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2019 ANNUAL GROUNDWATER MONITORING REPORT

**HOBBS JUNCTION MAINLINE
LEA COUNTY, NEW MEXICO
SRS #2003—00017
NMOCD REF. # AP-054**

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

**Prepared By:
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408 Texas Avenue
Artesia, NM 88210**

January 30, 2020



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TALON/LPE PROJECT NO. 700376.052.11

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NMOCD – New Mexico Oil Conservation Division

NMSLO – New Mexico State Land Office

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1.0 INTRODUCTION

1.1 Introduction and Site Background

The Hobbs Junction Mainline site (site) is located approximately three miles west of Hobbs, in Unit Letter M, Section 26, Township 18 South and Range 37 East in Lea County, New Mexico. The GPS coordinates of this site are 32° 42' 40.85" latitude and 103° 13' 42.01" longitude. The land on the southern portion of the site is owned by the estate of Ms. Faye Klein and the land on the northern portion of the site is owned by the State of New Mexico. A site plan is provided as Figure 1 included in Appendix A.

1.2 Site Geology

The surface deposits in Lea County are composed of Blackwater Draw (Illinoian) sediments, Ogallala sediments and undivided Quaternary alluvium, which is also termed 'cover sands'. The soil in the upper two (2) feet at the site is composed of gravelly loam that 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 paleovalley fill composed of gravelly to sandy braided stream deposits that trended west to east across the Southern High Plains. During the late Miocene the west to east drainage was diverted (captured) by the Pecos River. Subsequently, the Pecos River basin has experienced deflation, which facilitated eolian deposition on the Southern High Plains during the Pliocene.

1.3 Previous Environmental Investigations

Currently, a total of 33 monitor wells have been installed in the vicinity of the release (see Figure 1). Initial groundwater delineation activities began on February 13, 2003, by advancing a soil boring BH-1 with a hollow-stem auger drilling rig. Refusal occurred 28 feet below ground surface (bgs), in well-indurated caliche. On March 5, 2003, using an air rotary rig, monitor wells MW-1 and MW-2 were installed to groundwater in order to evaluate the presence of phase separated hydrocarbons (PSH). After it was determined that monitor wells MW-1 and MW-2 were impacted with PSH; monitor wells MW-3 through MW-6 were installed in August 2003. PSH was detected in monitor wells MW-3 through MW-6 during the development process. On January 19 and 20, 2004, monitor wells MW-7 through MW-13 were installed in order to delineate the dissolved-phase plume. Subsequent to development, PSH was detected in monitor well MW-12. Monitor wells MW-14 through MW-17 were installed on May 24, 2004, outside the release perimeter. PSH was detected in monitor wells MW-14 and MW-17 as well. Monitor wells MW-18 through MW-20 were installed in November 2006, and monitor wells MW-21 and MW-22 were installed on December 5, 2007, in order to further delineate the dissolved phase plume. Monitor wells MW-23 and MW-24 were installed on March 17, 2008, as requested by the New Mexico Oil Conservation Division (NMOCD), in order to further delineate the

dissolved phase plume down-gradient towards the southeast. Subsequently, monitor wells MW-25, MW-26, and MW-27 were installed in December of 2011 to increase the density of pumping wells in order to increase drawdown of the groundwater level to further impede the migration of the dissolved-phase plume. Six (6) new monitor wells (MW-28 through MW-33) were installed in late April 2015. Two (2) of the wells, MW-29 and MW-30, were completed with 4-inch screen and blank riser to accommodate pneumatic pumps. Four (4) of the wells were completed with 2-inch screen and blank riser to further delineate the benzene, toluene, ethylbenzene, xylenes (BTEX) contamination north, northeast, south and southeast (downgradient) of the dissolved-phase plume.

A quarterly groundwater monitoring program was implemented for the site that included PSH recovery utilizing an automated eductor system, which operated from March 2004 to March 2007. In March 2007, the eductor system was replaced with an automated pneumatic skimmer and bladder pump PSH recovery system. At that time, a total of eight (8) skimmer pumps were installed in monitor wells MW-1, MW-2, MW-3, MW-4, MW-6, MW-12, MW-14, and MW-17 and a pneumatic total fluid pump was installed in monitor well MW-5. Total fluid pumps were installed in monitor wells MW-25 and MW-26 in 2012.

