	-	3,685.48
				06/24/2019	85.93	-	-	3,685.07
				09/11/2019	86.33	-	-	3,684.67
				12/12/2019	88.88	-	-	3,682.12
MW-24	3,770.97	50	90	03/24/2016	85.10	80.91	4.19	3,689.37
4"				06/20/2016	85.76	81.40	4.36	3,688.85
				09/28/2016	86.29	82.16	4.13	3,688.13
				12/13/2016	85.82	82.64	3.18	3,687.81
				03/16/2017	87.70	82.56	5.14	3,687.56
				06/05/2017	86.75	83.20	3.55	3,687.18
				09/19/2017	89.00	83.35	5.65	3,686.69
				12/13/2017	85.27	84.60	0.67	3,686.26
				03/23/2018	86.07	84.71	1.36	3,686.04
				06/14/2018	88.20	84.95	3.25	3,685.48
				09/24/2018	88.42	86.24	2.18	3,684.37
				12/17/2018	89.69	85.65	4.04	3,684.65
				03/21/2019	89.41	85.93	3.48	3,684.47
				06/24/2019	89.62	86.38	3.24	3,684.06
				09/16/2019	87.43	86.95	0.48	3,683.94
				12/12/2019	89.90	87.53	2.37	3,683.05

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-25	3,770.54	55	95	03/24/2016	84.76	80.38	4.38	3,689.44
4"				06/20/2016	85.03	80.90	4.13	3,688.96
				09/28/2016	85.90	81.61	4.29	3,688.22
				12/13/2016	NL	-	-	-
				03/16/2017	87.34	81.98	5.36	3,687.68
				06/05/2017	83.75	83.17	0.58	3,687.27
				09/19/2017	84.30	83.61	0.69	3,686.82
				12/13/2017	84.22	84.06	0.16	3,686.45
				03/23/2018	84.53	84.23	0.3	3,686.26
				06/14/2018	85.01	84.80	0.21	3,685.71
				09/24/2018	85.34	85.33	0.01	3,685.21
				12/17/2018	85.80	85.75	0.05	3,684.78
				03/21/2019	85.93	85.91	0.02	3,684.63
				06/24/2019	86.41	86.35	0.06	3,684.18
				09/16/2019	87.10	86.80	0.3	3,683.69
				12/12/2019	87.90	87.27	0.63	3,683.17
MW-26	3,772.89	55	95	03/24/2016	83.30	-	-	3,689.59
4"				06/20/2016	83.80	-	-	3,689.09
				09/28/2016	84.40	-	-	3,688.49
				12/13/2016	84.75	-	-	3,688.14
				03/16/2017	85.04	-	-	3,687.85
				06/05/2017	85.41	-	-	3,687.48
				09/19/2017	85.87	-	-	3,687.02
				12/13/2017	86.25	-	-	3,686.64
				03/23/2018	86.50	-	-	3,686.39
				06/14/2018	86.95	-	-	3,685.94
				09/24/2018	87.48	-	-	3,685.41
				12/17/2018	87.90	-	-	3,684.99
				03/21/2019	88.05	-	-	3,684.84
				06/24/2019	88.48	-	-	3,684.41
				09/11/2019	89.87	-	-	3,683.02
				12/12/2019	89.40	-	-	3,683.49
MW-27	3,774.53	55	95	03/24/2016	86.82	-	-	3,687.71
4"				06/20/2016	86.85	-	-	3,687.68
				09/28/2016	87.52	-	-	3,687.01
				12/13/2016	87.80	-	-	3,686.73
				03/16/2017	88.08	-	-	3,686.45
				06/05/2017	88.49	-	-	3,686.04
				09/19/2017	88.95	-	-	3,685.58
				12/13/2017	89.31	-	-	3,685.22
				03/23/2018	89.55	-	-	3,684.98
				06/14/2018	90.01	-	-	3,684.52
				09/24/2018	90.58	-	-	3,683.95
				12/17/2018	90.98	-	-	3,683.55
				03/21/2019	91.09	-	-	3,683.44
				06/24/2019	91.56	-	-	3,682.97
				09/11/2019	92.00	-	-	3,682.53
				12/12/2019	92.52	-	-	3,682.01

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-28	3,772.18	55	95	03/24/2016	84.20	-	-	3,687.98
4"				06/20/2016	84.70	-	-	3,687.48
				09/28/2016	85.35	-	-	3,686.83
				12/13/2016	85.68	-	-	3,686.50
				03/16/2017	85.93	-	-	3,686.25
				06/05/2017	86.32	-	-	3,685.86
				09/19/2017	86.79	-	-	3,685.39
				12/13/2017	87.18	-	-	3,685.00
				03/23/2018	87.42	-	-	3,684.76
				06/14/2018	87.90	-	-	3,684.28
				09/24/2018	88.41	-	-	3,683.77
				12/17/2018	88.89	-	-	3,683.29
				03/21/2019	88.99	-	-	3,683.19
				06/24/2019	89.42	-	-	3,682.76
				09/11/2019	89.84	-	-	3,682.34
				12/12/2019	90.39	-	-	3,681.79
MW-29	3,769.79	55	96	03/24/2016	81.91	-	-	3,687.88
4"				06/20/2016	82.40	-	-	3,687.39
				09/28/2016	83.05	-	-	3,686.74
				12/13/2016	83.37	-	-	3,686.42
				03/16/2017	83.65	-	-	3,686.14
				06/05/2017	84.01	-	-	3,685.78
				09/19/2017	84.50	-	-	3,685.29
				12/13/2017	84.88	-	-	3,684.91
				03/23/2018	85.15	-	-	3,684.64
				06/14/2018	85.57	-	-	3,684.22
				09/24/2018	86.50	-	-	3,683.29
				12/17/2018	86.55	-	-	3,683.24
				03/21/2019	86.71	-	-	3,683.08
				06/24/2019	87.13	-	-	3,682.66
				09/11/2019	87.56	-	-	3,682.23
				12/12/2019	88.08	-	-	3,681.71
MW-30	3,766.52	61	91	03/24/2016	81.80	75.78	6.02	3,689.75
4"				06/20/2016	81.56	75.42	6.14	3,690.09
				09/28/2016	80.55	77.37	3.18	3,688.63
				12/14/2016	80.22	77.88	2.34	3,688.25
				03/16/2017	80.35	78.18	2.17	3,687.98
				06/05/2017	80.32	78.58	1.74	3,687.65
				09/19/2017	80.04	79.22	0.82	3,687.16
				12/13/2017	80.29	79.60	0.69	3,686.81
				03/23/2018	81.09	79.80	1.29	3,686.51
				06/14/2018	83.30	79.87	3.43	3,686.08
				09/24/2018	83.50	80.32	3.18	3,685.68
				12/17/2018	84.84	80.68	4.16	3,685.15
				03/21/2019	83.84	81.18	2.66	3,684.90
				06/24/2019	OB	-	-	-
				09/11/2019	OB	-	-	-
				12/12/2019	84.90	82.50	2.4	3,683.62

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-31	3,766.45	60	90	03/24/2016	83.58	75.68	7.9	3,689.47
4"				06/20/2016	83.72	75.81	7.91	3,689.33
				09/28/2016	84.04	76.96	7.08	3,688.32
				12/14/2016	83.10	77.56	5.54	3,687.98
				03/16/2017	85.10	77.45	7.65	3,687.74
				06/05/2017	85.15	77.84	7.31	3,687.40
				09/19/2017	85.90	78.39	7.51	3,686.82
				12/13/2017	84.11	79.10	5.01	3,686.52
				03/23/2018	81.83	79.93	1.9	3,686.21
				06/14/2018	80.00	79.70	0.3	3,686.70
				09/24/2018	85.17	80.35	4.82	3,685.30
				12/17/2018	84.80	80.80	4	3,684.99
				03/21/2019	85.44	81.12	4.32	3,684.62
				06/24/2019	85.95	81.58	4.37	3,684.15
				09/11/2019	84.80	82.06	2.74	3,683.94
				12/12/2019	85.43	82.75	2.68	3,683.26
MW-32	3,766.75	60	90	03/24/2016	83.85	76.42	7.43	3,689.10
4"				06/20/2016	83.43	76.82	6.61	3,688.84
				09/28/2016	83.95	77.74	6.21	3,687.99
				12/14/2016	84.08	78.18	5.9	3,687.60
				03/16/2017	84.70	78.30	6.4	3,687.39
				06/05/2017	84.71	78.75	5.96	3,687.02
				09/19/2017	86.35	79.00	7.35	3,686.54
				12/13/2017	85.33	76.95	8.38	3,688.42
				03/23/2018	85.75	79.93	5.82	3,685.86
				06/14/2018	81.13	80.11	1.02	3,686.47
				09/24/2018	84.20	80.64	3.56	3,685.52
				12/17/2018	88.15	81.11	7.04	3,684.48
				03/21/2019	88.29	81.34	6.95	3,684.26
				06/24/2019	88.73	81.70	7.03	3,683.89
				09/11/2019	88.85	82.26	6.59	3,683.40
				12/12/2019	85.48	83.54	1.94	3,682.89
MW-33	3,767.44	60	90	03/24/2016	NL	-	-	-
4"				06/20/2016	85.01	77.95	7.06	3,688.33
				09/28/2016	82.56	79.32	3.24	3,687.59
				12/14/2016	83.23	79.60	3.63	3,687.24
				03/16/2017	85.40	79.45	5.95	3,687.01
				06/05/2017	84.85	79.98	4.87	3,686.66
				09/19/2017	86.32	80.26	6.06	3,686.18
				12/13/2017	83.85	81.20	2.65	3,685.80
				03/23/2018	NL	-	-	-
				06/14/2018	NL	-	-	-
				09/24/2018	88.35	81.80	6.55	3,684.56
				12/17/2018	88.35	82.30	6.05	3,684.14
				03/21/2019	87.57	82.58	4.99	3,684.04
				06/24/2019	88.79	82.95	5.84	3,683.53
				09/11/2019	88.89	83.39	5.5	3,683.14
				12/12/2019	85.13	84.86	0.27	3,682.54

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-34	3,766.32	59.400002	89.400002	03/24/2016	76.85	-	-	3,689.47
4"				06/20/2016	77.30	-	-	3,689.02
				09/28/2016	77.90	-	-	3,688.42
				12/13/2016	78.28	-	-	3,688.04
				03/16/2017	78.60	-	-	3,687.72
				06/05/2017	79.90	-	-	3,686.42
				09/19/2017	79.36	-	-	3,686.96
				12/13/2017	79.76	-	-	3,686.56
				03/23/2018	83.10	-	-	3,683.22
				06/14/2018	80.45	-	-	3,685.87
				09/24/2018	80.90	-	-	3,685.42
				12/17/2018	81.40	-	-	3,684.92
				03/21/2019	81.67	-	-	3,684.65
				06/24/2019	81.99	-	-	3,684.33
				09/16/2019	82.50	-	-	3,683.82
				12/12/2019	82.92	-	-	3,683.40
MW-35	3,765.67	61.099998	91.099998	03/24/2016	76.71	-	-	3,688.96
4"				06/20/2016	77.18	-	-	3,688.49
				09/28/2016	77.79	-	-	3,687.88
				12/13/2016	78.18	-	-	3,687.49
				03/16/2017	78.48	-	-	3,687.19
				06/05/2017	78.80	-	-	3,686.87
				09/19/2017	79.25	-	-	3,686.42
				12/13/2017	79.66	-	-	3,686.01
				03/23/2018	79.96	-	-	3,685.71
				06/14/2018	80.35	-	-	3,685.32
				09/24/2018	80.84	-	-	3,684.83
				12/17/2018	81.35	-	-	3,684.32
				03/21/2019	81.57	-	-	3,684.10
				06/24/2019	81.90	-	-	3,683.77
				09/16/2019	82.35	-	-	3,683.32
				12/12/2019	82.85	-	-	3,682.82
MW-36	3,765.37	61.400002	91.400002	03/24/2016	76.91	-	-	3,688.46
4"				06/20/2016	77.35	-	-	3,688.02
				09/28/2016	78.00	-	-	3,687.37
				12/13/2016	78.37	-	-	3,687.00
				03/16/2017	78.67	-	-	3,686.70
				06/05/2017	79.01	-	-	3,686.36
				09/19/2017	79.46	-	-	3,685.91
				12/13/2017	79.87	-	-	3,685.50
				03/23/2018	80.16	-	-	3,685.21
				06/14/2018	80.56	-	-	3,684.81
				09/24/2018	81.05	-	-	3,684.32
				12/17/2018	81.56	-	-	3,683.81
				03/21/2019	81.79	-	-	3,683.58
				06/24/2019	82.14	-	-	3,683.23
				09/16/2019	82.55	-	-	3,682.82
				12/12/2019	83.06	-	-	3,682.31

Table 1 - Groundwater Gauging and NAPL Thickness - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #2002-10270

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-37	3,772.66	73	103	03/24/2016	85.33	-	-	3,687.33
4"				06/20/2016	85.86	-	-	3,686.80
				09/28/2016	86.50	-	-	3,686.16
				12/13/2016	86.81	-	-	3,685.85
				03/16/2017	87.07	-	-	3,685.59
				06/05/2017	87.37	-	-	3,685.29
				09/19/2017	87.92	-	-	3,684.74
				12/13/2017	88.32	-	-	3,684.34
				03/23/2018	88.56	-	-	3,684.10
				06/14/2018	89.03	-	-	3,683.63
				09/24/2018	89.59	-	-	3,683.07
				12/17/2018	89.90	-	-	3,682.76
				03/21/2019	90.10	-	-	3,682.56
				06/24/2019	90.08	-	-	3,682.58
				09/11/2019	91.02	-	-	3,681.64
				12/12/2019	91.52	-	-	3,681.14
MW-38	3,769.96	73	103	03/24/2016	82.52	-	-	3,687.44
4"				06/20/2016	83.02	-	-	3,686.94
				09/28/2016	83.67	-	-	3,686.29
				12/13/2016	84.02	-	-	3,685.94
				03/16/2017	84.27	-	-	3,685.69
				06/05/2017	84.66	-	-	3,685.30
				09/19/2017	85.10	-	-	3,684.86
				12/13/2017	85.53	-	-	3,684.43
				03/23/2018	85.79	-	-	3,684.17
				06/14/2018	86.21	-	-	3,683.75
				09/24/2018	88.74	-	-	3,681.22
				12/17/2018	91.68	-	-	3,678.28
				03/21/2019	87.35	-	-	3,682.61
				06/24/2019	87.80	-	-	3,682.16
				09/11/2019	88.19	-	-	3,681.77
				12/12/2019	88.72	-	-	3,681.24
MW-39	3,768.99	85	105	09/24/2018	91.21	-	-	3,677.78
4"				12/17/2018	86.71	-	-	3,682.28
				03/21/2019	86.92	-	-	3,682.07
				06/24/2019	87.28	-	-	3,681.71
				09/17/2019	87.73	-	-	3,681.26
				12/12/2019	88.23	-	-	3,680.76
MW-40	3,773.47	85	105	09/24/2018	86.21	-	-	3,687.26
4"				12/17/2018	86.71	-	-	3,686.76
				03/21/2019	91.77	-	-	3,681.70
				06/24/2019	92.25	-	-	3,681.22
				09/11/2019	92.66	-	-	3,680.81
				12/12/2019	93.17	-	-	3,680.30
MW-41	3,766.15	85	105	09/24/2018	82.50	-	-	3,683.65
4"				12/17/2018	83.01	-	-	3,683.14
				03/21/2019	83.22	-	-	3,682.93
				06/24/2019	83.58	-	-	3,682.57
				09/16/2019	84.02	-	-	3,682.13
				12/12/2019	84.52	-	-	3,681.63

Specific Gravity: 0.75
Notes:
DR = Well dry
DS = Well destroyed
NG = Well not gauged
NL = Well not located
NSA = No access
OB = Obstruction in well
PA = Well plugged and abandoned

Table 2 - Groundwater Analytical Data - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS#: 2002-10270

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
NMOCD - Groundwater		0.01	0.75	0.75	0.62	-
MW-13	9/21/2017	**0.568 D**	0.165	0.0860	0.154	0.973
	12/21/2017	**0.397 X**	0.0344 X	0.0201	0.0621	0.514
	3/28/2018	**3.07 D**	0.371	0.131	0.336	3.91
	6/14/2018	**2.18**	0.469	0.161	0.370	3.18
	3/27/2019	**0.0392**	0.0111	0.0309	0.0551	0.136
	6/27/2019	<0.000480	<0.000512	0.00660	0.00640	0.0130
MW-14	3/28/2016	**0.0120**	0.00100	<0.00024	<0.00024	-
	6/22/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	9/28/2016	0.00150	<0.000621	<0.000763	0.00130	-
	12/13/2016	**0.0411**	<0.00100	<0.000657	<0.000642	-
	3/21/2017	**0.0520**	<0.000367	<0.000657	<0.000630	0.0520
	6/6/2017	**0.671 D**	0.00198 J	<0.000657	0.00300	0.676
	9/21/2017	**0.0411**	<0.00100	<0.000657	<0.000630	0.0411
	12/21/2017	0.00262	<0.000367	<0.000657	<0.000630	0.00262
	3/28/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/14/2018	0.00230	<0.000512	<0.000616	<0.000270	0.00230
	9/26/2018	**0.0225**	0.00100 J	<0.000657	<0.000630	0.0235
	12/18/2018	**0.165**	0.000900 J	<0.000616	<0.000270	0.166
	3/26/2019	**0.0297**	<0.000500	<0.000500	<0.000500	0.0297
	6/26/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/17/2019	<0.000408	0.00771	<0.000657	<0.000630	0.00771
	12/13/2019	0.00392	0.000520	<0.000657	<0.000630	0.00444
MW-15	9/21/2017	**0.296**	0.0640	0.0681	0.180	0.608
	12/21/2017	**0.307**	0.0848	0.0276	0.121	0.540
	3/28/2018	**0.0684**	0.0282	0.00910	0.0300	0.136
MW-16	9/21/2017	**13.1 D**	0.0610	0.143	0.185	13.5
	12/21/2017	**3.66 D**	0.0542	0.0532	0.103	3.87
	3/28/2018	**6.44 D**	0.0252	0.212	0.245	6.92
	6/14/2018	**9.38**	<0.0256	0.275	0.240	9.90
	9/26/2018	**9.24 D**	0.0161	0.207	0.187	9.65
	12/18/2018	**4.35**	<0.0102	0.114	0.0820	4.55
	3/26/2019	**9.85**	<0.0100	0.350	0.259	10.5
	6/27/2019	**3.54**	<0.0256	0.165	0.190	3.90
MW-17	3/28/2016	<0.00022	<0.00024	<0.00024	<0.00024	-
	6/22/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	9/28/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	3/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/5/2017	0.00125 J	0.00118 J	<0.000657	<0.000642	0.00243
	9/21/2017	<0.000408	<0.00100	<0.000657	<0.000630	<0.000408
	12/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	3/28/2018	0.00319	<0.000367	<0.000657	<0.000630	0.00319
	6/14/2018	0.00150	<0.000512	<0.000616	<0.000270	0.00150
	9/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	3/26/2019	0.000780	<0.000500	<0.000500	<0.000500	0.000780
	6/24/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/17/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/13/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367

Table 2 - Groundwater Analytical Data - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS#: 2002-10270

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-18	3/28/2016	<0.00022	<0.00024	<0.00024	<0.00024	-
	6/22/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	9/28/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	<0.000657	0.00240	-
	3/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/5/2017	0.00113 J	0.00134 J	<0.000657	<0.000642	0.00247
	9/21/2017	<0.000408	<0.00100	<0.000657	<0.000630	<0.000408
	12/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	3/28/2018	0.00106 J	<0.000367	<0.000657	<0.000630	0.00106 J
	6/14/2018	0.000600 J	<0.000512	<0.000616	<0.000270	0.000600 J
	9/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	3/27/2019	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	9/17/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
MW-19	3/28/2016	<0.00022	<0.00024	<0.00024	<0.00024	-
	6/22/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	9/28/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	3/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/5/2017	0.00128 J	0.00153 J	<0.000657	<0.000642	0.00281
	9/21/2017	0.00178 J	<0.00100	0.000830 J	0.000660 J	0.00327
	12/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	3/28/2018	<0.000408	0.000700 J	<0.000657	<0.000630	0.000700 J
	6/14/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	3/26/2019	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	6/25/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/17/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/13/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
MW-20	3/28/2016	<0.00022	<0.00024	<0.00024	<0.00024	-
	6/22/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	9/28/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	3/21/2017	0.00260	<0.000367	<0.000657	<0.000630	0.00260
	6/6/2017	0.00180 J	0.00189 J	<0.000657	<0.000642	0.00369
	9/21/2017	0.00286	<0.00100	0.00123 J	<0.000630	0.00409
	12/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	3/28/2018	<0.000408	0.000690 J	<0.000657	<0.000630	0.000690 J
	6/14/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	3/26/2019	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	6/25/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/17/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/13/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367

Table 2 - Groundwater Analytical Data - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS#: 2002-10270

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-21	3/28/2016	<0.00022	<0.00024	<0.00024	<0.00024	-
	6/22/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	9/28/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	<0.000657	0.00214	-
	3/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/5/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	9/21/2017	<0.000408	<0.00100	<0.000657	<0.000630	<0.000408
	12/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	3/28/2018	0.00266	<0.000367	<0.000657	<0.000630	0.00266
	6/14/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/26/2018	0.00373	0.00294	<0.000657	<0.000630	0.00667
	12/18/2018	0.00680	0.00280	<0.000616	0.00210	0.0117
	3/25/2019	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	6/27/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/17/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/13/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
MW-22	3/28/2016	<0.00022	<0.00024	<0.00024	<0.00024	-
	6/22/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	9/28/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	3/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/5/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	9/21/2017	<0.000408	<0.00100	<0.000657	<0.000630	<0.000408
	12/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	3/28/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/14/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/26/2018	<0.000408	0.254	<0.000657	<0.000630	0.254
	12/18/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	3/25/2019	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	6/27/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/17/2019	<0.000480 K	<0.000512 K	<0.000616 K	<0.000270 K	<0.000270 K
	12/13/2019	0.00125	<0.000367	<0.000657	<0.000630	0.00125
MW-23	3/28/2016	<0.00022	<0.00024	<0.00024	<0.00024	-
	6/22/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	9/28/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	3/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/5/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	9/21/2017	<0.000408	<0.00100	<0.000657	<0.000630	<0.000408
	12/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	3/28/2018	0.00410	0.000710 J	<0.000657	<0.000630	0.00481
	6/14/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/26/2018	<0.000408	0.0345	<0.000657	<0.000630	0.0345
	12/18/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	3/25/2019	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	6/26/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/17/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/13/2019	0.00170	<0.000367	<0.000657	<0.00063	0.00170

Table 2 - Groundwater Analytical Data - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS#: 2002-10270