Currently there are nineteen (19) pneumatic total fluid pumps installed in monitor wells MW-1 thru MW-6, MW-8, MW-10, MW-11, MW-12, MW-14, MW-15, MW-17, MW-19, MW-25, MW-26, MW-27, MW-29, and MW-30. The recovered PSH and water is pumped into a holding tank within a lined secondary containment. As the tank level fills a high-level head pressure switch engages a fluid transfer pump that moves the recovered fluids to the Occidental Permian North Hobbs Unit Satellite 25 SWD.

During 2019, the recovery system extracted 184.48 bbls of PSH and 21,232.4 bbls of groundwater.

Additionally, during 2019, twelve (12) mobile dual-phase extraction (MDPE) events were conducted at this site on January 9, February 7, April 2, April 23, May 21, June 5, July 18, August 22, September 4, October 16, November 20, and December 17, 2019. A total of 266.78 bbls of PSH were recovered, consisting of 162.81 bbls of liquid PSH and 103.97 bbls of vapor PSH.

1.4 Regulatory Framework

Groundwater analytical data collected from monitor wells during quarterly groundwater monitoring events at this site is evaluated to the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards listed in the table below.

(NMWQCC) groundwater standards	
Compound	mg/L
Benzene	0.010
Toluene	0.750
Ethylbenzene	0.750
Total Xylenes	0.620
PAH (Naphthalene)	0.030
PAH (Benzo[a]pyrene)	0.007

2.0 SITE ACTIVITIES

The sections that follow summarize groundwater monitoring, PSH recovery and site assessment activities conducted at the subject site during the year 2019. The primary function of groundwater monitoring activities is to collect depth to fluid measurements and collect groundwater samples 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 Groundwater Monitoring Activities

Talon conducted four (4) groundwater monitoring events during 2019: March 19, June 27, September 23, and December 11, 2019. Details of the gauging, purging, and sample collection 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 to determine static water levels and to monitor the presence and/or absence of PSH accumulations. The top of groundwater elevation was corrected in monitor wells impacted with PSH by the following equation: Corrected groundwater elevation = the surveyed top of casing elevation – (measured depth to water) – (PSH thickness x the specific gravity of the PSH). Measured groundwater depths and elevations collected during the sampling events, along with historical measurements, are presented in Table 1 – Summary of Historical Fluid Level Measurements and contoured gradient maps are located in Appendix A.

All wells not impacted with PSH were purged a minimum of three (3) well volumes prior to sample collection. All monitor wells were purged utilizing dedicated disposable polyethylene bailers or 12-volt submersible pump and vinyl tubing. The pumps and tubing used to purge the wells were decontaminated with Alconox® detergent and rinsed with distilled water prior to initial use and between sample collection events. All recovered groundwater from purging activities and recovered water used in the decontamination process was contained onsite in the system recovery tank until the water was transferred to the OXY North Hobbs Unit disposal facility.

Groundwater samples were collected from monitoring wells not impacted with PSH utilizing dedicated disposable polyethylene bailers. The groundwater samples collected were transferred from the disposable bailer into appropriately preserved laboratory supplied sample containers. The groundwater samples were maintained on ice in the custody of Talon/LPE, until delivery to Xenco Laboratories, Inc. in Midland, Texas for analysis. The collected samples were quantified for BTEX by EPA Method SW-846 8021B. Groundwater samples collected from six (6) groundwater monitoring wells during the first event were analyzed for Polycyclic Aromatic Hydrocarbons (PAH) by EPA Method 8270C.

2.3 Phase Separated Hydrocarbon and Groundwater Recovery

The crude oil and groundwater recovered with the total fluid pumps were expelled in an onsite frac tank used as a settling tank where the oil and water are gravity separated. The tank is equipped with a head pressure switch, which operates a transfer pump. When the pump is engaged, recovered water is transferred to Occidental Permian's North Hobbs Satellite disposal facility via a four (4) inch HDPE flow line.

The depth to water and PSH is periodically measured with an oil/water interface probe so that recovered volumes can be calculated. An in-line flow meter is also installed downstream of the transfer pump to quantify the total fluids recovered.