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-26	3/28/2016	<0.00022	<0.00024	<0.00024	<0.00024	-
	6/22/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	9/28/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	3/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/5/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	9/21/2017	<0.000408	<0.00100	<0.000657	<0.000630	<0.000408
	12/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	3/28/2018	<0.000408	0.000630 J	<0.000657	<0.000630	0.000630 J
	6/14/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/26/2018	<0.000408	0.0172	<0.000657	<0.000630	0.0172
	12/18/2018	0.00320	<0.000512	<0.000616	<0.000270	0.00320
	3/25/2019	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	6/26/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/17/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/13/2019	0.000430	<0.000367	<0.000657	<0.000630	0.000430
MW-27	3/28/2016	<0.00022	<0.00024	<0.00024	<0.00024	-
	6/22/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	9/28/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	3/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/5/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	9/21/2017	<0.000408	<0.00100	<0.000657	<0.000630	<0.000408
	12/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	3/28/2018	0.000560 J	<0.000367	<0.000657	<0.000630	0.000560 J
	6/14/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/26/2018	<0.000408	0.0128	<0.000657	<0.000630	0.0128
	12/18/2018	0.00240	<0.000512	<0.000616	<0.000270	0.00240
	3/26/2019	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	6/26/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/17/2019	<0.000408	0.00713	<0.000657	<0.000630	0.00713
	12/13/2019	**0.0375**	<0.000367	0.000850	0.00225	0.0406
MW-28	3/28/2016	**0.120**	<0.00024	<0.00024	<0.00024	-
	6/22/2016	**0.0468**	<0.000621	<0.000763	<0.000256	-
	9/28/2016	0.00240	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	3/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/6/2017	0.00985	0.00126 J	<0.000657	0.00149 J	0.0126
	9/21/2017	**0.0167**	<0.00100	<0.000657	<0.000630	0.0167
	12/21/2017	**0.0686**	0.000410 J	<0.000657	<0.000630	0.0690
	3/28/2018	**0.0118**	0.000800 J	<0.000657	<0.000630	0.0126
	6/14/2018	0.00260	<0.000512	<0.000616	<0.000270	0.00260
	9/26/2018	<0.000408	0.00642	<0.000657	<0.000630	0.00642
	12/18/2018	0.00310	<0.000512	<0.000616	<0.000270	0.00310
	3/26/2019	0.00464	<0.000500	<0.000500	<0.000500	0.00464
	6/26/2019	0.00320	<0.000512	<0.000616	<0.000270	0.00320
	9/16/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/13/2019	**0.0163**	<0.000367	<0.000657	<0.000630	0.0163

Table 2 - Groundwater Analytical Data - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS#: 2002-10270

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-29	3/28/2016	**20.0**	<0.0119	<0.0119	<0.0122	-
	6/22/2016	**6.81**	<0.0310	<0.0382	<0.0128	-
	9/28/2016	**4.77**	<0.0658	<0.0809	<0.0271	-
	12/13/2016	**6.92**	<0.0200	<0.0131	0.0530	-
	3/21/2017	**0.245**	<0.000367	<0.000657	<0.000630	0.245
	6/6/2017	**37.9**	<0.100	<0.0657	<0.0642	37.9
	9/21/2017	**17.2 D**	<0.00100	0.00775	0.000890 J	17.2
	12/21/2017	**9.54 D**	<0.000367	0.00418	0.000660 J	9.54
	3/28/2018	**4.20**	<0.00734	<0.0131	<0.0126	4.20
	6/14/2018	**7.62**	<0.0256	<0.0308	<0.0135	7.62
	10/4/2018	**1.49 D**	<0.000367	<0.000657	0.00781	1.50
	12/18/2018	**0.0398**	<0.000512	0.000800 J	<0.000270	0.0406
	3/26/2019	0.000570	<0.000500	<0.000500	<0.000500	0.000570
	6/26/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/16/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/13/2019	<0.000408	0.000400	<0.000657	<0.000630	0.000400
MW-34	3/28/2016	<0.00022	<0.00024	<0.00024	<0.00024	-
	6/21/2016	0.00400	0.00160	<0.000763	<0.000256	-
	9/28/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	0.00239	<0.000642	-
	3/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/5/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	9/21/2017	0.00163 J	<0.00100	0.000770 J	0.000680 J	0.00308
	12/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	3/28/2018	0.000790 J	<0.000367	<0.000657	<0.000630	0.000790 J
	6/14/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/26/2018	0.00204	0.00392	<0.000657	<0.000630	0.00596
	12/18/2018	0.000900 J	<0.000512	<0.000616	<0.000270	0.000900 J
	3/27/2019	0.00302	0.00302	<0.000500	<0.000500	0.00604
	6/27/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/18/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/15/2019	0.00390	<0.000367	<0.000657	<0.000630	0.00390
MW-35	3/28/2016	0.00920	0.00510	0.00290	0.00270	-
	6/21/2016	0.000600 J	<0.000621	<0.000763	<0.000256	-
	9/28/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	<0.000657	0.00427	-
	3/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/5/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	9/21/2017	<0.000408	<0.00100	<0.000657	<0.000630	<0.000408
	12/21/2017	0.000740 J	<0.000367	<0.000657	<0.000630	0.000740 J
	3/28/2018	0.00175 J	<0.000367	<0.000657	<0.000630	0.00175 J
	6/14/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2018	0.000700 J	<0.000512	<0.000616	<0.000270	0.000700 J
	3/28/2019	0.000960	0.000680	<0.000500	<0.000500	0.00164
	6/27/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/18/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/15/2019	0.00205	<0.000367	<0.000657	<0.000630	0.00205

Table 2 - Groundwater Analytical Data - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS#: 2002-10270

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-36	3/28/2016	<0.00022	<0.00024	<0.00024	<0.00024	-
	6/21/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	9/28/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/13/2016	<0.000408	<0.00100	<0.000657	0.00416	-
	3/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	6/5/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	9/21/2017	<0.000408	<0.00100	<0.000657	<0.000630	<0.000408
	12/21/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	3/28/2018	0.00234	0.000590 J	<0.000657	<0.000630	0.00293
	6/14/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/26/2018	<0.000408	0.00199 J	<0.000657	<0.000630	0.00199 J
	12/18/2018	0.00140	<0.000512	<0.000616	<0.000270	0.00140
	3/28/2019	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	6/27/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/18/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/15/2019	0.00269	<0.000367	<0.000657	<0.000630	0.00269
MW-37	3/28/2016	<0.00022	<0.00024	<0.00024	<0.00024	-
	6/22/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	9/28/2016	**0.889**	<0.0658	<0.0809	<0.0271	-
	12/13/2016	**0.602**	<0.0200	<0.0131	<0.0128	-
	3/21/2017	**0.0170**	<0.000367	<0.000657	<0.000630	0.0170
	6/6/2017	**2.21**	<0.0500	<0.0329	<0.0321	2.21
	9/21/2017	**1.04 D**	<0.00100	<0.000657	<0.000630	1.04
	12/21/2017	**0.0774**	<0.000367	<0.000657	<0.000630	0.0774
	3/28/2018	**0.0467**	<0.000367	<0.000657	<0.000630	0.0467
	6/14/2018	**0.355**	<0.000512	<0.000616	<0.000270	0.355
	9/26/2018	0.00674	<0.000367	<0.000657	<0.000630	0.00674
	12/18/2018	0.000600 J	<0.000512	<0.000616	<0.000270	0.000600 J
	3/26/2019	**0.0161**	<0.000500	<0.000500	<0.00050	0.0161
	6/25/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/16/2019	0.00670	<0.000367	<0.000657	<0.000630	0.00670
	12/13/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
MW-38	3/28/2016	**6.55**	<0.0119	<0.0119	0.104	-
	6/22/2016	**4.07**	<0.0310	<0.0382	0.0427 J	-
	9/28/2016	**2.83**	<0.0658	0.126	0.417	-
	12/13/2016	**5.91**	<0.0200	0.0450	0.0417	-
	3/21/2017	**12.6**	<0.0184	<0.0329	<0.0315	12.6
	6/6/2017	**0.216**	<0.00100	0.000890 J	0.00174 J	0.219
	9/21/2017	**14 D**	<0.00100	0.0118	0.00155 J	14.0
	12/21/2017	**13.4 D**	<0.000367	0.00794	0.00184 J	13.4
	3/28/2018	**7.58 D**	<0.000367	<0.000657	<0.000630	7.58
	6/14/2018	**12.6**	<0.0256	<0.0308	<0.0135	12.6
	9/26/2018	**10.7 D**	0.00427	0.0106	0.00298	10.7
	12/18/2018	**3.72**	<0.0102	<0.0123	<0.00540	3.72
	3/26/2019	**8.06**	<0.0100	<0.0100	<0.0100	8.06
	6/25/2019	**2.70**	<0.00512	<0.00616	<0.00270	2.70
	9/16/2019	**6.19**	<0.000367	0.00669	<0.000630	6.20
	12/13/2019	**0.682**	0.000530	0.000970	<0.000630	0.684
MW-39	9/26/2018	**0.0473**	<0.000367	<0.000657	0.00142 J	0.0487
	12/18/2018	**0.358**	<0.000512	<0.000616	0.00540	0.363
	3/27/2019	0.00573	0.00472	<0.000500	0.000550	0.0110
	6/27/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/18/2019	<0.000480 K	<0.000512 K	<0.000616 K	<0.000270 K	<0.000270 K
	12/15/2019	0.00663	<0.000367	<0.000657	<0.000630	0.006630

Table 2 - Groundwater Analytical Data - Historical
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS#: 2002-10270

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-40	9/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	3/26/2019	**0.104**	<0.000500	<0.000500	0.00177	0.106
	6/25/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/16/2019	**1.65**	<0.000367	0.00221	0.0394	1.69
	12/13/2019	**5.14**	0.00576	0.0156	0.0545	5.22
MW-41	9/26/2018	<0.000408	0.00564	<0.000657	<0.000630	0.00564
	12/18/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	3/27/2019	**0.0101**	0.00732	0.000600	0.00306	0.0211
	6/27/2019	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	9/18/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/15/2019	0.00381	<0.000367	<0.000657	<0.000630	0.00381

Notes:
Lab Flags noted next to vales. See lab report for description.

Analyte concentration exceeds the standard for:
NMOCD - Groundwater

Table 3 - Groundwater Analytical Data - Historical - PAH Supplement
Moore to Jal No. 1
Lovington/Hobbs, NM
SRS #: 2002-10270

Sample ID	Date Sampled	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Dibenzofuran (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno (1,2,3-c,d) pyrene (mg/l)	Naphthalene (mg/l)	Phenanthrene (mg/l)	Pyrene (mg/l)
NMOCD - Groundwater		-	-	-	-	0.007	-	-	-	-	-	-	-	-	-	0.03	-	-
MW-15	03/28/2018	<0.0000408	<0.0000731	<0.0000757	<0.0000632	<0.0000955	<0.0000907	<0.0000796	<0.0000779	<0.0000880	<0.0000495	0.00111	<0.0000896	0.00122	<0.0000495	0.00293 J	0.00141	<0.0000920
MW-27	03/28/2018	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	<0.0000053	<0.0000090	<0.0000055	<0.0000049	0.000108 J	<0.0000055	<0.0000092
	03/26/2019	<0.0000042	<0.0000075	<0.0000078	<0.0000065	<0.0000099	<0.0000094	<0.0000082	<0.0000080	<0.0000091	<0.0000051	<0.0000055	<0.0000092	<0.0000056	<0.0000051	0.0000937	<0.0000057	<0.0000095
MW-28	03/28/2016	<0.000033	<0.000058	<0.000032	<0.000071	<0.000041	<0.000070	<0.000051	<0.000056	<0.000080	<0.000056	<0.000060	<0.000063	<0.000078	<0.000053	<0.000065	<0.000051	<0.000041
	03/28/2018	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	<0.0000053	<0.0000090	<0.0000055	<0.0000049	0.0000918 J	<0.0000055	<0.0000092
	03/26/2019	<0.0000041	<0.0000074	<0.0000077	<0.0000064	<0.0000096	<0.0000092	<0.0000080	<0.0000079	<0.0000089	<0.000005	<0.0000054	<0.0000090	<0.0000055	<0.000005	0.0000757	<0.0000056	<0.0000093
MW-29	03/28/2016	<0.000033	<0.000057	<0.000031	<0.000071	<0.000041	<0.000070	<0.000051	<0.000055	<0.000080	<0.000055	0.00106	<0.000063	0.000884	<0.000053	**0.0342**	0.000957	<0.000041
	03/28/2018	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	0.000474	<0.0000090	0.000495	<0.0000049	0.000505	0.000197	<0.0000092
	03/26/2019	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	0.000269	<0.0000090	0.000441	<0.0000049	0.000463	0.0000894	<0.0000092
MW-34	03/28/2016	<0.000033	<0.000058	<0.000032	<0.000071	<0.000041	<0.000070	<0.000051	<0.000056	<0.000080	<0.000056	<0.000060	<0.000063	<0.000078	<0.000053	<0.000065	<0.000051	<0.000041
	03/28/2018	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	<0.0000053	<0.0000090	<0.0000055	<0.0000049	<0.0000045	<0.0000055	<0.0000092
	03/27/2019	<0.0000041	<0.0000074	<0.0000077	<0.0000064	<0.0000096	<0.0000092	<0.0000080	<0.0000079	<0.0000089	<0.000005	<0.0000054	<0.0000090	<0.0000055	<0.000005	0.0000332	<0.0000056	<0.0000093
MW-35	03/28/2016	<0.000033	<0.000058	<0.000032	<0.000071	<0.000041	<0.000070	<0.000051	<0.000056	<0.000080	<0.000056	<0.000060	<0.000063	<0.000078	<0.000053	<0.000065	<0.000051	<0.000041
	03/28/2018	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	<0.0000053	<0.0000090	<0.0000055	<0.0000049	<0.0000045	<0.0000055	<0.0000092
	03/30/2019	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	<0.0000053	<0.0000090	<0.0000055	<0.0000049	0.0000262	<0.0000055	<0.0000092
MW-36	03/28/2016	<0.000033	<0.000057	<0.000031	<0.000071	<0.000041	<0.000070	<0.000051	<0.000055	<0.000080	<0.000055	<0.000059	<0.000063	<0.000077	<0.000053	<0.000064	<0.000051	<0.000041
	03/28/2018	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111
	03/30/2019	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	<0.0000053	<0.0000090	<0.0000055	<0.0000049	<0.0000045	<0.0000055	<0.0000092
MW-37	03/28/2016	<0.000033	<0.000057	<0.000032	<0.000071	<0.000041	<0.000070	<0.000051	<0.000055	<0.000080	<0.000055	<0.000060	<0.000063	<0.000078	<0.000053	<0.000065	<0.000051	<0.000041
	03/28/2018	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	0.0000562	<0.0000090	0.0000424 J	<0.0000049	0.000376 J	<0.0000055	<0.0000092
	03/26/2019	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	<0.0000053	<0.0000090	<0.0000055	<0.0000049	0.0000771	<0.0000055	<0.0000092
MW-38	03/28/2016	<0.000032	<0.000057	<0.000031	<0.000070	<0.000041	<0.000069	<0.000051	<0.000055	<0.000079	<0.000055	<0.000059	<0.000062	<0.000077	<0.000052	0.00650	<0.000050	<0.000040
	03/28/2018	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	0.000187	<0.0000090	0.0000604	<0.0000049	0.000359 J	0.000116	<0.0000092
	03/26/2019	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	0.00125	<0.0000090	0.000274	<0.0000049	0.00403	0.000547	<0.0000092

Notes:
Lab Flags noted next to values. See lab report for description.

Analyte concentration exceeds the standard for:
NMOCD - Groundwater

APPENDIX C

Laboratory Analytical Data Reports and Chain of Custody Documentation

Analytical Report 619491

for

Talon/LPE Co.

Project Manager: David Adkins

Moore to Jal #1

700376 044 04

08-APR-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)
Xenco-Lakeland: Florida (E84098)

Table of Contents

08-APR-19

Project Manager: **David Adkins**
Talon/LPE Co.
921 N Bivins St
Amarillo, TX 79107

Reference: XENCO Report No(s): **619491**
Moore to Jal #1
Project Address:

David Adkins:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 619491. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 619491 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Wendy Walfoort

Wendy Walfoort
Project Manager

Sample Cross Reference 619491

Talon/LPE Co., Amarillo, TX

Moore to Jal #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW22	W	03-25-19 12:10		619491-001
MW21	W	03-25-19 13:40		619491-002
MW23	W	03-25-19 16:05		619491-003
MW26	W	03-25-19 15:10		619491-004
MW17	W	03-26-19 16:05		619491-005
MW19	W	03-26-19 15:30		619491-006
MW20	W	03-26-19 09:25		619491-007
MW27	W	03-26-19 09:45		619491-008
MW14	W	03-26-19 11:25		619491-009
MW16	W	03-26-19 12:15		619491-010
MW29	W	03-26-19 10:40		619491-011
MW38	W	03-26-19 12:50		619491-012
MW40	W	03-26-19 13:25		619491-013
MW37	W	03-26-19 13:55		619491-014
MW28	W	03-26-19 15:05		619491-015
MW34	W	03-27-19 14:00		619491-016
MW35	W	03-28-19 10:00		619491-017
MW36	W	03-28-19 10:30		619491-018
MW41	W	03-27-19 15:50		619491-019
MW39	W	03-27-19 12:50		619491-020
MW13	W	03-27-19 12:00		619491-021
MW18	W	03-27-19 00:00		619491-022

CASE NARRATIVE

Client Name: Talon/LPE Co.

Project Name: Moore to Jal #1

Project ID:	*700376 044 04*	Report Date:	*08-APR-19*
Work Order Number(s):	*619491*	Date Received:	*03/29/2019*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Samples MW35 and MW36 PAH containers were received broken. PAH container for MW-19 was not received.

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results
619491
Talon/LPE Co., Amarillo, TX
Moore to Jal #1

Sample Id: **MW22** Matrix: Water Sample Depth:

Lab Sample Id: 619491-001 Date Collected: 03.25.19 12.10 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084677 Date Prep: 04.04.19 12.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	04.04.19 18:49	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.04.19 18:49	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.04.19 18:49	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.04.19 18:49	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.04.19 18:49	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.04.19 18:49	U	
Total BTEX		<0.000500		0.000500	mg/L	04.04.19 18:49	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	104	75 - 131	%		
1,2-Dichloroethane-D4	96	63 - 144	%		
Toluene-D8	107	80 - 117	%		

Sample Id: **MW21** Matrix: Water Sample Depth:

Lab Sample Id: 619491-002 Date Collected: 03.25.19 13.40 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084677 Date Prep: 04.04.19 12.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:18	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:18	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:18	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.04.19 20:18	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:18	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.04.19 20:18	U	
Total BTEX		<0.000500		0.000500	mg/L	04.04.19 20:18	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	105	75 - 131	%		
1,2-Dichloroethane-D4	99	63 - 144	%		
Toluene-D8	112	80 - 117	%		

Certificate of Analytical Results
619491
Talon/LPE Co., Amarillo, TX
Moore to Jal #1

Sample Id: **MW23** Matrix: Water Sample Depth:

Lab Sample Id: 619491-003 Date Collected: 03.25.19 16.05 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084677 Date Prep: 04.04.19 12.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	04.04.19 19:06	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.04.19 19:06	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.04.19 19:06	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.04.19 19:06	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.04.19 19:06	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.04.19 19:06	U	
Total BTEX		<0.000500		0.000500	mg/L	04.04.19 19:06	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	104	75 - 131	%		
1,2-Dichloroethane-D4	97	63 - 144	%		
Toluene-D8	94	80 - 117	%		

Sample Id: **MW26** Matrix: Water Sample Depth:

Lab Sample Id: 619491-004 Date Collected: 03.25.19 15.10 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084677 Date Prep: 04.04.19 12.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:36	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:36	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:36	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.04.19 20:36	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:36	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.04.19 20:36	U	
Total BTEX		<0.000500		0.000500	mg/L	04.04.19 20:36	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	105	75 - 131	%		
1,2-Dichloroethane-D4	105	63 - 144	%		
Toluene-D8	84	80 - 117	%		

Certificate of Analytical Results
619491
Talon/LPE Co., Amarillo, TX
Moore to Jal #1

Sample Id: **MW17** Matrix: Water Sample Depth:

Lab Sample Id: 619491-005 Date Collected: 03.26.19 16.05 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084677 Date Prep: 04.04.19 12.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.000780**	0.00100	0.000500	mg/L	04.04.19 19:24	J	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.04.19 19:24	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.04.19 19:24	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.04.19 19:24	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.04.19 19:24	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.04.19 19:24	U	
Total BTEX		**0.000780**		0.000500	mg/L	04.04.19 19:24	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	107	75 - 131	%		
1,2-Dichloroethane-D4	101	63 - 144	%		
Toluene-D8	99	80 - 117	%		

Sample Id: **MW19** Matrix: Water Sample Depth:

Lab Sample Id: 619491-006 Date Collected: 03.26.19 15.30 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084677 Date Prep: 04.04.19 12.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	04.04.19 19:42	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.04.19 19:42	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.04.19 19:42	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.04.19 19:42	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.04.19 19:42	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.04.19 19:42	U	
Total BTEX		<0.000500		0.000500	mg/L	04.04.19 19:42	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	105	75 - 131	%		
1,2-Dichloroethane-D4	108	63 - 144	%		
Toluene-D8	98	80 - 117	%		

Certificate of Analytical Results
619491

Talon/LPE Co., Amarillo, TX

Moore to Jal #1

Sample Id:	**MW20**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	619491-007	Date Collected:	03.26.19 09.25	Date Received:	03.29.19 11.45
Analytical Method:	BTEX by SW 8260B			Prep Method:	5030B
Analyst:	KRP	% Moist:		Tech:	KRP
Seq Number:	3084677	Date Prep:	04.04.19 12.30		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7675094		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:00	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:00	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:00	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.04.19 20:00	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:00	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.04.19 20:00	U	
Total BTEX		<0.000500		0.000500	mg/L	04.04.19 20:00	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	106	75 - 131	%		
1,2-Dichloroethane-D4	104	63 - 144	%		
Toluene-D8	98	80 - 117	%		

Certificate of Analytical Results
619491
Talon/LPE Co., Amarillo, TX
Moore to Jal #1

Sample Id:	**MW27**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	619491-008	Date Collected:	03.26.19 09.45	Date Received:	03.29.19 11.45
Analytical Method:	PAHs by 8270D SIM			Prep Method:	3510C
Analyst:	EKL	% Moist:		Tech:	RUO
Seq Number:	3084458	Date Prep:	04.02.19 14.24		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7674861		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000420	0.0000515	0.00000421	mg/L	04.02.19 20:12	U	1
Acenaphthylene	208-96-8	<0.00000750	0.0000515	0.00000753	mg/L	04.02.19 20:12	U	1
Anthracene	120-12-7	<0.00000780	0.0000515	0.00000781	mg/L	04.02.19 20:12	U	1
Benzo(a)anthracene	56-55-3	<0.00000650	0.0000515	0.00000652	mg/L	04.02.19 20:12	U	1
Benzo(a)pyrene	50-32-8	<0.00000990	0.0000515	0.00000985	mg/L	04.02.19 20:12	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000940	0.0000515	0.00000935	mg/L	04.02.19 20:12	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000820	0.0000515	0.00000821	mg/L	04.02.19 20:12	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000800	0.0000515	0.00000803	mg/L	04.02.19 20:12	U	1
Chrysene	218-01-9	<0.00000910	0.0000515	0.00000908	mg/L	04.02.19 20:12	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000510	0.0000515	0.00000511	mg/L	04.02.19 20:12	U	1
Dibenzofuran	132-64-9	<0.00000550	0.0000515	0.00000547	mg/L	04.02.19 20:12	U	1
Fluoranthene	206-44-0	<0.00000920	0.0000515	0.00000924	mg/L	04.02.19 20:12	U	1
Fluorene	86-73-7	<0.00000560	0.0000515	0.00000563	mg/L	04.02.19 20:12	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000510	0.0000515	0.00000511	mg/L	04.02.19 20:12	U	1
Naphthalene	91-20-3	**0.0000937**	0.000515	0.00000465	mg/L	04.02.19 20:12	J	1
Phenanthrene	85-01-8	<0.00000570	0.0000515	0.00000567	mg/L	04.02.19 20:12	U	1
Pyrene	129-00-0	<0.00000950	0.0000515	0.00000948	mg/L	04.02.19 20:12	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	98	41 - 128	%		
2-Fluorobiphenyl	100	55 - 135	%		
Terphenyl-D14	106	54 - 131	%		

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Talon/LPE Co., Amarillo, TX
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Sample Id: **MW27** Matrix: Water Sample Depth:

Lab Sample Id: 619491-008 Date Collected: 03.26.19 09.45 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084677 Date Prep: 04.04.19 12.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:54	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:54	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:54	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.04.19 20:54	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.04.19 20:54	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.04.19 20:54	U	
Total BTEX		<0.000500		0.000500	mg/L	04.04.19 20:54	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	108	75 - 131	%		
1,2-Dichloroethane-D4	97	63 - 144	%		
Toluene-D8	99	80 - 117	%		