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

- 1st Quarter – 76.75 bbls of crude oil and 3,875 bbls of groundwater
- 2nd Quarter – 35.43 bbls of crude oil and 6,954 bbls of groundwater
- 3rd Quarter – 41.40 bbls of crude oil and 6,395 bbls of groundwater
- 4th Quarter – 30.90 bbls of crude oil and 4,008.4 bbls of groundwater

In addition to the recovery system, twelve (12) 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 – 8.21 bbls of vapor and 10.75 bbls of liquid
- February 7, 2019 – 10.54 bbls of vapor and 5.87 bbls of liquid
- April 2, 2019 – 3.52 bbls of vapor and 6.69 bbls of liquid
- April 23, 2019 – 8.03 bbls of vapor and 9.01 bbls of liquid
- May 21, 2019 – 13.04 bbls of vapor and 17.52 bbls of liquid
- June 5, 2019 – 9.9 bbls of vapor and 2.43 bbls of liquid
- July 18, 2019 – 16.26 bbls of vapor and 20.72 bbls of liquid
- August 22, 2019 – 2.36 bbls of vapor and 10.91 bbls of liquid
- September 4, 2019 – 6.22 bbls of vapor and 17.18 bbls of liquid
- October 16, 2019 – 15.29 bbls of vapor and 28.03 bbls of liquid
- November 20, 2019 – 6.03 bbls of vapor and 7.79 bbls of liquid
- December 17, 2019 – 4.57 bbls of vapor and 25.91 bbls of liquid

Approximately 451.26 bbls of oil were recovered during 2019 and a total of 4,167.32 bbls of PSH has been recovered from the site to date.

3.0 GROUNDWATER MONITORING RESULTS

The results of the laboratory analyses are summarized in Table 2 – Summary of Groundwater Analytical Data in Appendix B. Laboratory analytical reports and chains of custody documentation are provided in Appendix C. The following sections present the results from the monitoring of the first water-bearing zone underlying the Hobbs Junction Mainline site.

3.1 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 has 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 zero (0) to 1.6 inches per year.

The Ogallala Aquifer is generally unconfined and the potentiometric surface generally mimics the topography 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 been approximately 40 feet bgs and the groundwater flow direction is to the southeast at an average of 25 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. The pH of Ogallala water averages 7.3.

3.2 Groundwater Gradient and Flow Direction

Water level measurements were collected from all monitor wells during all four (4) groundwater monitoring events. The data collected is summarized in Table 1, Summary of Historical Fluid Level Measurements, presented in Appendix B. Potentiometric surface contour maps were constructed from the four (4) water level measurement datasets. These maps are Figure 2a through Figure 2d presented in Appendix A. The groundwater flow direction at the site is consistently towards the east-southeast, at an average gradient of 0.0054 feet/foot or approximately 28.51 feet per mile. Groundwater levels at the subject site have decreased slightly in 2019, which is consistent with regional declining groundwater elevations in the Ogallala Aquifer.

3.3 Phase Separated Hydrocarbon (PSH)

The collection of water level measurement data was conducted using an oil/water interface probe, which was also used to determine the presence of PSH.

- In March 2019, PSH was observed in monitor wells MW-1 through MW-6, MW-8 through MW-12, MW-14 through MW-17, MW-20, MW-26, MW-27, MW-29, and MW-30. PSH thicknesses ranged from 0.06 feet in MW-16 to 4.27 feet in MW-14.
- In June 2019, PSH was observed in monitor wells MW-1 through MW-6, MW-8 through MW-12, MW-14 through MW-17, MW-19, MW-20, MW-26, MW-27, MW-29, and MW-30. PSH thicknesses ranged from 0.03 feet in MW-6, MW-11, and MW-27 to 3.27 feet in MW-4.
- In September 2019, PSH was observed in monitor wells MW-1 through MW-6, MW-8 through MW-12, MW-14 through MW-17, MW-19, MW-20, MW-25 through MW-27, MW-29, and MW-30. PSH thicknesses ranged from 0.01 feet in MW-25 to 3.75 feet in MW-15.
- In December 2019, PSH was observed in monitor wells MW-1 through MW-6, MW-8 through MW-12, MW-14 through MW-17, MW-19, MW-20, MW-25 through MW-27, and MW-30. PSH thicknesses ranged from 0.02 feet in MW-25 to 4.89 feet in MW-5.