Sample Id: **MW14** Matrix: Water Sample Depth:

Lab Sample Id: 619491-009 Date Collected: 03.26.19 11.25 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084677 Date Prep: 04.04.19 12.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.0297**	0.00100	0.000500	mg/L	04.04.19 21:12		1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.04.19 21:12	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.04.19 21:12	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.04.19 21:12	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.04.19 21:12	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.04.19 21:12	U	
Total BTEX		**0.0297**		0.000500	mg/L	04.04.19 21:12		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	107	75 - 131	%		
1,2-Dichloroethane-D4	103	63 - 144	%		
Toluene-D8	100	80 - 117	%		

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Moore to Jal #1

Sample Id:	**MW16**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	619491-010	Date Collected:	03.26.19 12.15	Date Received:	03.29.19 11.45
Analytical Method:	BTEX by SW 8260B			Prep Method:	5030B
Analyst:	KRP	% Moist:		Tech:	KRP
Seq Number:	3084677	Date Prep:	04.04.19 12.30		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7675094		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**9.85**	0.200	0.100	mg/L	04.05.19 17:18	D	200
Toluene	108-88-3	<0.0100	0.0200	0.0100	mg/L	04.04.19 17:21	U	20
Ethylbenzene	100-41-4	**0.350**	0.0200	0.0100	mg/L	04.04.19 17:21		20
m,p-Xylenes	179601-23-1	**0.241**	0.0400	0.0200	mg/L	04.04.19 17:21		20
o-Xylene	95-47-6	**0.0182**	0.0200	0.0100	mg/L	04.04.19 17:21	J	20
Total Xylenes	1330-20-7	**0.259**		0.0100	mg/L	04.04.19 17:21		
Total BTEX		**10.5**		0.0100	mg/L	04.05.19 17:18		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	107	75 - 131	%		
1,2-Dichloroethane-D4	89	63 - 144	%		
Toluene-D8	99	80 - 117	%		

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Sample Id:	**MW29**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	619491-011	Date Collected:	03.26.19 10.40	Date Received:	03.29.19 11.45
Analytical Method:	PAHs by 8270D SIM			Prep Method:	3510C
Analyst:	EKL	% Moist:		Tech:	RUO
Seq Number:	3084458	Date Prep:	04.02.19 14.27		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7674861		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000500	0.00000408	mg/L	04.02.19 20:30	U	1
Acenaphthylene	208-96-8	<0.00000730	0.0000500	0.00000731	mg/L	04.02.19 20:30	U	1
Anthracene	120-12-7	<0.00000760	0.0000500	0.00000757	mg/L	04.02.19 20:30	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000500	0.00000632	mg/L	04.02.19 20:30	U	1
Benzo(a)pyrene	50-32-8	<0.00000960	0.0000500	0.00000955	mg/L	04.02.19 20:30	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000910	0.0000500	0.00000907	mg/L	04.02.19 20:30	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000500	0.00000796	mg/L	04.02.19 20:30	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000780	0.0000500	0.00000779	mg/L	04.02.19 20:30	U	1
Chrysene	218-01-9	<0.00000880	0.0000500	0.00000880	mg/L	04.02.19 20:30	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000500	0.00000495	mg/L	04.02.19 20:30	U	1
Dibenzofuran	132-64-9	**0.000269**	0.0000500	0.00000530	mg/L	04.02.19 20:30		1
Fluoranthene	206-44-0	<0.00000900	0.0000500	0.00000896	mg/L	04.02.19 20:30	U	1
Fluorene	86-73-7	**0.000441**	0.0000500	0.00000546	mg/L	04.02.19 20:30		1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000500	0.00000495	mg/L	04.02.19 20:30	U	1
Naphthalene	91-20-3	**0.000463**	0.000500	0.00000451	mg/L	04.02.19 20:30	J	1
Phenanthrene	85-01-8	**0.0000894**	0.0000500	0.00000550	mg/L	04.02.19 20:30		1
Pyrene	129-00-0	<0.00000920	0.0000500	0.00000920	mg/L	04.02.19 20:30	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	94	41 - 128	%		
2-Fluorobiphenyl	105	55 - 135	%		
Terphenyl-D14	117	54 - 131	%		

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Moore to Jal #1

Sample Id:	**MW29**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	619491-011	Date Collected:	03.26.19 10.40	Date Received:	03.29.19 11.45
Analytical Method:	BTEX by SW 8260B			Prep Method:	5030B
Analyst:	KRP	% Moist:		Tech:	KRP
Seq Number:	3084677	Date Prep:	04.04.19 12.30		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7675094		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.000570**	0.00100	0.000500	mg/L	04.04.19 21:30	J	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.04.19 21:30	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.04.19 21:30	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.04.19 21:30	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.04.19 21:30	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.04.19 21:30	U	
Total BTEX		**0.000570**		0.000500	mg/L	04.04.19 21:30	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	105	75 - 131	%		
1,2-Dichloroethane-D4	107	63 - 144	%		
Toluene-D8	97	80 - 117	%		

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Moore to Jal #1

Sample Id:	**MW38**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	619491-012	Date Collected:	03.26.19 12.50	Date Received:	03.29.19 11.45
Analytical Method:	PAHs by 8270D SIM			Prep Method:	3510C
Analyst:	EKL	% Moist:		Tech:	RUO
Seq Number:	3084458	Date Prep:	04.02.19 14.30		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7674861		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000500	0.00000408	mg/L	04.02.19 20:48	U	1
Acenaphthylene	208-96-8	<0.00000730	0.0000500	0.00000731	mg/L	04.02.19 20:48	U	1
Anthracene	120-12-7	<0.00000760	0.0000500	0.00000757	mg/L	04.02.19 20:48	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000500	0.00000632	mg/L	04.02.19 20:48	U	1
Benzo(a)pyrene	50-32-8	<0.00000960	0.0000500	0.00000955	mg/L	04.02.19 20:48	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000910	0.0000500	0.00000907	mg/L	04.02.19 20:48	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000500	0.00000796	mg/L	04.02.19 20:48	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000780	0.0000500	0.00000779	mg/L	04.02.19 20:48	U	1
Chrysene	218-01-9	<0.00000880	0.0000500	0.00000880	mg/L	04.02.19 20:48	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000500	0.00000495	mg/L	04.02.19 20:48	U	1
Dibenzofuran	132-64-9	**0.00125**	0.0000500	0.00000530	mg/L	04.02.19 20:48		1
Fluoranthene	206-44-0	<0.00000900	0.0000500	0.00000896	mg/L	04.02.19 20:48	U	1
Fluorene	86-73-7	**0.000274**	0.0000500	0.00000546	mg/L	04.02.19 20:48		1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000500	0.00000495	mg/L	04.02.19 20:48	U	1
Naphthalene	91-20-3	**0.00403**	0.000500	0.00000451	mg/L	04.02.19 20:48		1
Phenanthrene	85-01-8	**0.000547**	0.0000500	0.00000550	mg/L	04.02.19 20:48		1
Pyrene	129-00-0	<0.00000920	0.0000500	0.00000920	mg/L	04.02.19 20:48	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	81	41 - 128	%		
2-Fluorobiphenyl	98	55 - 135	%		
Terphenyl-D14	103	54 - 131	%		

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Sample Id: **MW38** Matrix: Water Sample Depth:

Lab Sample Id: 619491-012 Date Collected: 03.26.19 12.50 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084740 Date Prep: 04.04.19 16.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675147

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**8.06**	0.200	0.100	mg/L	04.05.19 17:36	D	200
Toluene	108-88-3	<0.0100	0.0200	0.0100	mg/L	04.05.19 04:15	U	20
Ethylbenzene	100-41-4	<0.0100	0.0200	0.0100	mg/L	04.05.19 04:15	U	20
m,p-Xylenes	179601-23-1	<0.0200	0.0400	0.0200	mg/L	04.05.19 04:15	U	20
o-Xylene	95-47-6	<0.0100	0.0200	0.0100	mg/L	04.05.19 04:15	U	20
Total Xylenes	1330-20-7	<0.0100		0.0100	mg/L	04.05.19 04:15	U	
Total BTEX		**8.06**		0.0100	mg/L	04.05.19 17:36		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	106	75 - 131	%		
1,2-Dichloroethane-D4	90	63 - 144	%		
Toluene-D8	96	80 - 117	%		

Sample Id: **MW40** Matrix: Water Sample Depth:

Lab Sample Id: 619491-013 Date Collected: 03.26.19 13.25 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084740 Date Prep: 04.04.19 16.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675147

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.104**	0.00100	0.000500	mg/L	04.05.19 01:16		1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.05.19 01:16	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.05.19 01:16	U	1
m,p-Xylenes	179601-23-1	**0.00177**	0.00200	0.00100	mg/L	04.05.19 01:16	J	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.05.19 01:16	U	1
Total Xylenes	1330-20-7	**0.00177**		0.000500	mg/L	04.05.19 01:16		
Total BTEX		**0.106**		0.000500	mg/L	04.05.19 01:16		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	107	75 - 131	%		
1,2-Dichloroethane-D4	97	63 - 144	%		
Toluene-D8	97	80 - 117	%		

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Moore to Jal #1

Sample Id:	**MW37**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	619491-014	Date Collected:	03.26.19 13.55	Date Received:	03.29.19 11.45
Analytical Method:	PAHs by 8270D SIM			Prep Method:	3510C
Analyst:	EKL	% Moist:		Tech:	RUO
Seq Number:	3084458	Date Prep:	04.02.19 14.33		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7674861		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000500	0.00000408	mg/L	04.02.19 21:06	U	1
Acenaphthylene	208-96-8	<0.00000730	0.0000500	0.00000731	mg/L	04.02.19 21:06	U	1
Anthracene	120-12-7	<0.00000760	0.0000500	0.00000757	mg/L	04.02.19 21:06	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000500	0.00000632	mg/L	04.02.19 21:06	U	1
Benzo(a)pyrene	50-32-8	<0.00000960	0.0000500	0.00000955	mg/L	04.02.19 21:06	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000910	0.0000500	0.00000907	mg/L	04.02.19 21:06	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000500	0.00000796	mg/L	04.02.19 21:06	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000780	0.0000500	0.00000779	mg/L	04.02.19 21:06	U	1
Chrysene	218-01-9	<0.00000880	0.0000500	0.00000880	mg/L	04.02.19 21:06	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000500	0.00000495	mg/L	04.02.19 21:06	U	1
Dibenzofuran	132-64-9	<0.00000530	0.0000500	0.00000530	mg/L	04.02.19 21:06	U	1
Fluoranthene	206-44-0	<0.00000900	0.0000500	0.00000896	mg/L	04.02.19 21:06	U	1
Fluorene	86-73-7	<0.00000550	0.0000500	0.00000546	mg/L	04.02.19 21:06	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000500	0.00000495	mg/L	04.02.19 21:06	U	1
Naphthalene	91-20-3	**0.0000771**	0.000500	0.00000451	mg/L	04.02.19 21:06	J	1
Phenanthrene	85-01-8	<0.00000550	0.0000500	0.00000550	mg/L	04.02.19 21:06	U	1
Pyrene	129-00-0	<0.00000920	0.0000500	0.00000920	mg/L	04.02.19 21:06	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	99	41 - 128	%		
2-Fluorobiphenyl	92	55 - 135	%		
Terphenyl-D14	122	54 - 131	%		

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Moore to Jal #1

Sample Id:	**MW37**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	619491-014	Date Collected:	03.26.19 13.55	Date Received:	03.29.19 11.45
Analytical Method:	BTEX by SW 8260B			Prep Method:	5030B
Analyst:	KRP	% Moist:		Tech:	KRP
Seq Number:	3084740	Date Prep:	04.04.19 16.30		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7675147		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.0161**	0.00100	0.000500	mg/L	04.05.19 02:10		1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.05.19 02:10	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.05.19 02:10	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.05.19 02:10	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.05.19 02:10	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.05.19 02:10	U	
Total BTEX		**0.0161**		0.000500	mg/L	04.05.19 02:10		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	108	75 - 131	%		
1,2-Dichloroethane-D4	98	63 - 144	%		
Toluene-D8	98	80 - 117	%		

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Moore to Jal #1

Sample Id:	**MW28**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	619491-015	Date Collected:	03.26.19 15.05	Date Received:	03.29.19 11.45
Analytical Method:	PAHs by 8270D SIM			Prep Method:	3510C
Analyst:	EKL	% Moist:		Tech:	RUO
Seq Number:	3084458	Date Prep:	04.02.19 14.36		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7674861		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000505	0.00000412	mg/L	04.02.19 21:24	U	1
Acenaphthylene	208-96-8	<0.00000740	0.0000505	0.00000738	mg/L	04.02.19 21:24	U	1
Anthracene	120-12-7	<0.00000770	0.0000505	0.00000765	mg/L	04.02.19 21:24	U	1
Benzo(a)anthracene	56-55-3	<0.00000640	0.0000505	0.00000638	mg/L	04.02.19 21:24	U	1
Benzo(a)pyrene	50-32-8	<0.00000970	0.0000505	0.00000965	mg/L	04.02.19 21:24	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000920	0.0000505	0.00000916	mg/L	04.02.19 21:24	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000505	0.00000804	mg/L	04.02.19 21:24	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000790	0.0000505	0.00000787	mg/L	04.02.19 21:24	U	1
Chrysene	218-01-9	<0.00000890	0.0000505	0.00000889	mg/L	04.02.19 21:24	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000505	0.00000500	mg/L	04.02.19 21:24	U	1
Dibenzofuran	132-64-9	<0.00000540	0.0000505	0.00000536	mg/L	04.02.19 21:24	U	1
Fluoranthene	206-44-0	<0.00000910	0.0000505	0.00000905	mg/L	04.02.19 21:24	U	1
Fluorene	86-73-7	<0.00000550	0.0000505	0.00000551	mg/L	04.02.19 21:24	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000505	0.00000500	mg/L	04.02.19 21:24	U	1
Naphthalene	91-20-3	**0.0000757**	0.000505	0.00000455	mg/L	04.02.19 21:24	J	1
Phenanthrene	85-01-8	<0.00000560	0.0000505	0.00000556	mg/L	04.02.19 21:24	U	1
Pyrene	129-00-0	<0.00000930	0.0000505	0.00000929	mg/L	04.02.19 21:24	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	98	41 - 128	%		
2-Fluorobiphenyl	94	55 - 135	%		
Terphenyl-D14	120	54 - 131	%		

Certificate of Analytical Results
619491

Talon/LPE Co., Amarillo, TX

Moore to Jal #1

Sample Id:	**MW28**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	619491-015	Date Collected:	03.26.19 15.05	Date Received:	03.29.19 11.45
Analytical Method:	BTEX by SW 8260B			Prep Method:	5030B
Analyst:	KRP	% Moist:		Tech:	KRP
Seq Number:	3084740	Date Prep:	04.04.19 16.30		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7675147		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00464**	0.00100	0.000500	mg/L	04.05.19 02:28		1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.05.19 02:28	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.05.19 02:28	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.05.19 02:28	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.05.19 02:28	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.05.19 02:28	U	
Total BTEX		**0.00464**		0.000500	mg/L	04.05.19 02:28		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	108	75 - 131	%		
1,2-Dichloroethane-D4	103	63 - 144	%		
Toluene-D8	95	80 - 117	%		

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Talon/LPE Co., Amarillo, TX
Moore to Jal #1

Sample Id:	**MW34**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	619491-016	Date Collected:	03.27.19 14.00	Date Received:	03.29.19 11.45
Analytical Method:	PAHs by 8270D SIM			Prep Method:	3510C
Analyst:	EKL	% Moist:		Tech:	RUO
Seq Number:	3084458	Date Prep:	04.02.19 14.39		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7674861		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000505	0.00000412	mg/L	04.02.19 21:42	U	1
Acenaphthylene	208-96-8	<0.00000740	0.0000505	0.00000738	mg/L	04.02.19 21:42	U	1
Anthracene	120-12-7	<0.00000770	0.0000505	0.00000765	mg/L	04.02.19 21:42	U	1
Benzo(a)anthracene	56-55-3	<0.00000640	0.0000505	0.00000638	mg/L	04.02.19 21:42	U	1
Benzo(a)pyrene	50-32-8	<0.00000970	0.0000505	0.00000965	mg/L	04.02.19 21:42	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000920	0.0000505	0.00000916	mg/L	04.02.19 21:42	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000505	0.00000804	mg/L	04.02.19 21:42	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000790	0.0000505	0.00000787	mg/L	04.02.19 21:42	U	1
Chrysene	218-01-9	<0.00000890	0.0000505	0.00000889	mg/L	04.02.19 21:42	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000505	0.00000500	mg/L	04.02.19 21:42	U	1
Dibenzofuran	132-64-9	<0.00000540	0.0000505	0.00000536	mg/L	04.02.19 21:42	U	1
Fluoranthene	206-44-0	<0.00000910	0.0000505	0.00000905	mg/L	04.02.19 21:42	U	1
Fluorene	86-73-7	<0.00000550	0.0000505	0.00000551	mg/L	04.02.19 21:42	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000505	0.00000500	mg/L	04.02.19 21:42	U	1
Naphthalene	91-20-3	**0.0000332**	0.000505	0.00000455	mg/L	04.02.19 21:42	J	1
Phenanthrene	85-01-8	<0.00000560	0.0000505	0.00000556	mg/L	04.02.19 21:42	U	1
Pyrene	129-00-0	<0.00000930	0.0000505	0.00000929	mg/L	04.02.19 21:42	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	98	41 - 128	%		
2-Fluorobiphenyl	98	55 - 135	%		
Terphenyl-D14	108	54 - 131	%		

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Talon/LPE Co., Amarillo, TX
Moore to Jal #1

Sample Id: **MW34** Matrix: Water Sample Depth:

Lab Sample Id: 619491-016 Date Collected: 03.27.19 14.00 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084740 Date Prep: 04.04.19 16.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675147

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00302**	0.00100	0.000500	mg/L	04.05.19 02:46		1
Toluene	108-88-3	**0.00302**	0.00100	0.000500	mg/L	04.05.19 02:46		1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.05.19 02:46	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.05.19 02:46	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.05.19 02:46	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.05.19 02:46	U	
Total BTEX		**0.00604**		0.000500	mg/L	04.05.19 02:46		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	107	75 - 131	%		
1,2-Dichloroethane-D4	101	63 - 144	%		
Toluene-D8	97	80 - 117	%		

Sample Id: **MW35** Matrix: Water Sample Depth:

Lab Sample Id: 619491-017 Date Collected: 03.28.19 10.00 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084740 Date Prep: 04.04.19 16.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675147

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.000960**	0.00100	0.000500	mg/L	04.05.19 03:04	J	1
Toluene	108-88-3	**0.000680**	0.00100	0.000500	mg/L	04.05.19 03:04	J	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.05.19 03:04	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.05.19 03:04	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.05.19 03:04	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.05.19 03:04	U	
Total BTEX		**0.00164**		0.000500	mg/L	04.05.19 03:04		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	106	75 - 131	%		
1,2-Dichloroethane-D4	103	63 - 144	%		
Toluene-D8	101	80 - 117	%		

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Talon/LPE Co., Amarillo, TX
Moore to Jal #1

Sample Id: **MW36** Matrix: Water Sample Depth:

Lab Sample Id: 619491-018 Date Collected: 03.28.19 10.30 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084740 Date Prep: 04.04.19 16.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675147

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	04.05.19 03:22	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.05.19 03:22	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.05.19 03:22	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.05.19 03:22	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.05.19 03:22	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.05.19 03:22	U	
Total BTEX		<0.000500		0.000500	mg/L	04.05.19 03:22	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	106	75 - 131	%		
1,2-Dichloroethane-D4	99	63 - 144	%		
Toluene-D8	91	80 - 117	%		

Sample Id: **MW41** Matrix: Water Sample Depth:

Lab Sample Id: 619491-019 Date Collected: 03.27.19 15.50 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084740 Date Prep: 04.04.19 16.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675147

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.0101**	0.00100	0.000500	mg/L	04.05.19 01:34		1
Toluene	108-88-3	**0.00732**	0.00100	0.000500	mg/L	04.05.19 01:34		1
Ethylbenzene	100-41-4	**0.000600**	0.00100	0.000500	mg/L	04.05.19 01:34	J	1
m,p-Xylenes	179601-23-1	**0.00188**	0.00200	0.00100	mg/L	04.05.19 01:34	J	1
o-Xylene	95-47-6	**0.00118**	0.00100	0.000500	mg/L	04.05.19 01:34		1
Total Xylenes	1330-20-7	**0.00306**		0.000500	mg/L	04.05.19 01:34		
Total BTEX		**0.0211**		0.000500	mg/L	04.05.19 01:34		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	106	75 - 131	%		
1,2-Dichloroethane-D4	104	63 - 144	%		
Toluene-D8	99	80 - 117	%		

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Sample Id: **MW39** Matrix: Water Sample Depth:

Lab Sample Id: 619491-020 Date Collected: 03.27.19 12.50 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084740 Date Prep: 04.04.19 16.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675147

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00573**	0.00100	0.000500	mg/L	04.05.19 03:40		1
Toluene	108-88-3	**0.00472**	0.00100	0.000500	mg/L	04.05.19 03:40		1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.05.19 03:40	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.05.19 03:40	U	1
o-Xylene	95-47-6	**0.000550**	0.00100	0.000500	mg/L	04.05.19 03:40	J	1
Total Xylenes	1330-20-7	**0.000550**		0.000500	mg/L	04.05.19 03:40	J	
Total BTEX		**0.0110**		0.000500	mg/L	04.05.19 03:40		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	107	75 - 131	%		
1,2-Dichloroethane-D4	105	63 - 144	%		
Toluene-D8	107	80 - 117	%		

Sample Id: **MW13** Matrix: Water Sample Depth:

Lab Sample Id: 619491-021 Date Collected: 03.27.19 12.00 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084740 Date Prep: 04.04.19 16.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675147

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.0392**	0.00100	0.000500	mg/L	04.05.19 03:57		1
Toluene	108-88-3	**0.0111**	0.00100	0.000500	mg/L	04.05.19 03:57		1
Ethylbenzene	100-41-4	**0.0309**	0.00100	0.000500	mg/L	04.05.19 03:57		1
m,p-Xylenes	179601-23-1	**0.0363**	0.00200	0.00100	mg/L	04.05.19 03:57		1
o-Xylene	95-47-6	**0.0188**	0.00100	0.000500	mg/L	04.05.19 03:57		1
Total Xylenes	1330-20-7	**0.0551**		0.000500	mg/L	04.05.19 03:57		
Total BTEX		**0.136**		0.000500	mg/L	04.05.19 03:57		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	105	75 - 131	%		
1,2-Dichloroethane-D4	98	63 - 144	%		
Toluene-D8	98	80 - 117	%		

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Talon/LPE Co., Amarillo, TX
Moore to Jal #1

Sample Id: **MW18** Matrix: Water Sample Depth:

Lab Sample Id: 619491-022 Date Collected: 03.27.19 00.00 Date Received: 03.29.19 11.45

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084740 Date Prep: 04.04.19 16.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675147

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	04.05.19 01:52	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.05.19 01:52	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.05.19 01:52	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.05.19 01:52	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.05.19 01:52	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	04.05.19 01:52	U	
Total BTEX		<0.000500		0.000500	mg/L	04.05.19 01:52	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	107	75 - 131	%		
1,2-Dichloroethane-D4	104	63 - 144	%		
Toluene-D8	95	80 - 117	%		

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Talon/LPE Co., Amarillo, TX

Moore to Jal #1

Sample Id: **7674861-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: 7674861-1-BLK Date Collected: Date Received:

Analytical Method: PAHs by 8270D SIM Prep Method: 3510C

Analyst: EKL % Moist: Tech: RUO

Seq Number: 3084458 Date Prep: 04.02.19 14.00

Subcontractor: SUB: T104704215-19-29 Prep seq: 7674861

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000500	0.00000408	mg/L	04.02.19 17:13	U	1
Acenaphthylene	208-96-8	<0.00000730	0.0000500	0.00000731	mg/L	04.02.19 17:13	U	1
Anthracene	120-12-7	<0.00000760	0.0000500	0.00000757	mg/L	04.02.19 17:13	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000500	0.00000632	mg/L	04.02.19 17:13	U	1
Benzo(a)pyrene	50-32-8	<0.00000960	0.0000500	0.00000955	mg/L	04.02.19 17:13	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000910	0.0000500	0.00000907	mg/L	04.02.19 17:13	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000500	0.00000796	mg/L	04.02.19 17:13	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000780	0.0000500	0.00000779	mg/L	04.02.19 17:13	U	1
Chrysene	218-01-9	<0.00000880	0.0000500	0.00000880	mg/L	04.02.19 17:13	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000500	0.00000495	mg/L	04.02.19 17:13	U	1
Dibenzofuran	132-64-9	<0.00000530	0.0000500	0.00000530	mg/L	04.02.19 17:13	U	1
Fluoranthene	206-44-0	<0.00000900	0.0000500	0.00000896	mg/L	04.02.19 17:13	U	1
Fluorene	86-73-7	<0.00000550	0.0000500	0.00000546	mg/L	04.02.19 17:13	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000500	0.00000495	mg/L	04.02.19 17:13	U	1
Naphthalene	91-20-3	<0.00000450	0.000500	0.00000451	mg/L	04.02.19 17:13	U	1
Phenanthrene	85-01-8	<0.00000550	0.0000500	0.00000550	mg/L	04.02.19 17:13	U	1
Pyrene	129-00-0	<0.00000920	0.0000500	0.00000920	mg/L	04.02.19 17:13	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	110	41 - 128	%		
2-Fluorobiphenyl	105	55 - 135	%		
Terphenyl-D14	107	54 - 131	%		

Certificate of Analytical Results
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Talon/LPE Co., Amarillo, TX
Moore to Jal #1

Sample Id: **7675094-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: 7675094-1-BLK Date Collected: Date Received:

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084677 Date Prep: 04.04.19 12.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	04.04.19 14:58	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.04.19 14:58	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.04.19 14:58	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.04.19 14:58	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.04.19 14:58	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	104	75 - 131	%		
1,2-Dichloroethane-D4	97	63 - 144	%		
Toluene-D8	94	80 - 117	%		

Sample Id: **7675147-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: 7675147-1-BLK Date Collected: Date Received:

Analytical Method: BTEX by SW 8260B Prep Method: 5030B

Analyst: KRP % Moist: Tech: KRP

Seq Number: 3084740 Date Prep: 04.04.19 16.30

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675147

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	04.05.19 00:58	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	04.05.19 00:58	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	04.05.19 00:58	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	04.05.19 00:58	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	04.05.19 00:58	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	105	75 - 131	%		
1,2-Dichloroethane-D4	101	63 - 144	%		
Toluene-D8	96	80 - 117	%		

Certificate of Analytical Results
619491

Talon/LPE Co., Amarillo, TX

Moore to Jal #1

Sample Id:	**7675166-1-BLK**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	7675166-1-BLK	Date Collected:		Date Received:	
Analytical Method:	BTEX by SW 8260B			Prep Method:	5030B
Analyst:	KRP	% Moist:		Tech:	KRP
Seq Number:	3084766	Date Prep:	04.05.19 09.55		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7675166		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	04.05.19 13:34	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	107	75 - 131	%		
1,2-Dichloroethane-D4	98	63 - 144	%		
Toluene-D8	97	80 - 117	%		

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: Moore to Jal #1

Work Orders : 619491,

Project ID: 700376 044 04

Lab Batch #: 3084677 **Sample:** 7675094-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/04/19 13:29

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0518	0.0500	104	75-131	
1,2-Dichloroethane-D4	0.0543	0.0500	109	63-144	
Toluene-D8	0.0462	0.0500	92	80-117	

Lab Batch #: 3084677 **Sample:** 7675094-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/04/19 13:47

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0544	0.0500	109	75-131	
1,2-Dichloroethane-D4	0.0540	0.0500	108	63-144	
Toluene-D8	0.0565	0.0500	113	80-117	

Lab Batch #: 3084677 **Sample:** 619424-004 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/04/19 14:07

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0536	0.0500	107	75-131	
1,2-Dichloroethane-D4	0.0541	0.0500	108	63-144	
Toluene-D8	0.0478	0.0500	96	80-117	

Lab Batch #: 3084677 **Sample:** 7675094-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/04/19 14:58

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0519	0.0500	104	75-131	
1,2-Dichloroethane-D4	0.0484	0.0500	97	63-144	
Toluene-D8	0.0472	0.0500	94	80-117	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Moore to Jal #1

Work Orders : 619491,

Project ID: 700376 044 04

Lab Batch #: 3084740 **Sample:** 7675147-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/04/19 23:31

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0520	0.0500	104	75-131	
1,2-Dichloroethane-D4	0.0471	0.0500	94	63-144	
Toluene-D8	0.0484	0.0500	97	80-117	

Lab Batch #: 3084740 **Sample:** 7675147-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/04/19 23:49

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0528	0.0500	106	75-131	
1,2-Dichloroethane-D4	0.0518	0.0500	104	63-144	
Toluene-D8	0.0467	0.0500	93	80-117	

Lab Batch #: 3084740 **Sample:** 619491-013 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/05/19 00:07

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0519	0.0500	104	75-131	
1,2-Dichloroethane-D4	0.0435	0.0500	87	63-144	
Toluene-D8	0.0493	0.0500	99	80-117	

Lab Batch #: 3084740 **Sample:** 7675147-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/05/19 00:58

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0526	0.0500	105	75-131	
1,2-Dichloroethane-D4	0.0503	0.0500	101	63-144	
Toluene-D8	0.0481	0.0500	96	80-117	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Moore to Jal #1

Work Orders : 619491, **Project ID:** 700376 044 04

Lab Batch #: 3084766 **Sample:** 7675166-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/05/19 10:51

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0536	0.0500	107	75-131	
1,2-Dichloroethane-D4	0.0529	0.0500	106	63-144	
Toluene-D8	0.0461	0.0500	92	80-117	

Lab Batch #: 3084766 **Sample:** 7675166-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/05/19 11:19

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0540	0.0500	108	75-131	
1,2-Dichloroethane-D4	0.0465	0.0500	93	63-144	
Toluene-D8	0.0468	0.0500	94	80-117	

Lab Batch #: 3084766 **Sample:** 619300-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/05/19 12:24

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0535	0.0500	107	75-131	
1,2-Dichloroethane-D4	0.0480	0.0500	96	63-144	
Toluene-D8	0.0472	0.0500	94	80-117	

Lab Batch #: 3084766 **Sample:** 7675166-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/05/19 13:34

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0533	0.0500	107	75-131	
1,2-Dichloroethane-D4	0.0491	0.0500	98	63-144	
Toluene-D8	0.0486	0.0500	97	80-117	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Moore to Jal #1

Work Orders : 619491,

Project ID: 700376 044 04

Lab Batch #: 3084458 **Sample:** 7674861-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/02/19 17:13

PAHs by 8270D SIM Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Nitrobenzene-d5	1.10	1.00	110	41-128	
2-Fluorobiphenyl	1.05	1.00	105	55-135	
Terphenyl-D14	1.07	1.00	107	54-131	

Lab Batch #: 3084458 **Sample:** 7674861-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/03/19 18:55

PAHs by 8270D SIM Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Nitrobenzene-d5	0.897	1.00	90	41-128	
2-Fluorobiphenyl	0.952	1.00	95	55-135	
Terphenyl-D14	1.06	1.00	106	54-131	

Lab Batch #: 3084458 **Sample:** 7674861-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04/03/19 19:13

PAHs by 8270D SIM Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Nitrobenzene-d5	0.928	1.00	93	41-128	
2-Fluorobiphenyl	1.09	1.00	109	55-135	
Terphenyl-D14	0.899	1.00	90	54-131	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Moore to Jal #1

Work Order #: 619491 **Project ID:** 700376 044 04

Analyst: KRP **Date Prepared:** 04/04/2019 **Date Analyzed:** 04/04/2019

Lab Batch ID: 3084677 **Sample:** 7675094-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.0500	0.0556	111	0.0500	0.0520	104	7	66-142	20	
Toluene	<0.000500	0.0500	0.0526	105	0.0500	0.0581	116	10	59-139	20	
Ethylbenzene	<0.000500	0.0500	0.0549	110	0.0500	0.0513	103	7	75-125	20	
m,p-Xylenes	<0.00100	0.100	0.109	109	0.100	0.103	103	6	75-125	20	
o-Xylene	<0.000500	0.0500	0.0542	108	0.0500	0.0512	102	6	75-125	20	

Analyst: KRP **Date Prepared:** 04/04/2019 **Date Analyzed:** 04/04/2019

Lab Batch ID: 3084740 **Sample:** 7675147-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.0500	0.0492	98	0.0500	0.0516	103	5	66-142	20	
Toluene	<0.000500	0.0500	0.0488	98	0.0500	0.0483	97	1	59-139	20	
Ethylbenzene	<0.000500	0.0500	0.0499	100	0.0500	0.0501	100	0	75-125	20	
m,p-Xylenes	<0.00100	0.100	0.0971	97	0.100	0.101	101	4	75-125	20	
o-Xylene	<0.000500	0.0500	0.0463	93	0.0500	0.0503	101	8	75-125	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Moore to Jal #1

Work Order #: 619491 **Project ID:** 700376 044 04

Analyst: KRP **Date Prepared:** 04/05/2019 **Date Analyzed:** 04/05/2019

Lab Batch ID: 3084766 **Sample:** 7675166-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.0500	0.0557	111	0.0500	0.0528	106	5	66-142	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Moore to Jal #1

Work Order #: 619491 **Project ID:** 700376 044 04

Analyst: EKL **Date Prepared:** 04/02/2019 **Date Analyzed:** 04/03/2019

Lab Batch ID: 3084458 **Sample:** 7674861-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

PAHs by 8270D SIM Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<0.00000410	0.00100	0.000863	86	0.00100	0.000891	89	3	37-117	25	
Acenaphthylene	<0.00000730	0.00100	0.000860	86	0.00100	0.000882	88	3	37-119	25	
Anthracene	<0.00000760	0.00100	0.000899	90	0.00100	0.000887	89	1	45-121	25	
Benzo(a)anthracene	<0.00000630	0.00100	0.000926	93	0.00100	0.000900	90	3	51-113	25	
Benzo(a)pyrene	<0.00000960	0.00100	0.000986	99	0.00100	0.000940	94	5	45-127	25	
Benzo(b)fluoranthene	<0.00000910	0.00100	0.00101	101	0.00100	0.000933	93	8	56-110	25	
Benzo(g,h,i)perylene	<0.00000800	0.00100	0.00119	119	0.00100	0.00113	113	5	47-122	25	
Benzo(k)fluoranthene	<0.00000780	0.00100	0.000956	96	0.00100	0.000902	90	6	58-123	25	
Chrysene	<0.00000880	0.00100	0.000975	98	0.00100	0.000943	94	3	52-113	25	
Dibenz(a,h)anthracene	<0.00000500	0.00100	0.00109	109	0.00100	0.00106	106	3	48-126	25	
Dibenzofuran	<0.00000530	0.00100	0.000881	88	0.00100	0.000919	92	4	38-118	25	
Fluoranthene	<0.00000900	0.00100	0.000996	100	0.00100	0.000944	94	5	51-124	25	
Fluorene	<0.00000550	0.00100	0.000871	87	0.00100	0.000883	88	1	42-116	25	
Indeno(1,2,3-c,d)Pyrene	<0.00000500	0.00100	0.00114	114	0.00100	0.00108	108	5	48-123	25	
Naphthalene	<0.00000450	0.00100	0.000849	85	0.00100	0.000883	88	4	35-116	25	
Phenanthrene	<0.00000550	0.00100	0.000918	92	0.00100	0.000925	93	1	46-113	25	
Pyrene	<0.00000920	0.00100	0.00102	102	0.00100	0.000805	81	24	47-124	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Moore to Jal #1

Work Order #: 619491

Lab Batch #: 3084677 **Project ID:** 700376 044 04

Date Analyzed: 04/04/2019 **Date Prepared:** 04/04/2019 **Analyst:** KRP

QC- Sample ID: 619424-004 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

BTEX by SW 8260B	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	<0.000500	0.0500	0.0528	106	66-142	
Toluene	<0.000500	0.0500	0.0509	102	59-139	
Ethylbenzene	<0.000500	0.0500	0.0525	105	75-125	
m,p-Xylenes	<0.00100	0.100	0.104	104	75-125	
o-Xylene	<0.000500	0.0500	0.0511	102	75-125	

Lab Batch #: 3084740

Date Analyzed: 04/05/2019 **Date Prepared:** 04/04/2019 **Analyst:** KRP

QC- Sample ID: 619491-013 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

BTEX by SW 8260B	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	0.104	0.0500	0.143	78	66-142	
Toluene	<0.000500	0.0500	0.0541	108	59-139	
Ethylbenzene	<0.000500	0.0500	0.0552	110	75-125	
m,p-Xylenes	0.00177	0.100	0.110	108	75-125	
o-Xylene	<0.000500	0.0500	0.0532	106	75-125	

Lab Batch #: 3084766

Date Analyzed: 04/05/2019 **Date Prepared:** 04/05/2019 **Analyst:** KRP

QC- Sample ID: 619300-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

BTEX by SW 8260B	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	<0.0250	2.50	2.68	107	66-142	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Chain of Custody

Work Order No: 619491

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com Page 1 of 3

Project Manager:	David Adkins	Bill to: (if different)	PLAINS All AMERICAN
Company Name:	Talon	Company Name:	Pipeline
Address:	408 W. Texas Ave.	Address:	ATN: Camille Bryant
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	SRS #2002-10270
Phone:	575-616-4022 or 575-746-8905	Email:	dadkins@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Moore To Jal #1	Turn Around	
Project Number:	700376 044 04	Routine	☒
P.O. Number:	SRS # 2002-10270	Rush:	
Sampler's Name:	Bill Riggs	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	6/1.5	Thermometer ID	R8
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.1
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX	PAH
MW22		3-25-19	12:10 PM			X	
MW21		3-25-19	1:40 PM			X	
MW23		3-25-19	4:05pm			X	
MW26		3-25-19	3:10pm			X	
MW17		3-26-19	4:05pm			X	
MW19		3-26-19	3:30pm			X	X
MW20		3-26-19	9:25AM			X	
MW27		3-26-19	9:45AM			X	X
MW14		3-26-19	11:25AM			X	
MW16		3-26-19	12:15PM			X	

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

4705 2520 5068

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Bill Riggs	Jessica Fuentes	3/28/19 1:24	2 Jessica Fuentes		3-29-19 1145
3				4		
5				6		

Chain of Custody

Work Order No: 619491

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com Page 2 of 3

Project Manager:	David Adkins	Bill to: (if different)	Plains All American
Company Name:	Talon	Company Name:	Pipeline
Address:	408 W. Texas Ave.	Address:	ATTN: Camille Bryant
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	SRS # 2002-10270
Phone:	575-616-4022 or 575-746-8905	Email:	dadkins@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Moore to Jal #1	Turn Around	
Project Number:	700376 044 04	Routine	☑
P.O. Number:	SRS # 2002-10270	Rush:	
Sampler's Name:	Bill Riggs	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	6.5	Thermometer ID	R8
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.1
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX	PAH	Sample Comments
MW29		3-26-19	1040 AM			X	X	
MW38		3-26-19	1250 PM			X	X	
MW40		3-26-19	125 PM			X		
MW37		3-26-19	155 PM			X	X	
MW28		3-26-19	305 PM			X	X	
MW34		3-27-19	2 PM			X	X	
MW35		3-28-19	10 AM			X	X	
MW36		3-28-19	1030 AM			X	X	
MW41		3-27-19	350 PM			X		
MW39		3-27-19	1250 PM			X		

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

4705 2520 5068

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Bill Riggs	Jessica Fuentes	3/28/19 1:24	2 Jessica Fuentes		3.29.19 1145
3						
5				6		

Revised Date 051418 Rev. 2018.1

Final 1.000

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Chain of Custody

Work Order No: 619491

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

www.xenco.com Page 3 of 3

Project Manager:	David Adkins	Bill to: (if different)	Plains All American
Company Name:	Talon	Company Name:	Pipeline
Address:	408 W. Texas Ave.	Address:	ATN: Camille Bryant
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	SRS # 2002-10270
Phone:	575-616-4022 or 575-746-8905	Email:	dadkins@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Moore TO Jal #1	Turn Around	
Project Number:	700376 044 04	Routine	☑
P.O. Number:	SRS # 2002-10270	Rush:	
Sampler's Name:	Bill Riggs	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	6.5	Thermometer ID	R8
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.1
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX	PAH	Sample Comments
MW 13		3-27-19	12 pm			X		
MW 18		3-27-19				X		

3.29.19

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

4705 2520 5068

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Bill Riggs	Jessica Frantz	3/28/19 1:24	2 Jessica Frantz		3.29.19 1145
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Final 1.000

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Inter-Office Shipment

IOS Number **125623**

Date/Time: 03/29/19 12:03
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Katie Lowe
Delivery Priority:
Air Bill No.: 774840842678

Please send report to: Wendy Walfoort
Address: 1211 W. Florida Ave
E-Mail: wendy.walfoort@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
619491-001	W	MW22	03/25/19 12:10	SW8260BTX	BTEX by SW 8260B	04/04/19	04/08/19	WEW	BZ BZME EBZ XYLENES	
619491-002	W	MW21	03/25/19 13:40	SW8260BTX	BTEX by SW 8260B	04/04/19	04/08/19	WEW	BZ BZME EBZ XYLENES	
619491-003	W	MW23	03/25/19 16:05	SW8260BTX	BTEX by SW 8260B	04/04/19	04/08/19	WEW	BZ BZME EBZ XYLENES	
619491-004	W	MW26	03/25/19 15:10	SW8260BTX	BTEX by SW 8260B	04/04/19	04/08/19	WEW	BZ BZME EBZ XYLENES	
619491-005	W	MW17	03/26/19 16:05	SW8260BTX	BTEX by SW 8260B	04/04/19	04/09/19	WEW	BZ BZME EBZ XYLENES	
619491-006	W	MW19	03/26/19 15:30	SIM_PAH_D	PAHs by 8270D SIM	HOLD	**04/02/19 15:30**	WEW	ACNP ACNPY ANTH BZA	
619491-006	W	MW19	03/26/19 15:30	SW8260BTX	BTEX by SW 8260B	04/04/19	04/09/19	WEW	BZ BZME EBZ XYLENES	
619491-007	W	MW20	03/26/19 09:25	SW8260BTX	BTEX by SW 8260B	04/04/19	04/09/19	WEW	BZ BZME EBZ XYLENES	
619491-008	W	MW27	03/26/19 09:45	SIM_PAH_D	PAHs by 8270D SIM	04/04/19	**04/02/19 09:45**	WEW	ACNP ACNPY ANTH BZA	
619491-008	W	MW27	03/26/19 09:45	SW8260BTX	BTEX by SW 8260B	04/04/19	04/09/19	WEW	BZ BZME EBZ XYLENES	
619491-009	W	MW14	03/26/19 11:25	SW8260BTX	BTEX by SW 8260B	04/04/19	04/09/19	WEW	BZ BZME EBZ XYLENES	
619491-010	W	MW16	03/26/19 12:15	SW8260BTX	BTEX by SW 8260B	04/04/19	04/09/19	WEW	BZ BZME EBZ XYLENES	
619491-011	W	MW29	03/26/19 10:40	SIM_PAH_D	PAHs by 8270D SIM	04/04/19	**04/02/19 10:40**	WEW	ACNP ACNPY ANTH BZA	
619491-011	W	MW29	03/26/19 10:40	SW8260BTX	BTEX by SW 8260B	04/04/19	04/09/19	WEW	BZ BZME EBZ XYLENES	
619491-012	W	MW38	03/26/19 12:50	SW8260BTX	BTEX by SW 8260B	04/04/19	04/09/19	WEW	BZ BZME EBZ XYLENES	
619491-012	W	MW38	03/26/19 12:50	SIM_PAH_D	PAHs by 8270D SIM	04/04/19	**04/02/19 12:50**	WEW	ACNP ACNPY ANTH BZA	
619491-013	W	MW40	03/26/19 13:25	SW8260BTX	BTEX by SW 8260B	04/04/19	04/09/19	WEW	BZ BZME EBZ XYLENES	
619491-014	W	MW37	03/26/19 13:55	SW8260BTX	BTEX by SW 8260B	04/04/19	04/09/19	WEW	BZ BZME EBZ XYLENES	
619491-014	W	MW37	03/26/19 13:55	SIM_PAH_D	PAHs by 8270D SIM	04/04/19	**04/02/19 13:55**	WEW	ACNP ACNPY ANTH BZA	
619491-015	W	MW28	03/26/19 15:05	SIM_PAH_D	PAHs by 8270D SIM	04/04/19	**04/02/19 15:05**	WEW	ACNP ACNPY ANTH BZA	
619491-015	W	MW28	03/26/19 15:05	SW8260BTX	BTEX by SW 8260B	04/04/19	04/09/19	WEW	BZ BZME EBZ XYLENES	
619491-016	W	MW34	03/27/19 14:00	SW8260BTX	BTEX by SW 8260B	04/04/19	04/10/19	WEW	BZ BZME EBZ XYLENES	
619491-016	W	MW34	03/27/19 14:00	SIM_PAH_D	PAHs by 8270D SIM	04/04/19	**04/03/19 14:00**	WEW	ACNP ACNPY ANTH BZA	
619491-017	W	MW35	03/28/19 10:00	SIM_PAH_D	PAHs by 8270D SIM	HOLD	**04/04/19 10:00**	WEW	ACNP ACNPY ANTH BZA	
619491-017	W	MW35	03/28/19 10:00	SW8260BTX	BTEX by SW 8260B	04/04/19	04/11/19	WEW	BZ BZME EBZ XYLENES	

Final 1.000

Inter-Office Shipment

IOS Number **125623**

Date/Time: 03/29/19 12:03
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Katie Lowe
Delivery Priority:
Air Bill No.: 774840842678

Please send report to: Wendy Walfoort
Address: 1211 W. Florida Ave
E-Mail: wendy.walfoort@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
619491-018	W	MW36	03/28/19 10:30	SW8260BTX	BTEX by SW 8260B	04/04/19	04/11/19	WEW	BZ BZME EBZ XYLENES	
619491-018	W	MW36	03/28/19 10:30	SIM_PAH_D	PAHs by 8270D SIM	HOLD	**04/04/19 10:30**	WEW	ACNP ACNPY ANTH BZA	
619491-019	W	MW41	03/27/19 15:50	SW8260BTX	BTEX by SW 8260B	04/04/19	04/10/19	WEW	BZ BZME EBZ XYLENES	
619491-020	W	MW39	03/27/19 12:50	SW8260BTX	BTEX by SW 8260B	04/04/19	04/10/19	WEW	BZ BZME EBZ XYLENES	
619491-021	W	MW13	03/27/19 12:00	SW8260BTX	BTEX by SW 8260B	04/04/19	04/10/19	WEW	BZ BZME EBZ XYLENES	

Inter Office Shipment or Sample Comments:

Sample 017 & 018 PAH liters were received broken in Midland, you will not be receiving the PAH containers for these samples.- KL

Relinquished By: Katie Lowe

Date Relinquished: 03/29/2019

Received By: Taha Hedib

Date Received: 03/30/2019 09:30

Cooler Temperature: 3.7

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 125623

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used :

Sent By: Katie Lowe **Date Sent:** 03/29/2019 12:03 PM

Received By: Taha Hedib **Date Received:** 03/30/2019 09:30 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.7	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

NonConformance:

Sample 017 & 018 PAH liters were received broken in Midland, you will not be receiving the PAH containers for these samples.- KL

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: _____ Date: 03/30/2019

Taha Hedib

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Talon/LPE Co.