PSH thickness isopleths maps are presented as Figure 3a through Figure 3d in Appendix A.

3.4 Groundwater Sampling Results

During the March 2019 groundwater monitoring event, groundwater samples were collected from thirteen (13) monitor wells: MW-7, MW-13, MW-18, MW-19, MW-21 through MW-25, MW-28, and MW-31 through MW-33. Twenty (20) monitor wells (MW-1 through MW-6, MW-8 through MW-12, MW-14 through MW-17, MW-20, MW-26, MW-27, MW-29, and MW-30) were not sampled due to the presence of PSH.

Analytical results from the collected groundwater samples exhibited the following findings:

- Benzene concentrations ranged from less than the laboratory method detection limit (MDL) in MW-7, MW-13, MW-18, MW-23, MW-24, and MW-32 to 2.45 mg/L in MW-25. Benzene concentrations exceeded the NMWQCC standard of 0.010 mg/L in monitor wells MW-21, MW-25, and MW-31.
- Toluene concentrations ranged from less than the laboratory MDL in MW-7, MW-13, MW-18, MW-21 through MW-24, MW-28, and MW-31 through MW-33 to 0.00208 mg/L in MW-19. All wells sampled this quarter were below the NMWQCC standard of 0.750 mg/L.
- Ethylbenzene concentrations ranged from less than the laboratory MDL in MW-7, MW-13, MW-18, MW-23, MW-24, and MW-32 to 0.397 mg/L in MW-25. Ethylbenzene concentrations did not exceed the NMWQCC standard of 0.750 mg/L in any monitor wells sampled.

- Xylene concentrations ranged from less than the laboratory MDL in MW-7, MW-13, MW-18, MW-22 through MW-24, MW-28, and MW-31 through MW-33 to 0.281 mg/L in MW-19. All wells sampled were below the NMWQCC standard of 0.620 mg/L.
- Naphthalene concentrations ranged from less than the laboratory MDL in MW-28, MW-31, and MW-33 to 0.00111 mg/L in MW-21. The naphthalene concentrations did not exceed the NMWQCC groundwater standard of 0.030 mg/L in any of the six wells sampled this quarter.
- Benzo[a]pyrene concentrations were less than the laboratory MDL in all six wells sampled and did not exceed the NMWQCC groundwater standard of 0.007 mg/L this quarter.

During the June 2019 groundwater monitoring event, groundwater samples were collected from twelve (12) monitor wells: MW-7, MW-13, MW-18, MW-21 through MW-25, MW-28, and MW-31 through MW-33. Twenty-one (21) monitor wells (MW-1 through MW-6, MW-8 through MW-12, MW-14 through MW-17, MW-19, MW-20, MW-26, MW-27, MW-29, and MW-30) were not sampled due to the presence of PSH.

Analytical results from the collected groundwater samples exhibited the following findings:

- Benzene concentrations ranged from less than the laboratory MDL in MW-32 to 4.67 mg/L in MW-25. Benzene concentrations exceeded the NMWQCC standard of 0.010 mg/L in monitor wells MW-21 and MW-25.
- Toluene concentrations ranged from less than the laboratory MDL in MW-13, MW-21, MW-22, MW-24, MW-25, and MW-32 to 0.001 mg/L in MW-23. All wells sampled this quarter were below the NMWQCC standard of 0.750 mg/L.
- Ethylbenzene concentrations ranged from less than the laboratory MDL in MW-7, MW-13, MW-18, MW-23, MW-24, MW-28, and MW-31 through MW-33 to 0.776 mg/L in MW-25. Ethylbenzene concentrations exceeded the NMWQCC standard of 0.750 mg/L in monitor well MW-25.
- Xylene concentrations ranged from less than the laboratory MDL in MW-7, MW-13, MW-22, MW-24, MW-28, MW-31 through MW-33 to 0.513 mg/L in MW-25. All wells sampled were below the NMWQCC standard of 0.620 mg/L.

During the September 2019 groundwater monitoring event, groundwater samples were collected from eleven (11) monitor wells: MW-7, MW-13, MW-18, MW-21 through MW-24, MW-28, MW-31, MW-32 and MW-33. Twenty-two (22) monitor wells (MW-1 through MW-6, MW-8 through MW-12, MW-14 through MW-17, MW-19, MW-20, MW-25 through MW-27, MW-29, and MW-30) were not sampled due to the presence of PSH.