Date/ Time Received: 03.29.2019 11.45.00 AM

Work Order #: 619491

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**Yes**	No sample MW18. No sample container for PAH MW19
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**No**	Sample 017 & 018 (MW-35 and MW36) PAH containers were received broken.
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	Xenco Stafford
#18 Water VOC samples have zero headspace?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: BT

PH Device/Lot#: A023690

Checklist completed by: Katie Lowe — Date: 03.29.2019

Checklist reviewed by: Wendy Walfoort — Date: 04.03.2019

Analytical Report 619720

for

Talon/LPE Co.

Project Manager: David Adkins

Moore To Jal #1

700376 044 04

04.09.2019

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)
Xenco-Lakeland: Florida (E84098)

04.09.2019

Project Manager: **David Adkins**
Talon/LPE Co.
921 N Bivins St
Amarillo, TX 79107

Reference: XENCO Report No(s): **619720**
Moore To Jal #1
Project Address:

David Adkins:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 619720. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 619720 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Wendy Walfoort

Wendy Walfoort
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Sample Cross Reference 619720

Talon/LPE Co., Amarillo, TX

Moore To Jal #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW35	W	03.30.2019 09:45		619720-001
MW36	W	03.30.2019 10:50		619720-002

CASE NARRATIVE

Client Name: Talon/LPE Co.

Project Name: Moore To Jal #1

Project ID:	*700376 044 04*	Report Date:	*04.09.2019*
Work Order Number(s):	*619720*	Date Received:	*04.02.2019*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results
619720

Talon/LPE Co., Amarillo, TX

Moore To Jal #1

Sample Id: **MW35** Matrix: Water Sample Depth:

Lab Sample Id: 619720-001 Date Collected: 03.30.2019 09:45 Date Received: 04.02.2019 11:45

Analytical Method: PAHs by 8270D SIM Prep Method: 3510C

Analyst: EKL % Moist: Tech: EKL

Seq Number: 3084789 Date Prep: 04.05.2019 10:09

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675115

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000500	0.00000408	mg/L	04.07.2019 21:14	U	1
Acenaphthylene	208-96-8	<0.00000730	0.0000500	0.00000731	mg/L	04.07.2019 21:14	U	1
Anthracene	120-12-7	<0.00000760	0.0000500	0.00000757	mg/L	04.07.2019 21:14	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000500	0.00000632	mg/L	04.07.2019 21:14	U	1
Benzo(a)pyrene	50-32-8	<0.00000960	0.0000500	0.00000955	mg/L	04.07.2019 21:14	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000910	0.0000500	0.00000907	mg/L	04.07.2019 21:14	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000500	0.00000796	mg/L	04.07.2019 21:14	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000780	0.0000500	0.00000779	mg/L	04.07.2019 21:14	U	1
Chrysene	218-01-9	<0.00000880	0.0000500	0.00000880	mg/L	04.07.2019 21:14	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000500	0.00000495	mg/L	04.07.2019 21:14	U	1
Dibenzofuran	132-64-9	<0.00000530	0.0000500	0.00000530	mg/L	04.07.2019 21:14	U	1
Fluoranthene	206-44-0	<0.00000900	0.0000500	0.00000896	mg/L	04.07.2019 21:14	U	1
Fluorene	86-73-7	<0.00000550	0.0000500	0.00000546	mg/L	04.07.2019 21:14	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000500	0.00000495	mg/L	04.07.2019 21:14	U	1
Naphthalene	91-20-3	**0.0000262**	0.000500	0.00000451	mg/L	04.07.2019 21:14	J	1
Phenanthrene	85-01-8	<0.00000550	0.0000500	0.00000550	mg/L	04.07.2019 21:14	U	1
Pyrene	129-00-0	<0.00000920	0.0000500	0.00000920	mg/L	04.07.2019 21:14	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	79	41 - 128	%		
2-Fluorobiphenyl	69	55 - 135	%		
Terphenyl-D14	87	54 - 131	%		

Certificate of Analytical Results
619720

Talon/LPE Co., Amarillo, TX

Moore To Jal #1

Sample Id: **MW36** Matrix: Water Sample Depth:

Lab Sample Id: 619720-002 Date Collected: 03.30.2019 10:50 Date Received: 04.02.2019 11:45

Analytical Method: PAHs by 8270D SIM Prep Method: 3510C

Analyst: EKL % Moist: Tech: EKL

Seq Number: 3084789 Date Prep: 04.05.2019 10:12

Subcontractor: SUB: T104704215-19-29 Prep seq: 7675115

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000500	0.00000408	mg/L	04.07.2019 21:32	U	1
Acenaphthylene	208-96-8	<0.00000730	0.0000500	0.00000731	mg/L	04.07.2019 21:32	U	1
Anthracene	120-12-7	<0.00000760	0.0000500	0.00000757	mg/L	04.07.2019 21:32	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000500	0.00000632	mg/L	04.07.2019 21:32	U	1
Benzo(a)pyrene	50-32-8	<0.00000960	0.0000500	0.00000955	mg/L	04.07.2019 21:32	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000910	0.0000500	0.00000907	mg/L	04.07.2019 21:32	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000500	0.00000796	mg/L	04.07.2019 21:32	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000780	0.0000500	0.00000779	mg/L	04.07.2019 21:32	U	1
Chrysene	218-01-9	<0.00000880	0.0000500	0.00000880	mg/L	04.07.2019 21:32	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000500	0.00000495	mg/L	04.07.2019 21:32	U	1
Dibenzofuran	132-64-9	<0.00000530	0.0000500	0.00000530	mg/L	04.07.2019 21:32	U	1
Fluoranthene	206-44-0	<0.00000900	0.0000500	0.00000896	mg/L	04.07.2019 21:32	U	1
Fluorene	86-73-7	<0.00000550	0.0000500	0.00000546	mg/L	04.07.2019 21:32	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000500	0.00000495	mg/L	04.07.2019 21:32	U	1
Naphthalene	91-20-3	<0.00000450	0.000500	0.00000451	mg/L	04.07.2019 21:32	U	1
Phenanthrene	85-01-8	<0.00000550	0.0000500	0.00000550	mg/L	04.07.2019 21:32	U	1
Pyrene	129-00-0	<0.00000920	0.0000500	0.00000920	mg/L	04.07.2019 21:32	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	81	41 - 128	%		
2-Fluorobiphenyl	73	55 - 135	%		
Terphenyl-D14	90	54 - 131	%		

Certificate of Analytical Results
619720

Talon/LPE Co., Amarillo, TX

Moore To Jal #1

Sample Id:	**7675115-1-BLK**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	7675115-1-BLK	Date Collected:		Date Received:	
Analytical Method:	PAHs by 8270D SIM			Prep Method:	3510C
Analyst:	EKL	% Moist:		Tech:	EKL
Seq Number:	3084789	Date Prep:	04.05.2019 10:00		
Subcontractor:	SUB: T104704215-19-29	Prep seq:	7675115		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000500	0.00000408	mg/L	04.05.2019 15:41	U	1
Acenaphthylene	208-96-8	<0.00000730	0.0000500	0.00000731	mg/L	04.05.2019 15:41	U	1
Anthracene	120-12-7	<0.00000760	0.0000500	0.00000757	mg/L	04.05.2019 15:41	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000500	0.00000632	mg/L	04.05.2019 15:41	U	1
Benzo(a)pyrene	50-32-8	<0.00000960	0.0000500	0.00000955	mg/L	04.05.2019 15:41	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000910	0.0000500	0.00000907	mg/L	04.05.2019 15:41	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000500	0.00000796	mg/L	04.05.2019 15:41	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000780	0.0000500	0.00000779	mg/L	04.05.2019 15:41	U	1
Chrysene	218-01-9	<0.00000880	0.0000500	0.00000880	mg/L	04.05.2019 15:41	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000500	0.00000495	mg/L	04.05.2019 15:41	U	1
Dibenzofuran	132-64-9	<0.00000530	0.0000500	0.00000530	mg/L	04.05.2019 15:41	U	1
Fluoranthene	206-44-0	<0.00000900	0.0000500	0.00000896	mg/L	04.05.2019 15:41	U	1
Fluorene	86-73-7	<0.00000550	0.0000500	0.00000546	mg/L	04.05.2019 15:41	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000500	0.00000495	mg/L	04.05.2019 15:41	U	1
Naphthalene	91-20-3	<0.00000450	0.000500	0.00000451	mg/L	04.05.2019 15:41	U	1
Phenanthrene	85-01-8	<0.00000550	0.0000500	0.00000550	mg/L	04.05.2019 15:41	U	1
Pyrene	129-00-0	<0.00000920	0.0000500	0.00000920	mg/L	04.05.2019 15:41	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	90	41 - 128	%		
2-Fluorobiphenyl	78	55 - 135	%		
Terphenyl-D14	99	54 - 131	%		

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: Moore To Jal #1

Work Orders : 619720 **Project ID:** 700376 044 04

Lab Batch #: 3084789 **Sample:** 7675115-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04.05.2019 15:41 **SURROGATE RECOVERY STUDY**

PAHs by 8270D SIM Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Nitrobenzene-d5	0.897	1.00	90	41-128	
2-Fluorobiphenyl	0.775	1.00	78	55-135	
Terphenyl-D14	0.987	1.00	99	54-131	

Lab Batch #: 3084789 **Sample:** 7675115-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04.05.2019 16:00 **SURROGATE RECOVERY STUDY**

PAHs by 8270D SIM Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Nitrobenzene-d5	0.868	1.00	87	41-128	
2-Fluorobiphenyl	0.782	1.00	78	55-135	
Terphenyl-D14	1.02	1.00	102	54-131	

Lab Batch #: 3084789 **Sample:** 7675115-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 04.05.2019 16:18 **SURROGATE RECOVERY STUDY**

PAHs by 8270D SIM Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Nitrobenzene-d5	0.879	1.00	88	41-128	
2-Fluorobiphenyl	0.766	1.00	77	55-135	
Terphenyl-D14	0.942	1.00	94	54-131	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Moore To Jal #1

Work Order #: 619720 **Project ID:** 700376 044 04

Analyst: EKL **Date Prepared:** 04.05.2019 **Date Analyzed:** 04.05.2019

Lab Batch ID: 3084789 **Sample:** 7675115-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

PAHs by 8270D SIM Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<0.00000410	0.00100	0.000768	77	0.00100	0.000772	77	1	37-117	25	
Acenaphthylene	<0.00000730	0.00100	0.000746	75	0.00100	0.000789	79	6	37-119	25	
Anthracene	<0.00000760	0.00100	0.000784	78	0.00100	0.000787	79	0	45-121	25	
Benzo(a)anthracene	<0.00000630	0.00100	0.000814	81	0.00100	0.000815	82	0	51-113	25	
Benzo(a)pyrene	<0.00000960	0.00100	0.000876	88	0.00100	0.000843	84	4	45-127	25	
Benzo(b)fluoranthene	<0.00000910	0.00100	0.000822	82	0.00100	0.000794	79	3	56-110	25	
Benzo(g,h,i)perylene	<0.00000800	0.00100	0.000977	98	0.00100	0.00117	117	18	47-122	25	
Benzo(k)fluoranthene	<0.00000780	0.00100	0.000857	86	0.00100	0.000785	79	9	58-123	25	
Chrysene	<0.00000880	0.00100	0.000862	86	0.00100	0.000855	86	1	52-113	25	
Dibenz(a,h)anthracene	<0.00000500	0.00100	0.000974	97	0.00100	0.00103	103	6	48-126	25	
Dibenzofuran	<0.00000530	0.00100	0.000804	80	0.00100	0.000799	80	1	38-118	25	
Fluoranthene	<0.00000900	0.00100	0.000893	89	0.00100	0.000929	93	4	51-124	25	
Fluorene	<0.00000550	0.00100	0.000822	82	0.00100	0.000792	79	4	42-116	25	
Indeno(1,2,3-c,d)Pyrene	<0.00000500	0.00100	0.000982	98	0.00100	0.00109	109	10	48-123	25	
Naphthalene	<0.00000450	0.00100	0.000768	77	0.00100	0.000765	77	0	35-116	25	
Phenanthrene	<0.00000550	0.00100	0.000839	84	0.00100	0.000827	83	1	46-113	25	
Pyrene	<0.00000920	0.00100	0.000868	87	0.00100	0.000876	88	1	47-124	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Chain of Custody

Work Order No: 619720

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

www.xenco.com Page 1 of 1

Project Manager:	David Adkins	Bill to: (if different)	Plains All American
Company Name:	Talon	Company Name:	Pipeline
Address:	408 W. Texas Ave.	Address:	ATTN: Camille Bryant
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575-616-4022 or 575-746-8905	Email:	dadkins@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Moore to Jal #1	Turn Around	
Project Number:	700376 044 04	Routine	☑
P.O. Number:	SAS # 2002 10270	Rush:	
Sampler's Name:	Bill Riggs	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	1.5	Thermometer ID		
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.1	
Sample Custody Seals:	Yes (No) N/A	Total Containers:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX	PAH
MW35		3-30-19	945am				X
MW36		3-30-19	1050am				X

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Bill Riggs	Esperanza Gonzalez	4-1-19 11:30	2 Esperanza Gonzalez		4/2/19 1445
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Final 1.000

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After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Inter-Office Shipment

IOS Number : 125759

Date/Time:	04.02.2019 14:40	Created by:	Brianna Teel	Please send report to:	Wendy Walfoort
Lab# From:	**Midland**	Delivery Priority:		Address:	1211 W. Florida Ave
Lab# To:	**Houston**	Air Bill No.:	774867305470	E-Mail:	wendy.walfoort@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
619720-001	W	MW35	03.30.2019 09:45	SIM_PAH_D	PAHs by 8270D SIM	04.08.2019	**04.06.2019 09:45**	WEW	ACNP ACNPY ANTH BZ	
619720-002	W	MW36	03.30.2019 10:50	SIM_PAH_D	PAHs by 8270D SIM	04.08.2019	**04.06.2019 10:50**	WEW	ACNP ACNPY ANTH BZ	

Inter Office Shipment or Sample Comments:

Relinquished By: Brianna Teel

Brianna Teel

Date Relinquished: 04.02.2019

Received By: Monica Shakhshir

Date Received: 04.03.2019 09:05

Cooler Temperature: 1.6

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 125759

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : HOU-068

Sent By: Brianna Teel **Date Sent:** 04/02/2019 02:40 PM

Received By: Monica Shakhshir **Date Received:** 04/03/2019 09:05 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.6	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: _____ Date: 04/03/2019
Monica Shakhshir

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Talon/LPE Co.

Date/ Time Received: 04.02.2019 11.45.00 AM

Work Order #: 619720

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	Xenco Stafford
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: BT

PH Device/Lot#: A023690

Checklist completed by: Brianna Teel Date: 04.08.2019

Brianna Teel

Checklist reviewed by: Wendy Walfoort Date: 04.08.2019

Wendy Walfoort

Analytical Report 629452

for

Talon/LPE Co.

Project Manager: David Adkins

Moore To Jal #1 (MTJ#1)

700376.044.04

09-JUL-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

Table of Contents

09-JUL-19

Project Manager: **David Adkins**
Talon/LPE Co.
921 N Bivins St
Amarillo, TX 79107

Reference: XENCO Report No(s): **629452**
Moore To Jal #1 (MTJ#1)
Project Address:

David Adkins:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 629452. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 629452 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Sample Cross Reference 629452

Talon/LPE Co., Amarillo, TX

Moore To Jal #1 (MTJ#1)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-17	W	06-24-19 13:40		629452-001
MW-40	W	06-25-19 11:10		629452-002
MW-38	W	06-25-19 12:07		629452-003
MW-37	W	06-25-19 12:55		629452-004
MW-20	W	06-25-19 14:15		629452-005
MW-19	W	06-25-19 15:00		629452-006
MW-29	W	06-26-19 11:00		629452-007
MW-28	W	06-26-19 12:30		629452-008
MW-14	W	06-26-19 13:20		629452-009
MW-27	W	06-26-19 14:05		629452-010
MW-26	W	06-26-19 14:50		629452-011
MW-23	W	06-26-19 15:40		629452-012
MW-22	W	06-27-19 09:45		629452-013
MW-21	W	06-27-19 10:30		629452-014
MW-13	W	06-27-19 11:15		629452-015
MW-16	W	06-27-19 12:00		629452-016
MW-39	W	06-27-19 12:15		629452-017
MW-34	W	06-27-19 13:30		629452-018
MW-35	W	06-27-19 14:20		629452-019
MW-36	W	06-27-19 15:00		629452-020
MW-41	W	06-27-19 15:20		629452-021

CASE NARRATIVE

Client Name: Talon/LPE Co.

Project Name: Moore To Jal #1 (MTJ#1)

Project ID: *700376.044.04*
Work Order Number(s): *629452*

Report Date: *09-JUL-19*
Date Received: *06/28/2019*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Lab Sample ID 629452-010 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, Toluene, m_p-Xylenes , o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.
Samples in the analytical batch are: 629452-010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021. Laboratory control spikes recoveries and RPDs within control limits; therefore the data was accepted.

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3094290 BTEX-MTBE by EPA 8021B
Outlier/s are due to possible matrix interference.

Lab Sample ID 629452-010 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, Toluene, m_p-Xylenes , o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.
Samples in the analytical batch are: 629452-010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021.

Lab Sample ID 629452-010 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, Toluene, m_p-Xylenes , o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.
Samples in the analytical batch are: 629452-010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021.

Batch: LBA-3094584 BTEX-MTBE by EPA 8021B
Sample 629452-002 was diluted due to excessive soil in the voa.

Certificate of Analytical Results
629452
Talon/LPE Co., Amarillo, TX
Moore To Jal #1 (MTJ#1)

Sample Id: **MW-17** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-001 Date Collected: 06.24.19 13.40 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094147 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681167

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 04:33	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 04:33	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 04:33	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 04:33	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 04:33	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 04:33	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 04:33	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	91	66 - 120	%		
4-Bromofluorobenzene	91	67 - 120	%		

Sample Id: **MW-40** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-002 Date Collected: 06.25.19 11.10 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094584 Date Prep: 07.02.19 12.17

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681485

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.03.19 07:54	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.03.19 07:54	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.03.19 07:54	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.03.19 07:54	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.03.19 07:54	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.03.19 07:54	U	
Total BTEX		<0.000270		0.000270	mg/L	07.03.19 07:54	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	84	66 - 120	%		
4-Bromofluorobenzene	90	67 - 120	%		

Certificate of Analytical Results
629452
Talon/LPE Co., Amarillo, TX
Moore To Jal #1 (MTJ#1)

Sample Id: **MW-38** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-003 Date Collected: 06.25.19 12.07 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094584 Date Prep: 07.02.19 12.17

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681485

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**2.70**	0.0100	0.00480	mg/L	07.03.19 08:21		10
Toluene	108-88-3	<0.00512	0.0100	0.00512	mg/L	07.03.19 08:21	U	10
Ethylbenzene	100-41-4	<0.00616	0.0100	0.00616	mg/L	07.03.19 08:21	U	10
m_p-Xylenes	179601-23-1	<0.00454	0.0200	0.00454	mg/L	07.03.19 08:21	U	10
o-Xylene	95-47-6	<0.00270	0.0100	0.00270	mg/L	07.03.19 08:21	U	10
Xylenes, Total	1330-20-7	<0.00270		0.00270	mg/L	07.03.19 08:21	U	
Total BTEX		**2.70**		0.00270	mg/L	07.03.19 08:21		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	88	66 - 120	%		
4-Bromofluorobenzene	86	67 - 120	%		

Sample Id: **MW-37** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-004 Date Collected: 06.25.19 12.55 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094584 Date Prep: 07.02.19 12.17

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681485

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.03.19 08:48	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.03.19 08:48	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.03.19 08:48	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.03.19 08:48	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.03.19 08:48	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.03.19 08:48	U	
Total BTEX		<0.000270		0.000270	mg/L	07.03.19 08:48	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	85	66 - 120	%		
4-Bromofluorobenzene	89	67 - 120	%		

Certificate of Analytical Results
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Talon/LPE Co., Amarillo, TX
Moore To Jal #1 (MTJ#1)

Sample Id: **MW-20** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-005 Date Collected: 06.25.19 14.15 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094147 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681167

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 06:20	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 06:20	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 06:20	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 06:20	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 06:20	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 06:20	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 06:20	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	90	66 - 120	%		
4-Bromofluorobenzene	84	67 - 120	%		

Sample Id: **MW-19** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-006 Date Collected: 06.25.19 15.00 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094147 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681167

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 06:47	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 06:47	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 06:47	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 06:47	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 06:47	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 06:47	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 06:47	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	87	66 - 120	%		
4-Bromofluorobenzene	88	67 - 120	%		

Certificate of Analytical Results
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Talon/LPE Co., Amarillo, TX
Moore To Jal #1 (MTJ#1)

Sample Id: **MW-29** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-007 Date Collected: 06.26.19 11.00 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094147 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681167

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 07:14	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 07:14	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 07:14	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 07:14	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 07:14	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 07:14	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 07:14	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	88	66 - 120	%		
4-Bromofluorobenzene	91	67 - 120	%		

Sample Id: **MW-28** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-008 Date Collected: 06.26.19 12.30 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094147 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681167

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00320**	0.00100	0.000480	mg/L	07.02.19 07:40		1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 07:40	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 07:40	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 07:40	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 07:40	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 07:40	U	
Total BTEX		**0.00320**		0.000270	mg/L	07.02.19 07:40		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	90	66 - 120	%		
4-Bromofluorobenzene	92	67 - 120	%		

Certificate of Analytical Results
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Talon/LPE Co., Amarillo, TX
Moore To Jal #1 (MTJ#1)

Sample Id: **MW-14** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-009 Date Collected: 06.26.19 13.20 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094147 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681167

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 08:07	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 08:07	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 08:07	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 08:07	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 08:07	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 08:07	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 08:07	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	88	66 - 120	%		
4-Bromofluorobenzene	90	67 - 120	%		

Sample Id: **MW-27** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-010 Date Collected: 06.26.19 14.05 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094290 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681168

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 12:07	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 12:07	UF	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 12:07	UF	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 12:07	UF	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 12:07	UF	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 12:07	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 12:07	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	88	66 - 120	%		
4-Bromofluorobenzene	88	67 - 120	%		

Certificate of Analytical Results
629452
Talon/LPE Co., Amarillo, TX
Moore To Jal #1 (MTJ#1)

Sample Id: **MW-26** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-011 Date Collected: 06.26.19 14.50 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094290 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681168

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 13:59	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 13:59	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 13:59	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 13:59	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 13:59	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 13:59	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 13:59	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	85	66 - 120	%		
4-Bromofluorobenzene	86	67 - 120	%		

Sample Id: **MW-23** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-012 Date Collected: 06.26.19 15.40 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094290 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681168

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 14:26	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 14:26	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 14:26	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 14:26	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 14:26	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 14:26	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 14:26	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	86	66 - 120	%		
4-Bromofluorobenzene	89	67 - 120	%		

Certificate of Analytical Results
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Talon/LPE Co., Amarillo, TX
Moore To Jal #1 (MTJ#1)

Sample Id: **MW-22** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-013 Date Collected: 06.27.19 09.45 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094290 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681168

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 14:52	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 14:52	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 14:52	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 14:52	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 14:52	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 14:52	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 14:52	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	89	66 - 120	%		
4-Bromofluorobenzene	89	67 - 120	%		

Sample Id: **MW-21** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-014 Date Collected: 06.27.19 10.30 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094290 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681168

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 15:19	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 15:19	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 15:19	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 15:19	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 15:19	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 15:19	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 15:19	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	88	66 - 120	%		
4-Bromofluorobenzene	89	67 - 120	%		

Certificate of Analytical Results
629452
Talon/LPE Co., Amarillo, TX
Moore To Jal #1 (MTJ#1)

Sample Id: **MW-13** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-015 Date Collected: 06.27.19 11.15 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094290 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681168

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 15:46	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 15:46	U	1
Ethylbenzene	100-41-4	**0.00660**	0.00100	0.000616	mg/L	07.02.19 15:46		1
m_p-Xylenes	179601-23-1	**0.00640**	0.00200	0.000454	mg/L	07.02.19 15:46		1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 15:46	U	1
Xylenes, Total	1330-20-7	**0.00640**		0.000270	mg/L	07.02.19 15:46		
Total BTEX		**0.0130**		0.000270	mg/L	07.02.19 15:46		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	87	66 - 120	%		
4-Bromofluorobenzene	89	67 - 120	%		

Sample Id: **MW-16** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-016 Date Collected: 06.27.19 12.00 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094290 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681168

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**3.54**	0.0500	0.0240	mg/L	07.02.19 16:15		50
Toluene	108-88-3	<0.0256	0.0500	0.0256	mg/L	07.02.19 16:15	U	50
Ethylbenzene	100-41-4	**0.165**	0.0500	0.0308	mg/L	07.02.19 16:15		50
m_p-Xylenes	179601-23-1	**0.190**	0.100	0.0227	mg/L	07.02.19 16:15		50
o-Xylene	95-47-6	<0.0135	0.0500	0.0135	mg/L	07.02.19 16:15	U	50
Xylenes, Total	1330-20-7	**0.190**		0.0135	mg/L	07.02.19 16:15		
Total BTEX		**3.90**		0.0135	mg/L	07.02.19 16:15		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	80	66 - 120	%		
4-Bromofluorobenzene	89	67 - 120	%		

Certificate of Analytical Results
629452
Talon/LPE Co., Amarillo, TX
Moore To Jal #1 (MTJ#1)

Sample Id: **MW-39** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-017 Date Collected: 06.27.19 12.15 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094290 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681168

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 16:41	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 16:41	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 16:41	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 16:41	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 16:41	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 16:41	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 16:41	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	88	66 - 120	%		
4-Bromofluorobenzene	91	67 - 120	%		

Sample Id: **MW-34** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-018 Date Collected: 06.27.19 13.30 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094290 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681168

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 17:08	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 17:08	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 17:08	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 17:08	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 17:08	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 17:08	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 17:08	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	89	66 - 120	%		
4-Bromofluorobenzene	88	67 - 120	%		

Certificate of Analytical Results
629452
Talon/LPE Co., Amarillo, TX
Moore To Jal #1 (MTJ#1)

Sample Id: **MW-35** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-019 Date Collected: 06.27.19 14.20 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094290 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681168

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 17:35	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 17:35	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 17:35	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 17:35	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 17:35	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 17:35	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 17:35	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	89	66 - 120	%		
4-Bromofluorobenzene	85	67 - 120	%		

Sample Id: **MW-36** Matrix: Ground Water Sample Depth:

Lab Sample Id: 629452-020 Date Collected: 06.27.19 15.00 Date Received: 06.28.19 11.35

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094290 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681168

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 19:23	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 19:23	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 19:23	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 19:23	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 19:23	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 19:23	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 19:23	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	86	66 - 120	%		
4-Bromofluorobenzene	85	67 - 120	%		

Certificate of Analytical Results
629452

Talon/LPE Co., Amarillo, TX

Moore To Jal #1 (MTJ#1)

Sample Id:	**MW-41**	Matrix:	Ground Water	Sample Depth:	
Lab Sample Id:	629452-021	Date Collected:	06.27.19 15.20	Date Received:	06.28.19 11.35
Analytical Method:	BTEX by EPA 8021			Prep Method:	5030B
Analyst:	MIT	% Moist:		Tech:	MIT
Seq Number:	3094290	Date Prep:	07.01.19 16.00		
Subcontractor:	SUB: T104704219-19-21	Prep seq:	7681168		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 19:50	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 19:50	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 19:50	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 19:50	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 19:50	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 19:50	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 19:50	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	88	66 - 120	%		
4-Bromofluorobenzene	90	67 - 120	%		

Certificate of Analytical Results
629452
Talon/LPE Co., Amarillo, TX
Moore To Jal #1 (MTJ#1)

Sample Id: **7681167-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: 7681167-1-BLK Date Collected: Date Received:

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094147 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681167

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.01.19 20:28	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.01.19 20:28	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.01.19 20:28	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.01.19 20:28	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.01.19 20:28	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.01.19 20:28	U	
Total BTEX		<0.000270		0.000270	mg/L	07.01.19 20:28	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	93	66 - 120	%		
4-Bromofluorobenzene	92	67 - 120	%		

Sample Id: **7681168-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: 7681168-1-BLK Date Collected: Date Received:

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3094290 Date Prep: 07.01.19 16.00

Subcontractor: SUB: T104704219-19-21 Prep seq: 7681168

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.02.19 11:41	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.02.19 11:41	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.02.19 11:41	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.02.19 11:41	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.02.19 11:41	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.02.19 11:41	U	
Total BTEX		<0.000270		0.000270	mg/L	07.02.19 11:41	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	90	66 - 120	%		
4-Bromofluorobenzene	86	67 - 120	%		

Certificate of Analytical Results
629452

Talon/LPE Co., Amarillo, TX

Moore To Jal #1 (MTJ#1)

Sample Id:	**7681485-1-BLK**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	7681485-1-BLK	Date Collected:		Date Received:	
Analytical Method:	BTEX by EPA 8021			Prep Method:	5030B
Analyst:	MIT	% Moist:		Tech:	MIT
Seq Number:	3094584	Date Prep:	07.02.19 12.17		
Subcontractor:	SUB: T104704219-19-21	Prep seq:	7681485		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	07.03.19 03:27	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	07.03.19 03:27	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	07.03.19 03:27	U	1
m_p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	07.03.19 03:27	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	07.03.19 03:27	U	1
Xylenes, Total	1330-20-7	<0.000270		0.000270	mg/L	07.03.19 03:27	U	
Total BTEX		<0.000270		0.000270	mg/L	07.03.19 03:27	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	87	66 - 120	%		
4-Bromofluorobenzene	85	67 - 120	%		

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: Moore To Jal #1 (MTJ#1)

Work Orders : 629452,

Project ID: 700376.044.04

Lab Batch #: 3094147 **Sample:** 7681167-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/19 18:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0843	0.100	84	66-120	
4-Bromofluorobenzene	0.0892	0.100	89	67-120	

Lab Batch #: 3094147 **Sample:** 7681167-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/19 19:06

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0847	0.100	85	66-120	
4-Bromofluorobenzene	0.0844	0.100	84	67-120	

Lab Batch #: 3094147 **Sample:** 7681167-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/19 20:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0933	0.100	93	66-120	
4-Bromofluorobenzene	0.0924	0.100	92	67-120	

Lab Batch #: 3094147 **Sample:** 629450-007 S / MS **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 07/01/19 22:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0827	0.100	83	66-120	
4-Bromofluorobenzene	0.0885	0.100	89	67-120	

Lab Batch #: 3094147 **Sample:** 629450-007 SD / MSD **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 07/01/19 23:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0814	0.100	81	66-120	
4-Bromofluorobenzene	0.0911	0.100	91	67-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Moore To Jal #1 (MTJ#1)

Work Orders : 629452,

Project ID: 700376.044.04

Lab Batch #: 3094290 **Sample:** 7681168-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/02/19 09:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0839	0.100	84	66-120	
4-Bromofluorobenzene	0.0912	0.100	91	67-120	

Lab Batch #: 3094290 **Sample:** 7681168-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/02/19 10:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0839	0.100	84	66-120	
4-Bromofluorobenzene	0.0855	0.100	86	67-120	

Lab Batch #: 3094290 **Sample:** 7681168-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/02/19 11:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0899	0.100	90	66-120	
4-Bromofluorobenzene	0.0864	0.100	86	67-120	

Lab Batch #: 3094290 **Sample:** 629452-010 S / MS **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 07/02/19 12:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0820	0.100	82	66-120	
4-Bromofluorobenzene	0.0828	0.100	83	67-120	

Lab Batch #: 3094290 **Sample:** 629452-010 SD / MSD **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 07/02/19 13:06

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0813	0.100	81	66-120	
4-Bromofluorobenzene	0.0835	0.100	84	67-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Moore To Jal #1 (MTJ#1)

Work Orders : 629452,

Project ID: 700376.044.04

Lab Batch #: 3094584 **Sample:** 7681485-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/19 01:41

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0805	0.100	81	66-120	
4-Bromofluorobenzene	0.0845	0.100	85	67-120	

Lab Batch #: 3094584 **Sample:** 7681485-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/19 02:07

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0796	0.100	80	66-120	
4-Bromofluorobenzene	0.0872	0.100	87	67-120	

Lab Batch #: 3094584 **Sample:** 7681485-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/19 03:27

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0866	0.100	87	66-120	
4-Bromofluorobenzene	0.0853	0.100	85	67-120	

Lab Batch #: 3094584 **Sample:** 629300-002 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/19 04:21

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0800	0.100	80	66-120	
4-Bromofluorobenzene	0.0884	0.100	88	67-120	

Lab Batch #: 3094584 **Sample:** 629300-002 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/19 04:47

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0797	0.100	80	66-120	
4-Bromofluorobenzene	0.0876	0.100	88	67-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

BS / BSD Recoveries

Project Name: Moore To Jal #1 (MTJ#1)

Work Order #: 629452 **Project ID:** 700376.044.04

Analyst: MIT **Date Prepared:** 07/01/2019 **Date Analyzed:** 07/01/2019

Lab Batch ID: 3094147 **Sample:** 7681167-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000480	0.100	0.0909	91	0.100	0.0918	92	1	74-120	20	
Toluene	<0.000512	0.100	0.0866	87	0.100	0.0873	87	1	74-120	20	
Ethylbenzene	<0.000616	0.100	0.0869	87	0.100	0.0883	88	2	74-120	20	
m_p-Xylenes	<0.000454	0.200	0.174	87	0.200	0.176	88	1	73-120	25	
o-Xylene	<0.000270	0.100	0.0861	86	0.100	0.0881	88	2	73-120	25	

Analyst: MIT **Date Prepared:** 07/01/2019 **Date Analyzed:** 07/02/2019

Lab Batch ID: 3094290 **Sample:** 7681168-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000480	0.100	0.0977	98	0.100	0.0927	93	5	74-120	20	
Toluene	<0.000512	0.100	0.0934	93	0.100	0.0894	89	4	74-120	20	
Ethylbenzene	<0.000616	0.100	0.0941	94	0.100	0.0906	91	4	74-120	20	
m_p-Xylenes	<0.000454	0.200	0.188	94	0.200	0.180	90	4	73-120	25	
o-Xylene	<0.000270	0.100	0.0944	94	0.100	0.0898	90	5	73-120	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

BS / BSD Recoveries

Project Name: Moore To Jal #1 (MTJ#1)

Work Order #: 629452 **Project ID:** 700376.044.04

Analyst: MIT **Date Prepared:** 07/02/2019 **Date Analyzed:** 07/03/2019

Lab Batch ID: 3094584 **Sample:** 7681485-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000480	0.100	0.0954	95	0.100	0.0985	99	3	74-120	20	
Toluene	<0.000512	0.100	0.0880	88	0.100	0.0946	95	7	74-120	20	
Ethylbenzene	<0.000616	0.100	0.0898	90	0.100	0.0953	95	6	74-120	20	
m_p-Xylenes	<0.000454	0.200	0.180	90	0.200	0.191	96	6	73-120	25	
o-Xylene	<0.000270	0.100	0.0894	89	0.100	0.0956	96	7	73-120	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

Form 3 - MS / MSD Recoveries

Project Name: Moore To Jal #1 (MTJ#1)

Work Order # : 629452 **Project ID:** 700376.044.04

Lab Batch ID: 3094147 **QC- Sample ID:** 629450-007 S **Batch #:** 1 **Matrix:** Ground Water

Date Analyzed: 07/01/2019 **Date Prepared:** 07/01/2019 **Analyst:** MIT

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000480	0.100	0.0338	34	0.100	0.0312	31	8	15-147	25	
Toluene	<0.000512	0.100	0.0234	23	0.100	0.0202	20	15	11-147	25	
Ethylbenzene	<0.000616	0.100	0.0238	24	0.100	0.0210	21	13	10-149	25	
m_p-Xylenes	<0.000454	0.200	0.0443	22	0.200	0.0389	19	13	62-124	25	X
o-Xylene	<0.000270	0.100	0.0220	22	0.100	0.0190	19	15	62-124	25	X

Lab Batch ID: 3094290 **QC- Sample ID:** 629452-010 S **Batch #:** 1 **Matrix:** Ground Water

Date Analyzed: 07/02/2019 **Date Prepared:** 07/01/2019 **Analyst:** MIT

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000480	0.100	0.0751	75	0.100	0.0970	97	25	15-147	25	
Toluene	<0.000512	0.100	0.0679	68	0.100	0.0899	90	28	11-147	25	F
Ethylbenzene	<0.000616	0.100	0.0681	68	0.100	0.0910	91	29	10-149	25	F
m_p-Xylenes	<0.000454	0.200	0.134	67	0.200	0.182	91	30	62-124	25	F
o-Xylene	<0.000270	0.100	0.0658	66	0.100	0.0910	91	32	62-124	25	F

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: Moore To Jal #1 (MTJ#1)

Work Order # : 629452 **Project ID:** 700376.044.04

Lab Batch ID: 3094584 **QC- Sample ID:** 629300-002 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/03/2019 **Date Prepared:** 07/02/2019 **Analyst:** MIT

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000480	0.100	0.0963	96	0.100	0.101	101	5	15-147	25	
Toluene	<0.000512	0.100	0.0911	91	0.100	0.0966	97	6	11-147	25	
Ethylbenzene	<0.000616	0.100	0.0915	92	0.100	0.0967	97	6	10-149	25	
m_p-Xylenes	<0.000454	0.200	0.183	92	0.200	0.194	97	6	62-124	25	
o-Xylene	<0.000270	0.100	0.0927	93	0.100	0.0976	98	5	62-124	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Chain of Custody

Work Order No: 629452

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

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Project Manager:	David Adkins	Bill to: (if different)	PLAINS ALLAMERICAN
Company Name:	Talon	Company Name:	PIPELINE
Address:	408 W. Texas Ave.	Address:	ATTN: CAMILLE BRYANT
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575-616-4022 or 575-746-8905	Email:	dadkins@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	MOORE TO JAL #1 (MTJ#1)	Turn Around	
Project Number:	700376.044.04	Routine	☒
P.O. Number:	SRS # 2002-10270	Rush:	
Sampler's Name:	MICHAEL COLLIER	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	.9	Thermometer ID	
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX
MW-17	GW	6-24-19	1:40pm	N/A	3	X
MW-40		6-25-19	11:10am			
MW-38			12:07pm			
MW-37			12:35pm			
MW-20			2:15pm			
MW-19		6-25-19	3:00pm			
MW-29		6-26-19	11:00am			
MW-28			12:30pm			
MW-14			1:20pm			
MW-27	GW	6-26-19	2:05pm	N/A		

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

EMAIL ANALYTICALS TO CAMILLE BRYANT

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			4		
3			6		
5					

Revised Date 051418 Rev. 2018.1

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: 629452

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Project Manager:	David Adkins	Bill to: (if different)	PLAINS ALL AMERICAN
Company Name:	Talon	Company Name:	PIPELINE
Address:	408 W. Texas Ave.	Address:	ATTN: CAMILLE BRYANT
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575-616-4022 or 575-746-8905	Email:	dadkins@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	MOORE TO JAL #1 (MTJ #1)	Turn Around	
Project Number:	700376.044.04	Routine	☒
P.O. Number:	SRS # 2002-10270	Rush:	
Sampler's Name:	MICHAEL COLLIER	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	9	Thermometer ID	128	
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX
MW-26	GW	6-26-19	2:50pm	N/A	3	X
MW-23		6-26-19	3:40pm			
MW-22		6-27-19	9:45am			
MW-21			10:30am			
MW-13			11:15am			
MW-16			12:00pm			
MW-39			12:15pm			
MW-34			1:30pm			
MW-35			2:20pm			
MW-36	GW	6-27-19	3:00pm	N/A		

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

EMAIL ANALYTICALS TO CAMILLE BRYANT

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Final 1.000

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XENCO LABORATORIES

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: 629452

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Project Manager:	David Adkins	Bill to: (if different)	PLAINS ALL AMERICAN
Company Name:	Talon	Company Name:	PIPELINE
Address:	408 W. Texas Ave.	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575-616-4022 or 575-746-8905	Email:	dadkins@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

		Turn Around	
Project Name:	MOORE TO JAL #1 (MTJ#1)	Routine	☒
Project Number:	700376.044.04	Rush:	
P.O. Number:	SRS # 2002-10270		
Sampler's Name:	MICHAEL COLLIER	Due Date:	

SAMPLE RECEIPT

Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	9	Thermometer ID	DE
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX	Sample Comments
MW-41	GW	6-27-19	3:20pm	N/A	3	X	EMAIL ANALYTICALS TO CAMILLE BRYANT

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 [signature]	[signature]	6/27/19 3:50	2 [signature]	[signature]	6/28/19 1:55
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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MIDLAND TX 79711
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PO:
REF:
DEPT:
SHIP DATE: 27JUN19
ACTWGT: 35.00 LB MAN
CAD: 09093928/CAFE3241
DIMS: 25x15x15 IN
BILL RECIPIENT
551C1/0210/104C

Inter-Office Shipment

IOS Number **42563**

Date/Time: 06/28/19 15:24
Created by: Jessica Kramer
Please send report to: Jessica Kramer

Lab# From: **Midland**
Delivery Priority:
Address: 1211 W. Florida Ave

Lab# To: **Lubbock**
Air Bill No.: 7756 0053 3422
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
629452-001	W	MW-17	06/24/19 13:40	SW8021B	BTEX by EPA 8021	07/05/19	07/08/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-002	W	MW-40	06/25/19 11:10	SW8021B	BTEX by EPA 8021	07/05/19	07/09/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-003	W	MW-38	06/25/19 12:07	SW8021B	BTEX by EPA 8021	07/05/19	07/09/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-004	W	MW-37	06/25/19 12:55	SW8021B	BTEX by EPA 8021	07/05/19	07/09/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-005	W	MW-20	06/25/19 14:15	SW8021B	BTEX by EPA 8021	07/05/19	07/09/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-006	W	MW-19	06/25/19 15:00	SW8021B	BTEX by EPA 8021	07/05/19	07/09/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-007	W	MW-29	06/26/19 11:00	SW8021B	BTEX by EPA 8021	07/05/19	07/10/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-008	W	MW-28	06/26/19 12:30	SW8021B	BTEX by EPA 8021	07/05/19	07/10/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-009	W	MW-14	06/26/19 13:20	SW8021B	BTEX by EPA 8021	07/05/19	07/10/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-010	W	MW-27	06/26/19 14:05	SW8021B	BTEX by EPA 8021	07/05/19	07/10/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-011	W	MW-26	06/26/19 14:50	SW8021B	BTEX by EPA 8021	07/05/19	07/10/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-012	W	MW-23	06/26/19 15:40	SW8021B	BTEX by EPA 8021	07/05/19	07/10/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-013	W	MW-22	06/27/19 09:45	SW8021B	BTEX by EPA 8021	07/05/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-014	W	MW-21	06/27/19 10:30	SW8021B	BTEX by EPA 8021	07/05/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-015	W	MW-13	06/27/19 11:15	SW8021B	BTEX by EPA 8021	07/05/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-016	W	MW-16	06/27/19 12:00	SW8021B	BTEX by EPA 8021	07/05/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-017	W	MW-39	06/27/19 12:15	SW8021B	BTEX by EPA 8021	07/05/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-018	W	MW-34	06/27/19 13:30	SW8021B	BTEX by EPA 8021	07/05/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-019	W	MW-35	06/27/19 14:20	SW8021B	BTEX by EPA 8021	07/05/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-020	W	MW-36	06/27/19 15:00	SW8021B	BTEX by EPA 8021	07/05/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629452-021	W	MW-41	06/27/19 15:20	SW8021B	BTEX by EPA 8021	07/05/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	

Inter-Office Shipment

IOS Number **42563**

Date/Time: 06/28/19 15:24
Lab# From: **Midland**
Lab# To: **Lubbock**

Created by: Jessica Kramer
Delivery Priority:
Air Bill No.: 7756 0053 3422

Please send report to: Jessica Kramer
Address: 1211 W. Florida Ave
E-Mail: jessica.kramer@xenco.com

Inter Office Shipment or Sample Comments:

Relinquished By: Jessica Kramer
Jessica Kramer

Date Relinquished: 06/28/2019

Received By:
Ashley Derstine

Date Received: 06/29/2019 08:35

Cooler Temperature: 5.5

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Lubbock

IOS #: 42563

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used :

Sent By: Jessica Kramer **Date Sent:** 06/28/2019 03:24 PM

Received By: Holly Taylor **Date Received:** 06/29/2019 08:35 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	5.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: _____ Date: 06/29/2019

Ashley Derstine

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Talon/LPE Co.

Date/ Time Received: 06/28/2019 11:35:00 AM

Work Order #: 629452

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.9
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#18 Water VOC samples have zero headspace?	**Yes**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 06/28/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 06/28/2019

Jessica Kramer

Analytical Report 637382

for

Talon LPE-Artesia

Project Manager: David Adkins

MOore to Jal #1 (MTJ#1)

700376.044.04

11-OCT-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

Table of Contents

11-OCT-19

Project Manager: **David Adkins**
Talon LPE-Artesia
408 West Texas St.
Artesia, NM 88210

Reference: XENCO Report No(s): **637382**
MOore to Jal #1 (MTJ#1)
Project Address: Lea County

David Adkins:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 637382. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 637382 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Sample Cross Reference 637382

Talon LPE-Artesia, Artesia, NM

MOore to Jal #1 (MTJ#1)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-40	W	09-16-19 10:45		637382-001
MW-37	W	09-16-19 11:20		637382-002
MW-38	W	09-16-19 12:00		637382-003
MW-29	W	09-16-19 13:15		637382-004
MW-28	W	09-16-19 14:40		637382-005
MW-14	W	09-17-19 10:00		637382-006
MW-27	W	09-17-19 11:20		637382-007
MW-20	W	09-17-19 11:40		637382-008
MW-19	W	09-17-19 11:55		637382-009
MW-26	W	09-17-19 12:55		637382-010
MW-23	W	09-17-19 14:30		637382-011
MW-18	W	09-17-19 13:20		637382-012
MW-21	W	09-17-19 10:50		637382-013
MW-17	W	09-17-19 10:15		637382-014
MW-34	W	09-18-19 11:25		637382-015
MW-35	W	09-18-19 11:57		637382-016
MW-36	W	09-18-19 12:35		637382-017
MW-41	W	09-18-19 13:05		637382-018
MW-22	W	09-17-19 12:00		637382-019
MW-39	W	09-18-19 10:20		637382-020

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

MW-22 (Sample 019) & MW-39 (Sample 020) BTEX ran out of hold due to miscommunication between laboratories.

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3102259 BTEX-MTBE by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.
Samples affected are: 637380-001 S,637380-001 SD,637382-006.