Analytical results from the collected groundwater samples exhibited the following findings:

- Benzene concentrations ranged from less than the laboratory MDL in MW-7, MW-13, MW-18, MW-23, MW-24, MW-28, MW-31 through MW-33 to 7.46 mg/L in MW-21. Benzene concentrations exceeded the NMWQCC standard of 0.010 mg/L in monitor wells MW-21, and MW-22.
- Toluene concentrations were less than the laboratory MDL in all monitor wells. Toluene concentrations did not exceed the NMWQCC standard of 0.750 mg/L in any of the monitor wells sampled this quarter.
- Ethylbenzene concentrations ranged from less than the laboratory MDL in MW-7, MW-13, MW-18, MW-23, MW-24, MW-28, MW-31 through MW-33 to 0.117 mg/L in MW-21. Ethylbenzene concentrations did not exceed the NMWQCC standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Xylene concentrations ranged from less than the laboratory MDL in MW-7, MW-13, MW-18, MW-22 through MW-24, MW-28, MW-31 through MW-33 to 0.0102 mg/L in MW-21. Xylene concentrations did not exceed the NMWQCC standard of 0.620 mg/L in any of the monitor wells sampled this quarter.

During the December 2019 groundwater monitoring event, groundwater samples were collected from eleven (11) monitor wells: MW-7, MW-13, MW-18, MW-21 through MW-24, MW-28, MW-31 through MW-33. Twenty-one (21) monitor wells (MW-1 through MW-6, MW-8 through MW-12, MW-14 through MW-17, MW-19, MW-20, MW-25 through MW-27, and MW-30) were not sampled due to the presence of PSH. MW-29 was not sampled due to an obstruction in the well.

Analytical results from the collected groundwater samples exhibited the following findings:

- Benzene concentrations ranged from less than the laboratory MDL in MW-7, MW-13, MW-18, and MW-31 to 1.45 mg/L in MW-21. Benzene concentrations exceeded the NMWQCC standard of 0.010 mg/L in monitor wells MW-21, MW-22, and MW-24.
- Toluene concentrations ranged from less than the laboratory MDL in MW-7, MW-13, MW-18, MW-21, MW-23, MW-24, MW-28, MW-31 and MW-32 to 0.0005 mg/L in MW-22. Toluene concentrations were below the NMWQCC standard of 0.750 mg/L in all wells sampled.
- Ethylbenzene concentrations ranged from less than the laboratory MDL in MW-7, MW-13, MW-18, and MW-31 to 0.126 mg/L in MW-21. Ethylbenzene concentrations did not exceed the NMWQCC standard of 0.750 mg/L in any of the wells sampled this quarter.

- Xylene concentrations ranged from less than the laboratory MDL in MW-7, MW-13, MW-18, MW-22, MW-31, and MW-33 to 0.0430 mg/L in MW-21. Xylene concentrations did not exceed the NMWQCC standard of 0.620 mg/L in any of the wells sampled this quarter.

Laboratory analytical data reports and chains of custody documentation are provided in Appendix C.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The following section presents a summary of the four (4) 2019 groundwater monitoring events conducted at the Hobbs Junction Mainline site and provides recommendations for future actions.

4.1 Summary of Findings

- Approximately 184.48 bbls of crude were recovered by the groundwater system and 266.78 bbls of PSH were recovered via MDPE during 2019. Approximately 4,167.32 bbls of PSH has been recovered from the site to date.
- The furthest down-gradient monitor wells did not exhibit BTEX concentrations above the NMWQCC Standards during any of the four (4) quarterly groundwater monitoring events.
- The PSH thicknesses in many wells have fluctuated throughout the year.
- The PSH plume is delineated .

4.2 Recommendations

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

- Continue the quarterly MDPE events initiated in 2019.
- Continue operation and maintenance of the PSH recovery system and transfer system. Adjust pump intake port depths and controller settings to optimize PSH recovery as needed.
- Continue the quarterly groundwater monitoring program and annual reporting in accordance with NMOCD directives.
- Continue PAH sampling for the first quarter sampling event in 2020.