Certificate of Analytical Results
637382

Talon LPE-Artesia, Artesia, NM

MOore to Jal #1 (MTJ#1)

Sample Id: **MW-40** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-001 Date Collected: 09.16.19 10.45 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**1.65**	0.200	0.0408	mg/L	09.24.19 09:44	D	100
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 01:04	U	1
Ethylbenzene	100-41-4	**0.00221**	0.00200	0.000657	mg/L	09.23.19 01:04		1
m,p-Xylenes	179601-23-1	**0.0358**	0.00400	0.000630	mg/L	09.23.19 01:04		1
o-Xylene	95-47-6	**0.00361**	0.00200	0.000642	mg/L	09.23.19 01:04		1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 01:04	U	1
Total Xylenes	1330-20-7	**0.0394**		0.000630	mg/L	09.23.19 01:04		
Total BTEX		**1.69**		0.000367	mg/L	09.24.19 09:44		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	124	70 - 130	%		
4-Bromofluorobenzene	125	70 - 130	%		

Sample Id: **MW-37** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-002 Date Collected: 09.16.19 11.20 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00670**	0.00200	0.000408	mg/L	09.23.19 01:25		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 01:25	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 01:25	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 01:25	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 01:25	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 01:25	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 01:25	U	
Total BTEX		**0.00670**		0.000367	mg/L	09.23.19 01:25		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	126	70 - 130	%		

Certificate of Analytical Results
637382
Talon LPE-Artesia, Artesia, NM
MOore to Jal #1 (MTJ#1)

Sample Id: **MW-38** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-003 Date Collected: 09.16.19 12.00 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**6.19**	0.500	0.102	mg/L	09.24.19 10:24	D	250
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 01:45	U	1
Ethylbenzene	100-41-4	**0.00669**	0.00200	0.000657	mg/L	09.23.19 01:45		1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 01:45	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 01:45	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 01:45	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 01:45	U	
Total BTEX		**6.20**		0.000367	mg/L	09.24.19 10:24		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	189	70 - 130	%		**
4-Bromofluorobenzene	148	70 - 130	%		**

Sample Id: **MW-29** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-004 Date Collected: 09.16.19 13.15 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.24.19 10:44	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.24.19 10:44	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.24.19 10:44	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.24.19 10:44	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.24.19 10:44	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.24.19 10:44	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.24.19 10:44	U	
Total BTEX		<0.000367		0.000367	mg/L	09.24.19 10:44	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	142	70 - 130	%		**

Certificate of Analytical Results
637382
Talon LPE-Artesia, Artesia, NM
MOore to Jal #1 (MTJ#1)

Sample Id: **MW-28** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-005 Date Collected: 09.16.19 14.40 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.24.19 11:04	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.24.19 11:04	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.24.19 11:04	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.24.19 11:04	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.24.19 11:04	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.24.19 11:04	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.24.19 11:04	U	
Total BTEX		<0.000367		0.000367	mg/L	09.24.19 11:04	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	89	70 - 130	%		
4-Bromofluorobenzene	135	70 - 130	%		**

Sample Id: **MW-14** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-006 Date Collected: 09.17.19 10.00 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 03:22	U	1
Toluene	108-88-3	**0.00771**	0.00200	0.000367	mg/L	09.23.19 03:22		1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 03:22	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 03:22	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 03:22	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 03:22	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 03:22	U	
Total BTEX		**0.00771**		0.000367	mg/L	09.23.19 03:22		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	70 - 130	%		
4-Bromofluorobenzene	137	70 - 130	%		**

Certificate of Analytical Results
637382

Talon LPE-Artesia, Artesia, NM

MOore to Jal #1 (MTJ#1)

Sample Id: **MW-27** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-007 Date Collected: 09.17.19 11.20 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 03:42	U	1
Toluene	108-88-3	**0.00713**	0.00200	0.000367	mg/L	09.23.19 03:42		1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 03:42	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 03:42	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 03:42	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 03:42	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 03:42	U	
Total BTEX		**0.00713**		0.000367	mg/L	09.23.19 03:42		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	129	70 - 130	%		

Sample Id: **MW-20** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-008 Date Collected: 09.17.19 11.40 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 04:02	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 04:02	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 04:02	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 04:02	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 04:02	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 04:02	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 04:02	U	
Total BTEX		<0.000367		0.000367	mg/L	09.23.19 04:02	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	127	70 - 130	%		

Certificate of Analytical Results
637382
Talon LPE-Artesia, Artesia, NM
MOore to Jal #1 (MTJ#1)

Sample Id: **MW-19** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-009 Date Collected: 09.17.19 11.55 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 04:22	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 04:22	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 04:22	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 04:22	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 04:22	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 04:22	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 04:22	U	
Total BTEX		<0.000367		0.000367	mg/L	09.23.19 04:22	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	103	70 - 130	%		
4-Bromofluorobenzene	125	70 - 130	%		

Sample Id: **MW-26** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-010 Date Collected: 09.17.19 12.55 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 05:44	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 05:44	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 05:44	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 05:44	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 05:44	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 05:44	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 05:44	U	
Total BTEX		<0.000367		0.000367	mg/L	09.23.19 05:44	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	89	70 - 130	%		
4-Bromofluorobenzene	119	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
MOore to Jal #1 (MTJ#1)

Sample Id: **MW-23** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-011 Date Collected: 09.17.19 14.30 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 06:04	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 06:04	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 06:04	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 06:04	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 06:04	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 06:04	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 06:04	U	
Total BTEX		<0.000367		0.000367	mg/L	09.23.19 06:04	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	100	70 - 130	%		
4-Bromofluorobenzene	130	70 - 130	%		

Sample Id: **MW-18** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-012 Date Collected: 09.17.19 13.20 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 06:24	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 06:24	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 06:24	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 06:24	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 06:24	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 06:24	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 06:24	U	
Total BTEX		<0.000367		0.000367	mg/L	09.23.19 06:24	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	70 - 130	%		
4-Bromofluorobenzene	125	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
MOore to Jal #1 (MTJ#1)

Sample Id: **MW-21** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-013 Date Collected: 09.17.19 10.50 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 06:44	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 06:44	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 06:44	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 06:44	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 06:44	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 06:44	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 06:44	U	
Total BTEX		<0.000367		0.000367	mg/L	09.23.19 06:44	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	121	70 - 130	%		

Sample Id: **MW-17** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-014 Date Collected: 09.17.19 10.15 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 07:05	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 07:05	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 07:05	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 07:05	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 07:05	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 07:05	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 07:05	U	
Total BTEX		<0.000367		0.000367	mg/L	09.23.19 07:05	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	101	70 - 130	%		
4-Bromofluorobenzene	124	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
MOore to Jal #1 (MTJ#1)

Sample Id: **MW-34** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-015 Date Collected: 09.18.19 11.25 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 07:25	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 07:25	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 07:25	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 07:25	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 07:25	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 07:25	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 07:25	U	
Total BTEX		<0.000367		0.000367	mg/L	09.23.19 07:25	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	118	70 - 130	%		

Sample Id: **MW-35** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-016 Date Collected: 09.18.19 11.57 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 07:45	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 07:45	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 07:45	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 07:45	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 07:45	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 07:45	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 07:45	U	
Total BTEX		<0.000367		0.000367	mg/L	09.23.19 07:45	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	96	70 - 130	%		
4-Bromofluorobenzene	122	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
MOore to Jal #1 (MTJ#1)

Sample Id: **MW-36** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-017 Date Collected: 09.18.19 12.35 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 08:05	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 08:05	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 08:05	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 08:05	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 08:05	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 08:05	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 08:05	U	
Total BTEX		<0.000367		0.000367	mg/L	09.23.19 08:05	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	70 - 130	%		
4-Bromofluorobenzene	120	70 - 130	%		

Sample Id: **MW-41** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-018 Date Collected: 09.18.19 13.05 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 08:25	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 08:25	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 08:25	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 08:25	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 08:25	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 08:25	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 08:25	U	
Total BTEX		<0.000367		0.000367	mg/L	09.23.19 08:25	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	116	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM

MOore to Jal #1 (MTJ#1)

Sample Id: **MW-22** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-019 Date Collected: 09.17.19 12.00 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3103965 Date Prep: 10.10.19 12.45

Subcontractor: SUB: T104704219-19-21 Prep seq: 7687849

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	10.10.19 18:04	UK	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	10.10.19 18:04	UK	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	10.10.19 18:04	UK	1
m,p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	10.10.19 18:04	UK	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	10.10.19 18:04	UK	1
MTBE	1634-04-4	<0.000843	0.00100	0.000843	mg/L	10.10.19 18:04	UK	1
Total Xylenes	1330-20-7	<0.000270		0.000270	mg/L	10.10.19 18:04	UK	
Total BTEX		<0.000270		0.000270	mg/L	10.10.19 18:04	UK	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	84	66 - 120	%		
4-Bromofluorobenzene	81	67 - 120	%		

Sample Id: **MW-39** Matrix: Ground Water Sample Depth:

Lab Sample Id: 637382-020 Date Collected: 09.18.19 10.20 Date Received: 09.19.19 08.51

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3103965 Date Prep: 10.10.19 12.45

Subcontractor: SUB: T104704219-19-21 Prep seq: 7687849

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	10.10.19 18:28	UK	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	10.10.19 18:28	UK	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	10.10.19 18:28	UK	1
m,p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	10.10.19 18:28	UK	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	10.10.19 18:28	UK	1
MTBE	1634-04-4	<0.000843	0.00100	0.000843	mg/L	10.10.19 18:28	UK	1
Total Xylenes	1330-20-7	<0.000270		0.000270	mg/L	10.10.19 18:28	UK	
Total BTEX		<0.000270		0.000270	mg/L	10.10.19 18:28	UK	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	83	66 - 120	%		
4-Bromofluorobenzene	81	67 - 120	%		

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Talon LPE-Artesia, Artesia, NM
MOore to Jal #1 (MTJ#1)

Sample Id: **7686704-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: 7686704-1-BLK Date Collected: Date Received:

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3102259 Date Prep: 09.23.19 15.34

Subcontractor: SUB: T104704219-19-21 Prep seq: 7686704

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.23.19 12:24	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.23.19 12:24	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.23.19 12:24	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.23.19 12:24	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.23.19 12:24	U	1
MTBE	1634-04-4	<0.00258	0.0100	0.00258	mg/L	09.23.19 12:24	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	09.23.19 12:24	U	
Total BTEX		<0.000367		0.000367	mg/L	09.23.19 12:24	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	113	70 - 130	%		

Sample Id: **7687849-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: 7687849-1-BLK Date Collected: Date Received:

Analytical Method: BTEX-MTBE by EPA 8021B Prep Method: 5030B

Analyst: MIT % Moist: Tech: MIT

Seq Number: 3103965 Date Prep: 10.10.19 12.45

Subcontractor: SUB: T104704219-19-21 Prep seq: 7687849

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000480	0.00100	0.000480	mg/L	10.10.19 17:40	U	1
Toluene	108-88-3	<0.000512	0.00100	0.000512	mg/L	10.10.19 17:40	U	1
Ethylbenzene	100-41-4	<0.000616	0.00100	0.000616	mg/L	10.10.19 17:40	U	1
m,p-Xylenes	179601-23-1	<0.000454	0.00200	0.000454	mg/L	10.10.19 17:40	U	1
o-Xylene	95-47-6	<0.000270	0.00100	0.000270	mg/L	10.10.19 17:40	U	1
MTBE	1634-04-4	<0.000843	0.00100	0.000843	mg/L	10.10.19 17:40	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
a,a,a-Trifluorotoluene	104	66 - 120	%		
4-Bromofluorobenzene	98	67 - 120	%		

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: MOore to Jal #1 (MTJ#1)

Work Orders : 637382, **Project ID:** 700376.044.04

Lab Batch #: 3102259 **Sample:** 7686704-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/23/19 10:44

BTEX-MTBE by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	70-130	
4-Bromofluorobenzene	0.0370	0.0300	123	70-130	

Lab Batch #: 3102259 **Sample:** 7686704-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/23/19 11:05

BTEX-MTBE by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	70-130	
4-Bromofluorobenzene	0.0386	0.0300	129	70-130	

Lab Batch #: 3102259 **Sample:** 637380-001 S / MS **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 09/23/19 11:25

BTEX-MTBE by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	70-130	
4-Bromofluorobenzene	0.0397	0.0300	132	70-130	**

Lab Batch #: 3102259 **Sample:** 637380-001 SD / MSD **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 09/23/19 11:45

BTEX-MTBE by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	70-130	
4-Bromofluorobenzene	0.0412	0.0300	137	70-130	**

Lab Batch #: 3102259 **Sample:** 7686704-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/23/19 12:24

BTEX-MTBE by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	70-130	
4-Bromofluorobenzene	0.0339	0.0300	113	70-130	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: MOore to Jal #1 (MTJ#1)

Work Orders : 637382, **Project ID:** 700376.044.04

Lab Batch #: 3103965 **Sample:** 7687849-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/10/19 16:04

BTEX-MTBE by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0852	0.100	85	66-120	
4-Bromofluorobenzene	0.0767	0.100	77	67-120	

Lab Batch #: 3103965 **Sample:** 7687849-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/10/19 16:28

BTEX-MTBE by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0873	0.100	87	66-120	
4-Bromofluorobenzene	0.0825	0.100	83	67-120	

Lab Batch #: 3103965 **Sample:** 7687849-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/10/19 17:40

BTEX-MTBE by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.104	0.100	104	66-120	
4-Bromofluorobenzene	0.0983	0.100	98	67-120	

Lab Batch #: 3103965 **Sample:** 639374-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/10/19 19:41

BTEX-MTBE by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0810	0.100	81	66-120	
4-Bromofluorobenzene	0.0771	0.100	77	67-120	

Lab Batch #: 3103965 **Sample:** 639374-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/10/19 20:05

BTEX-MTBE by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	0.0918	0.100	92	66-120	
4-Bromofluorobenzene	0.0826	0.100	83	67-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

BS / BSD Recoveries

Project Name: MOore to Jal #1 (MTJ#1)

Work Order #: 637382 **Project ID:** 700376.044.04

Analyst: KTL **Date Prepared:** 09/23/2019 **Date Analyzed:** 09/23/2019

Lab Batch ID: 3102259 **Sample:** 7686704-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX-MTBE by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.104	104	0.100	0.105	105	1	70-130	25	
Toluene	<0.000367	0.100	0.103	103	0.100	0.105	105	2	70-130	25	
Ethylbenzene	<0.000657	0.100	0.122	122	0.100	0.122	122	0	70-130	25	
m,p-Xylenes	<0.000630	0.200	0.255	128	0.200	0.256	128	0	70-130	25	
o-Xylene	<0.000642	0.100	0.121	121	0.100	0.125	125	3	70-130	25	
MTBE	<0.00258	0.500	0.467	93	0.500	0.524	105	12	70-130	25	

Analyst: MIT **Date Prepared:** 10/10/2019 **Date Analyzed:** 10/10/2019

Lab Batch ID: 3103965 **Sample:** 7687849-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX-MTBE by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000480	0.100	0.0966	97	0.100	0.0940	94	3	74-120	20	
Toluene	<0.000512	0.100	0.0967	97	0.100	0.0931	93	4	74-120	20	
Ethylbenzene	<0.000616	0.100	0.101	101	0.100	0.0994	99	2	74-120	20	
m,p-Xylenes	<0.000454	0.200	0.198	99	0.200	0.195	98	2	73-120	25	
o-Xylene	<0.000270	0.100	0.0985	99	0.100	0.0971	97	1	73-120	25	
MTBE	<0.000843	0.100	0.0945	95	0.100	0.0943	94	0	72-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

Form 3 - MS / MSD Recoveries

Project Name: MOore to Jal #1 (MTJ#1)

Work Order # : 637382 **Project ID:** 700376.044.04

Lab Batch ID: 3102259 **QC- Sample ID:** 637380-001 S **Batch #:** 1 **Matrix:** Ground Water

Date Analyzed: 09/23/2019 **Date Prepared:** 09/23/2019 **Analyst:** KTL

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX-MTBE by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.108	108	0.100	0.116	116	7	70-130	25	
Toluene	<0.000367	0.100	0.107	107	0.100	0.115	115	7	70-130	25	
Ethylbenzene	<0.000657	0.100	0.130	130	0.100	0.135	135	4	70-130	25	X
m,p-Xylenes	<0.000630	0.200	0.271	136	0.200	0.284	142	5	70-130	25	X
o-Xylene	<0.000642	0.100	0.131	131	0.100	0.139	139	6	70-130	25	X
MTBE	<0.00258	0.500	0.539	108	0.500	0.562	112	4	70-130	25	

Lab Batch ID: 3103965 **QC- Sample ID:** 639374-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/10/2019 **Date Prepared:** 10/10/2019 **Analyst:** MIT

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX-MTBE by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000480	0.100	0.101	101	0.100	0.103	103	2	15-147	25	
Toluene	<0.000512	0.100	0.100	100	0.100	0.102	102	2	11-147	25	
Ethylbenzene	<0.000616	0.100	0.104	104	0.100	0.106	106	2	10-149	25	
m,p-Xylenes	<0.000454	0.200	0.203	102	0.200	0.208	104	2	62-124	25	
o-Xylene	<0.000270	0.100	0.102	102	0.100	0.104	104	2	62-124	25	
MTBE	<0.000843	0.100	0.105	105	0.100	0.104	104	1	13-150	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701 www.xenco.com

Work Order No: 637382

Page 1 of 2

Project Manager:	DAVID ADKINS	Bill to: (if different)	PLAINS ALL AMERICAN
Company Name:	TALON	Company Name:	PIPELINE
Address:	408 W. TEXAS AVE	Address:	ATTN: CAMILLE BRYANT
City, State ZIP:	ARTESIA NM 88210	City, State ZIP:	
Phone:	575-441-4835	Email:	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	MOORE TO JAL #1 (MTJ #1)	Turn Around	
Project Number:	700376.044.04	Routine	☒
Project Location	LEA COUNTY	Rush:	
Sampler's Name:	MICHAEL COLLIER	Due Date:	
PO #:	2002-10270	Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	2.8	Thermometer ID	T-NM-001
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	18

ANALYSIS REQUEST

Preservative Codes: MeOH: Me; None: NO; HNO3: HN; H2S04: H2; HCL: HL; NaOH: Na; Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX	Sample Comments
	MW-40	GW	9/16/19	10:45am	N/A	3	✓	EMAIL ANALYTICALS
	MW-37			11:20am				TO
	MW-38			12:00pm				CAMILLE BRYANT
	MW-29			1:15pm				
	MW-28		9/16/19	2:40pm				
	MW-14		9/17/19	10:00am				
	MW-27			11:20am				
	MW-20			11:40am				
	MW-19			11:55am				
	MW-26		9/17/19	12:55am	N/A	3	✓	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			9/19/19 0851	2		
3				4		
5				6		

Revised Date 022619 Rev. 2019.1

Final 1.001

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Chain of Custody

Work Order No: 637382

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701 www.xenco.com

Project Manager:	DAVID ADKINS	Bill to: (if different)	PLAINS ALL AMERICAN
Company Name:	TALON	Company Name:	PIPELINE
Address:	408 W. TEXAS AVE	Address:	ATTN: CAMILLE BRYANT
City, State ZIP:	ARTESIA NM 88210	City, State ZIP:	
Phone:	575-441-4835	Email:	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	MOORE TO JAL #1 (MTJ#1)	Turn Around	
Project Number:	700376.044.04	Routine	☒
Project Location	LEA COUNTY	Rush:	
Sampler's Name:	MICHAEL COLLIER	Due Date:	
PO #:	2002-10270	Quote #:	

SAMPLE RECEIPT			
Temperature (°C):		Temp Blank: Yes No	Wet Ice: Yes No
Received Intact:	Yes No	Thermometer ID	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	BTEX
	MW-23	GW	9/17/19	2:30pm	N/A	3		✓
	MW-18			1:20 pm				
	MW-21			10:50 pm				
	MW-17		9/17/19	10:15pm				
	MW-34		9/18/19	11:25am				
	MW-35			11:57am				
	MW-36			12:35				
	MW-41	GW	9/18/19	1:05	N/A			✓

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			9/19/19 0891	2			
3				4			
5				6			

Revised Date 022619 Rev. 2019.1

Inter-Office Shipment

IOS Number **48389**

Date/Time: 09/19/19 11:01
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Elizabeth Mcclellan
Delivery Priority:
Air Bill No.: 776288782636

Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
637382-001	W	MW-40	09/16/19 10:45	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	09/30/19	JKR	BZ BZME EBZ TBUTMEE	
637382-002	W	MW-37	09/16/19 11:20	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	09/30/19	JKR	BZ BZME EBZ TBUTMEE	
637382-003	W	MW-38	09/16/19 12:00	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	09/30/19	JKR	BZ BZME EBZ TBUTMEE	
637382-004	W	MW-29	09/16/19 13:15	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	09/30/19	JKR	BZ BZME EBZ TBUTMEE	
637382-005	W	MW-28	09/16/19 14:40	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	09/30/19	JKR	BZ BZME EBZ TBUTMEE	
637382-006	W	MW-14	09/17/19 10:00	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/01/19	JKR	BZ BZME EBZ TBUTMEE	
637382-007	W	MW-27	09/17/19 11:20	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/01/19	JKR	BZ BZME EBZ TBUTMEE	
637382-008	W	MW-20	09/17/19 11:40	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/01/19	JKR	BZ BZME EBZ TBUTMEE	
637382-009	W	MW-19	09/17/19 11:55	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/01/19	JKR	BZ BZME EBZ TBUTMEE	
637382-010	W	MW-26	09/17/19 12:55	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/01/19	JKR	BZ BZME EBZ TBUTMEE	
637382-011	W	MW-23	09/17/19 14:30	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/01/19	JKR	BZ BZME EBZ TBUTMEE	
637382-012	W	MW-18	09/17/19 13:20	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/01/19	JKR	BZ BZME EBZ TBUTMEE	
637382-013	W	MW-21	09/17/19 10:50	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/01/19	JKR	BZ BZME EBZ TBUTMEE	
637382-014	W	MW-17	09/17/19 10:15	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/01/19	JKR	BZ BZME EBZ TBUTMEE	
637382-015	W	MW-34	09/18/19 11:25	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/02/19	JKR	BZ BZME EBZ TBUTMEE	
637382-016	W	MW-35	09/18/19 11:57	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/02/19	JKR	BZ BZME EBZ TBUTMEE	
637382-017	W	MW-36	09/18/19 12:35	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/02/19	JKR	BZ BZME EBZ TBUTMEE	
637382-018	W	MW-41	09/18/19 13:05	SW8021BM	BTEX-MTBE by EPA 8021B	09/25/19	10/02/19	JKR	BZ BZME EBZ TBUTMEE	

Inter Office Shipment or Sample Comments:

Relinquished By: 
Elizabeth McClellan

Date Relinquished: 09/19/2019

Received By: 
Brianna Teel

Date Received: 09/20/2019 11:34

Cooler Temperature: 0.4

Inter-Office Shipment

IOS Number **49774**

Date/Time: 10/09/19 15:21
Lab# From: **Carlsbad**
Lab# To: **Lubbock**

Created by: Jessica Kramer
Delivery Priority:
Air Bill No.: FEDEX

Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
637382-019	W	MW-22	09/17/19 12:00	SW8021BM	BTEX-MTBE by EPA 8021B	**10/10/19**	**10/01/19 12:00**	JKR	BZ BZME EBZ TBUTMEE	
637382-020	W	MW-39	09/18/19 10:20	SW8021BM	BTEX-MTBE by EPA 8021B	**10/10/19**	**10/02/19 10:20**	JKR	BZ BZME EBZ TBUTMEE	

Inter Office Shipment or Sample Comments:

Relinquished By: Jessica Kramer
Jessica Kramer

Date Relinquished: 10/09/2019

Received By:
Ashley Derstine

Date Received: 10/11/2019 09:00

Cooler Temperature: 3.1

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 48389

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : R8

Sent By: Elizabeth McClellan **Date Sent:** 09/19/2019 11:01 AM

Received By: Brianna Teel **Date Received:** 09/20/2019 11:34 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.4	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: Brianna Teel Date: 09/20/2019

Brianna Teel

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Lubbock

IOS #: 49774

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : R4

Sent By: Jessica Kramer **Date Sent:** 10/09/2019 03:21 PM

Received By: Ashley Derstine **Date Received:** 10/11/2019 09:00 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.1	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: _____ Date: 10/11/2019

Ashley Derstine

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE-Artesia

Date/ Time Received: 09/19/2019 08:51:00 AM

Work Order #: 637382

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	2.8	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 Custody Seals intact on sample bottles?	**No**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**Yes**	Two sets of three VOAs are sent in addtion. No record of them on COC and client was contacted without response.
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	Subbed to Midland.
#18 Water VOC samples have zero headspace?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 09/19/2019

Checklist reviewed by: Jessica Kramer Date: 09/23/2019

Jessica Kramer

Analytical Report 646559

for

Talon LPE-Artesia

Project Manager: David Adkins

Moore To Jal #1 (MTJ 1)

700376.044.04

11-FEB-20

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

11-FEB-20

Project Manager: **David Adkins**
Talon LPE-Artesia
408 West Texas St.
Artesia, NM 88210

Reference: XENCO Report No(s): **646559**
Moore To Jal #1 (MTJ 1)
Project Address: Artesia NM

David Adkins:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 646559. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 646559 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Sample Cross Reference 646559

Talon LPE-Artesia, Artesia, NM

Moore To Jal #1 (MTJ 1)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-14	W	12-13-19 09:50		646559-001
MW-17	W	12-13-19 10:00		646559-002
MW-29	W	12-13-19 10:30		646559-003
MW-38	W	12-13-19 11:10		646559-004
MW-22	W	12-13-19 11:40		646559-005
MW-28	W	12-13-19 12:20		646559-006
MW-23	W	12-13-19 13:30		646559-007
MW-37	W	12-13-19 12:50		646559-008
MW-40	W	12-13-19 13:50		646559-009
MW-27	W	12-13-19 14:10		646559-010
MW-20	W	12-13-19 14:25		646559-011
MW-26	W	12-13-19 14:30		646559-012
MW-19	W	12-13-19 15:00		646559-013
MW-21	W	12-13-19 10:50		646559-014
MW-39	W	12-15-19 08:30		646559-015
MW-36	W	12-15-19 10:25		646559-016
MW-41	W	12-15-19 09:40		646559-017
MW-35	W	12-15-19 11:10		646559-018
MW-34	W	12-15-19 11:40		646559-019

CASE NARRATIVE

Client Name: Talon LPE-Artesia

Project Name: Moore To Jal #1 (MTJ 1)

Project ID:	*700376.044.04*	Report Date:	*11-FEB-20*
Work Order Number(s):	*646559*	Date Received:	*12/16/2019*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

V1.001 - Revision Sample 009 dilution error. JK 02/11/20

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3111110 BTEX by EPA 8021B

Surrogate 1,4-Difluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 646559-009.

Certificate of Analytical Results
646559
Talon LPE-Artesia, Artesia, NM
Moore To Jal #1 (MTJ 1)

Sample Id: **MW-14** Matrix: Water Sample Depth:

Lab Sample Id: 646559-001 Date Collected: 12.13.19 09.50 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00392**	0.00200	0.000408	mg/L	12.19.19 06:45		1
Toluene	108-88-3	**0.000520**	0.00200	0.000367	mg/L	12.19.19 06:45	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 06:45	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 06:45	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 06:45	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 06:45	U	
Total BTEX		**0.00444**		0.000367	mg/L	12.19.19 06:45		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	70 - 130	%		
4-Bromofluorobenzene	101	70 - 130	%		

Sample Id: **MW-17** Matrix: Water Sample Depth:

Lab Sample Id: 646559-002 Date Collected: 12.13.19 10.00 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.19.19 07:05	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 07:05	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 07:05	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 07:05	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 07:05	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 07:05	U	
Total BTEX		<0.000367		0.000367	mg/L	12.19.19 07:05	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	92	70 - 130	%		
4-Bromofluorobenzene	101	70 - 130	%		

Certificate of Analytical Results
646559

Talon LPE-Artesia, Artesia, NM
Moore To Jal #1 (MTJ 1)

Sample Id: **MW-29** Matrix: Water Sample Depth:

Lab Sample Id: 646559-003 Date Collected: 12.13.19 10.30 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.19.19 07:25	U	1
Toluene	108-88-3	**0.000400**	0.00200	0.000367	mg/L	12.19.19 07:25	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 07:25	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 07:25	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 07:25	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 07:25	U	
Total BTEX		**0.000400**		0.000367	mg/L	12.19.19 07:25	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	96	70 - 130	%		
4-Bromofluorobenzene	106	70 - 130	%		

Sample Id: **MW-38** Matrix: Water Sample Depth:

Lab Sample Id: 646559-004 Date Collected: 12.13.19 11.10 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.682**	0.0500	0.0102	mg/L	12.19.19 13:49	D	25
Toluene	108-88-3	**0.000530**	0.00200	0.000367	mg/L	12.19.19 07:45	J	1
Ethylbenzene	100-41-4	**0.000970**	0.00200	0.000657	mg/L	12.19.19 07:45	J	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 07:45	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 07:45	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 07:45	U	
Total BTEX		**0.684**		0.000367	mg/L	12.19.19 13:49		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	112	70 - 130	%		
4-Bromofluorobenzene	105	70 - 130	%		

Certificate of Analytical Results
646559
Talon LPE-Artesia, Artesia, NM
Moore To Jal #1 (MTJ 1)

Sample Id: **MW-22** Matrix: Water Sample Depth:

Lab Sample Id: 646559-005 Date Collected: 12.13.19 11.40 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00125**	0.00200	0.000408	mg/L	12.19.19 08:05	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 08:05	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 08:05	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 08:05	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 08:05	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 08:05	U	
Total BTEX		**0.00125**		0.000367	mg/L	12.19.19 08:05	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	70 - 130	%		
4-Bromofluorobenzene	107	70 - 130	%		

Sample Id: **MW-28** Matrix: Water Sample Depth:

Lab Sample Id: 646559-006 Date Collected: 12.13.19 12.20 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.0163**	0.00200	0.000408	mg/L	12.19.19 08:26		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 08:26	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 08:26	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 08:26	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 08:26	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 08:26	U	
Total BTEX		**0.0163**		0.000367	mg/L	12.19.19 08:26		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	103	70 - 130	%		

Certificate of Analytical Results
646559
Talon LPE-Artesia, Artesia, NM
Moore To Jal #1 (MTJ 1)

Sample Id: **MW-23** Matrix: Water Sample Depth:

Lab Sample Id: 646559-007 Date Collected: 12.13.19 13.30 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00170**	0.00200	0.000408	mg/L	12.19.19 08:46	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 08:46	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 08:46	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 08:46	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 08:46	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 08:46	U	
Total BTEX		**0.00170**		0.000367	mg/L	12.19.19 08:46	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	70 - 130	%		
4-Bromofluorobenzene	100	70 - 130	%		

Sample Id: **MW-37** Matrix: Water Sample Depth:

Lab Sample Id: 646559-008 Date Collected: 12.13.19 12.50 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.19.19 09:06	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 09:06	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 09:06	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 09:06	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 09:06	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 09:06	U	
Total BTEX		<0.000367		0.000367	mg/L	12.19.19 09:06	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	97	70 - 130	%		

Certificate of Analytical Results
646559
Talon LPE-Artesia, Artesia, NM
Moore To Jal #1 (MTJ 1)

Sample Id: **MW-40** Matrix: Water Sample Depth:

Lab Sample Id: 646559-009 Date Collected: 12.13.19 13.50 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**5.14**	0.0400	0.00816	mg/L	12.19.19 14:09	D	20
Toluene	108-88-3	**0.00576**	0.00200	0.000367	mg/L	12.19.19 09:26		1
Ethylbenzene	100-41-4	**0.0156**	0.00200	0.000657	mg/L	12.19.19 09:26		1
m_p-Xylenes	179601-23-1	**0.0520**	0.00400	0.000630	mg/L	12.19.19 09:26		1
o-Xylene	95-47-6	**0.00245**	0.00200	0.000642	mg/L	12.19.19 09:26		1
Xylenes, Total	1330-20-7	**0.0545**		0.000630	mg/L	12.19.19 09:26		
Total BTEX		**5.22**		0.000367	mg/L	12.19.19 14:09		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	181	70 - 130	%		**
4-Bromofluorobenzene	105	70 - 130	%		

Sample Id: **MW-27** Matrix: Water Sample Depth:

Lab Sample Id: 646559-010 Date Collected: 12.13.19 14.10 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111355 Date Prep: 12.19.19 15.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692891

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.0375**	0.00200	0.000408	mg/L	12.20.19 22:14		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.20.19 22:14	U	1
Ethylbenzene	100-41-4	**0.000850**	0.00200	0.000657	mg/L	12.20.19 22:14	J	1
m_p-Xylenes	179601-23-1	**0.00225**	0.00400	0.000630	mg/L	12.20.19 22:14	J	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.20.19 22:14	U	1
Xylenes, Total	1330-20-7	**0.00225**		0.000630	mg/L	12.20.19 22:14		
Total BTEX		**0.0406**		0.000367	mg/L	12.20.19 22:14		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	91	70 - 130	%		

Certificate of Analytical Results
646559
Talon LPE-Artesia, Artesia, NM
Moore To Jal #1 (MTJ 1)

Sample Id: **MW-20** Matrix: Water Sample Depth:

Lab Sample Id: 646559-011 Date Collected: 12.13.19 14.25 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.19.19 11:07	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 11:07	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 11:07	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 11:07	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 11:07	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 11:07	U	
Total BTEX		<0.000367		0.000367	mg/L	12.19.19 11:07	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	89	70 - 130	%		
4-Bromofluorobenzene	91	70 - 130	%		

Sample Id: **MW-26** Matrix: Water Sample Depth:

Lab Sample Id: 646559-012 Date Collected: 12.13.19 14.30 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.000430**	0.00200	0.000408	mg/L	12.19.19 11:28	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 11:28	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 11:28	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 11:28	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 11:28	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 11:28	U	
Total BTEX		**0.000430**		0.000367	mg/L	12.19.19 11:28	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	98	70 - 130	%		

Certificate of Analytical Results
646559

Talon LPE-Artesia, Artesia, NM
Moore To Jal #1 (MTJ 1)

Sample Id: **MW-19** Matrix: Water Sample Depth:

Lab Sample Id: 646559-013 Date Collected: 12.13.19 15.00 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.19.19 11:48	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 11:48	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 11:48	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 11:48	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 11:48	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 11:48	U	
Total BTEX		<0.000367		0.000367	mg/L	12.19.19 11:48	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	100	70 - 130	%		

Sample Id: **MW-21** Matrix: Water Sample Depth:

Lab Sample Id: 646559-014 Date Collected: 12.13.19 10.50 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.19.19 12:08	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 12:08	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 12:08	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 12:08	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 12:08	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 12:08	U	
Total BTEX		<0.000367		0.000367	mg/L	12.19.19 12:08	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	99	70 - 130	%		

Certificate of Analytical Results
646559
Talon LPE-Artesia, Artesia, NM
Moore To Jal #1 (MTJ 1)

Sample Id: **MW-39** Matrix: Water Sample Depth:

Lab Sample Id: 646559-015 Date Collected: 12.15.19 08.30 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00663**	0.00200	0.000408	mg/L	12.19.19 12:28		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 12:28	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 12:28	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 12:28	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 12:28	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 12:28	U	
Total BTEX		**0.00663**		0.000367	mg/L	12.19.19 12:28		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	101	70 - 130	%		

Sample Id: **MW-36** Matrix: Water Sample Depth:

Lab Sample Id: 646559-016 Date Collected: 12.15.19 10.25 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00269**	0.00200	0.000408	mg/L	12.19.19 12:48		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 12:48	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 12:48	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 12:48	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 12:48	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 12:48	U	
Total BTEX		**0.00269**		0.000367	mg/L	12.19.19 12:48		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	99	70 - 130	%		

Certificate of Analytical Results
646559
Talon LPE-Artesia, Artesia, NM
Moore To Jal #1 (MTJ 1)

Sample Id: **MW-41** Matrix: Water Sample Depth:

Lab Sample Id: 646559-017 Date Collected: 12.15.19 09.40 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00381**	0.00200	0.000408	mg/L	12.19.19 13:08		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 13:08	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 13:08	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 13:08	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 13:08	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 13:08	U	
Total BTEX		**0.00381**		0.000367	mg/L	12.19.19 13:08		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	96	70 - 130	%		

Sample Id: **MW-35** Matrix: Water Sample Depth:

Lab Sample Id: 646559-018 Date Collected: 12.15.19 11.10 Date Received: 12.16.19 16.00

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00205**	0.00200	0.000408	mg/L	12.19.19 13:29		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 13:29	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 13:29	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 13:29	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 13:29	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.19.19 13:29	U	
Total BTEX		**0.00205**		0.000367	mg/L	12.19.19 13:29		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	101	70 - 130	%		
4-Bromofluorobenzene	110	70 - 130	%		

Certificate of Analytical Results
646559

Talon LPE-Artesia, Artesia, NM
Moore To Jal #1 (MTJ 1)

Sample Id:	**MW-34**	Matrix:	Water	Sample Depth:	
Lab Sample Id:	646559-019	Date Collected:	12.15.19 11.40	Date Received:	12.16.19 16.00
Analytical Method:	BTEX by EPA 8021B			Prep Method:	5030B
Analyst:	KTL	% Moist:		Tech:	KTL
Seq Number:	3111355	Date Prep:	12.19.19 15.30		
Subcontractor:	SUB: T104704400-19-19	Prep seq:	7692891		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00390**	0.00200	0.000408	mg/L	12.20.19 22:34		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.20.19 22:34	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.20.19 22:34	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.20.19 22:34	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.20.19 22:34	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.20.19 22:34	U	
Total BTEX		**0.00390**		0.000367	mg/L	12.20.19 22:34		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	88	70 - 130	%		

Certificate of Analytical Results
646559

Talon LPE-Artesia, Artesia, NM
Moore To Jal #1 (MTJ 1)

Sample Id: **7692731-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: 7692731-1-BLK Date Collected: Date Received:

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111110 Date Prep: 12.18.19 12.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692731

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.19.19 06:25	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.19.19 06:25	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.19.19 06:25	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.19.19 06:25	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.19.19 06:25	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	92	70 - 130	%		
4-Bromofluorobenzene	97	70 - 130	%		

Sample Id: **7692891-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: 7692891-1-BLK Date Collected: Date Received:

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3111355 Date Prep: 12.19.19 15.30

Subcontractor: SUB: T104704400-19-19 Prep seq: 7692891

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.20.19 21:13	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.20.19 21:13	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.20.19 21:13	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.20.19 21:13	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.20.19 21:13	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	92	70 - 130	%		
4-Bromofluorobenzene	86	70 - 130	%		

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: Moore To Jal #1 (MTJ 1)

Work Orders : 646559,

Project ID: 700376.044.04

Lab Batch #: 3111110 **Sample:** 7692731-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/19/19 04:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	70-130	
4-Bromofluorobenzene	0.0309	0.0300	103	70-130	

Lab Batch #: 3111110 **Sample:** 7692731-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/19/19 05:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	70-130	
4-Bromofluorobenzene	0.0338	0.0300	113	70-130	

Lab Batch #: 3111110 **Sample:** 646559-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/19/19 05:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	70-130	
4-Bromofluorobenzene	0.0326	0.0300	109	70-130	

Lab Batch #: 3111110 **Sample:** 646559-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/19/19 05:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	70-130	
4-Bromofluorobenzene	0.0285	0.0300	95	70-130	

Lab Batch #: 3111110 **Sample:** 7692731-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/19/19 06:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	70-130	
4-Bromofluorobenzene	0.0291	0.0300	97	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Moore To Jal #1 (MTJ 1)

Work Orders : 646559,

Project ID: 700376.044.04

Lab Batch #: 3111355 **Sample:** 7692891-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/20/19 19:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	70-130	
4-Bromofluorobenzene	0.0287	0.0300	96	70-130	

Lab Batch #: 3111355 **Sample:** 7692891-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/20/19 19:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	70-130	
4-Bromofluorobenzene	0.0305	0.0300	102	70-130	

Lab Batch #: 3111355 **Sample:** 646614-001 S / MS **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 12/20/19 20:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	70-130	
4-Bromofluorobenzene	0.0291	0.0300	97	70-130	

Lab Batch #: 3111355 **Sample:** 646614-001 SD / MSD **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 12/20/19 20:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	70-130	
4-Bromofluorobenzene	0.0301	0.0300	100	70-130	

Lab Batch #: 3111355 **Sample:** 7692891-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/20/19 21:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	70-130	
4-Bromofluorobenzene	0.0258	0.0300	86	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Moore To Jal #1 (MTJ 1)

Work Order #: 646559 **Project ID:** 700376.044.04

Analyst: KTL **Date Prepared:** 12/18/2019 **Date Analyzed:** 12/19/2019

Lab Batch ID: 3111110 **Sample:** 7692731-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.102	102	0.100	0.104	104	2	70-130	25	
Toluene	<0.000367	0.100	0.0952	95	0.100	0.0974	97	2	70-130	25	
Ethylbenzene	<0.000657	0.100	0.0895	90	0.100	0.0915	92	2	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.178	89	0.200	0.185	93	4	70-130	25	
o-Xylene	<0.000642	0.100	0.0897	90	0.100	0.0945	95	5	70-130	25	

Analyst: KTL **Date Prepared:** 12/19/2019 **Date Analyzed:** 12/20/2019

Lab Batch ID: 3111355 **Sample:** 7692891-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.0962	96	0.100	0.0876	88	9	70-130	25	
Toluene	<0.000367	0.100	0.0919	92	0.100	0.0919	92	0	70-130	25	
Ethylbenzene	<0.000657	0.100	0.0937	94	0.100	0.0964	96	3	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.193	97	0.200	0.203	102	5	70-130	25	
o-Xylene	<0.000642	0.100	0.0983	98	0.100	0.106	106	8	70-130	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: Moore To Jal #1 (MTJ 1)

Work Order # : 646559 **Project ID:** 700376.044.04

Lab Batch ID: 3111110 **QC- Sample ID:** 646559-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 12/19/2019 **Date Prepared:** 12/18/2019 **Analyst:** KTL

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.00392	0.100	0.116	112	0.100	0.0999	96	15	70-130	25	
Toluene	0.000520	0.100	0.104	103	0.100	0.0951	95	9	70-130	25	
Ethylbenzene	<0.000657	0.100	0.0977	98	0.100	0.0824	82	17	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.196	98	0.200	0.165	83	17	70-130	25	
o-Xylene	<0.000642	0.100	0.0993	99	0.100	0.0855	86	15	70-130	25	

Lab Batch ID: 3111355 **QC- Sample ID:** 646614-001 S **Batch #:** 1 **Matrix:** Ground Water

Date Analyzed: 12/20/2019 **Date Prepared:** 12/19/2019 **Analyst:** KTL

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.000440	0.100	0.0971	97	0.100	0.0986	98	2	70-130	25	
Toluene	0.000390	0.100	0.0886	88	0.100	0.0931	93	5	70-130	25	
Ethylbenzene	<0.000657	0.100	0.0884	88	0.100	0.0936	94	6	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.180	90	0.200	0.194	97	7	70-130	25	
o-Xylene	<0.000642	0.100	0.0948	95	0.100	0.102	102	7	70-130	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Chain of Custody

Work Order No: 646559

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com

Project Manager:	David Adkins	Bill to: (if different)	PLAINS ALL AMERICAN
Company Name:	Talon	Company Name:	PIPELINE
Address:	408 W. Texas Ave.	Address:	ATTN: CAMILLE BRYANT
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575-616-4022 or 575-746-8905	Email:	dadkins@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	MOORE TO JAL #1 (MTJ#1)	Turn Around	
Project Number:	700376.044.04	Routine	☒
P.O. Number:	2002-10270	Rush:	
Sampler's Name:	MICHAEL COLLIER	Due Date:	

SAMPLE RECEIPT			
Temperature (°C):	2.2	Temp Blank: (Yes) No	Wet Ice: (Yes) No
Received Intact:	(Yes) No	Thermometer ID	TNM007
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	(Yes) No N/A	Total Containers:	57

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX
MW-14	GW	12-13-19	9:50am	N/A	3	✓
MW-17			10:00am			
MW-29			10:30am			
MW-38			11:10am			
MW-22			11:40am			
MW-28			12:20pm			
MW-23			12:30pm			
MW-37			12:50pm			
MW-40			1:30pm			
MW-27	GW	12-13-19	2:10pm	N/A	3	✓

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

EMAIL ANALYTICALS TO CAMILLE BRYANT

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Mike Cole		12/16/19 16:00	2		
3			4		
5			6		

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

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Work Order No: 646559

Project Manager:	David Adkins	Bill to: (if different)	PLAINS ALL AMERICAN
Company Name:	Talon	Company Name:	PIPELINE
Address:	408 W. Texas Ave.	Address:	ATTN: CAMILLE BRYANT
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575-616-4022 or 575-746-8905	Email:	dadkins@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	MOORE TO JAL #1 (MTJ#1)	Turn Around	
Project Number:	700376.044.04	Routine	☒
P.O. Number:	2002-10270	Rush:	
Sampler's Name:	MICHAEL COLLIER	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):		Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX
MW-20	GW	12-13-19	2:25pm	N/A	3	✓
MW-26			2:30pm			
MW-19			3:00pm			
MW-21		12-13-19	10:50am			
MW-39		12-15-19	8:30am			
MW-36			10:25am			
MW-41			9:40am			
MW-35			11:10am			
MW-34		12-15-19	11:40am	N/A	3	✓

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

EMAIL ANALYTICALS TO CAMILLE BRYANT

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			12/16/19 16:00	2		
3				4		
5				6		

Inter-Office Shipment

IOS Number **54511**

Date/Time: 12/17/19 10:59
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Martha Castro
Delivery Priority:
Air Bill No.: 777276334030

Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
646559-001	W	MW-14	12/13/19 09:50	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-002	W	MW-17	12/13/19 10:00	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-003	W	MW-29	12/13/19 10:30	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-004	W	MW-38	12/13/19 11:10	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-005	W	MW-22	12/13/19 11:40	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-006	W	MW-28	12/13/19 12:20	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-007	W	MW-23	12/13/19 13:30	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-008	W	MW-37	12/13/19 12:50	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-009	W	MW-40	12/13/19 13:50	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-010	W	MW-27	12/13/19 14:10	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-011	W	MW-20	12/13/19 14:25	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-012	W	MW-26	12/13/19 14:30	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-013	W	MW-19	12/13/19 15:00	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-014	W	MW-21	12/13/19 10:50	SW8021B	BTEX by EPA 8021B	12/20/19	12/27/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-015	W	MW-39	12/15/19 08:30	SW8021B	BTEX by EPA 8021B	12/20/19	12/29/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-016	W	MW-36	12/15/19 10:25	SW8021B	BTEX by EPA 8021B	12/20/19	12/29/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-017	W	MW-41	12/15/19 09:40	SW8021B	BTEX by EPA 8021B	12/20/19	12/29/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-018	W	MW-35	12/15/19 11:10	SW8021B	BTEX by EPA 8021B	12/20/19	12/29/19	JKR	BR4FBZ BZ BZME EBZ T	
646559-019	W	MW-34	12/15/19 11:40	SW8021B	BTEX by EPA 8021B	12/20/19	12/29/19	JKR	BR4FBZ BZ BZME EBZ T	

Inter Office Shipment or Sample Comments:

Relinquished By: Martha Castro

Date Relinquished: 12/17/2019

Received By: Brianna Teel

Date Received: 12/18/2019 12:04

Cooler Temperature: 0.5

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 54511

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : R8

Sent By: Martha Castro **Date Sent:** 12/17/2019 10:59 AM

Received By: Brianna Teel **Date Received:** 12/18/2019 12:04 PM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: Brianna Teel Date: 12/18/2019

Brianna Teel

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE-Artesia

Date/ Time Received: 12/16/2019 04:00:00 PM

Work Order #: 646559

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T NM 007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**Yes**
#18 Water VOC samples have zero headspace?	**No**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by: Martha Castro Date: 12/17/2019

Checklist reviewed by: Jessica Kramer Date: 12/19/2019