APPENDIX A

Figures

Figure 1 – Site Plan

Figure 2a – Groundwater Gradient Map – 03/19/2019

Figure 2b – Groundwater Gradient Map – 06/26/2019

Figure 2c – Groundwater Gradient Map – 09/20/2019

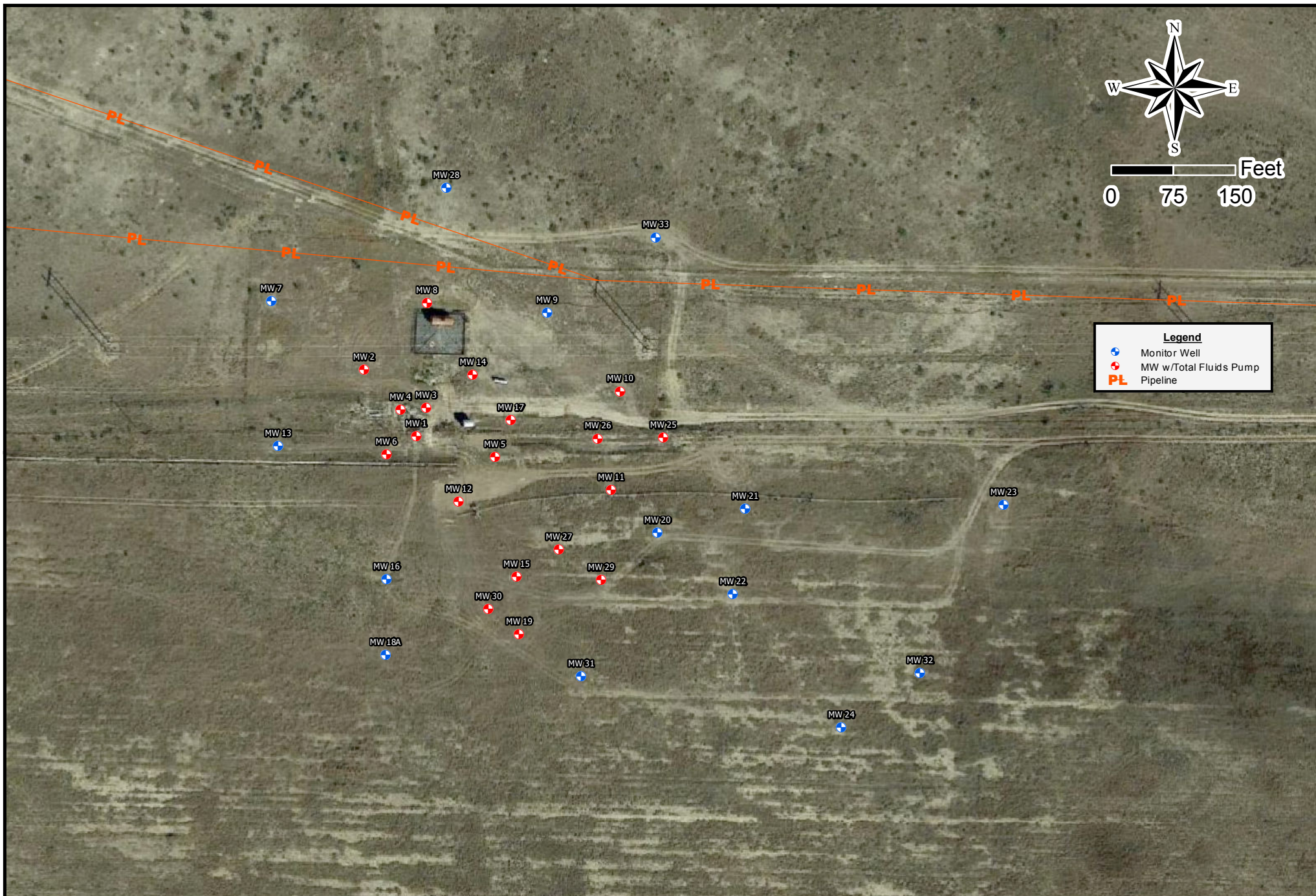
Figure 2d – Groundwater Gradient Map – 12/10-11/2019

Figure 3a – PSH Thickness & Groundwater Concentration Map – 03/19/2019

Figure 3b – PSH Thickness & Groundwater Concentration Map – 06/26-27/2019

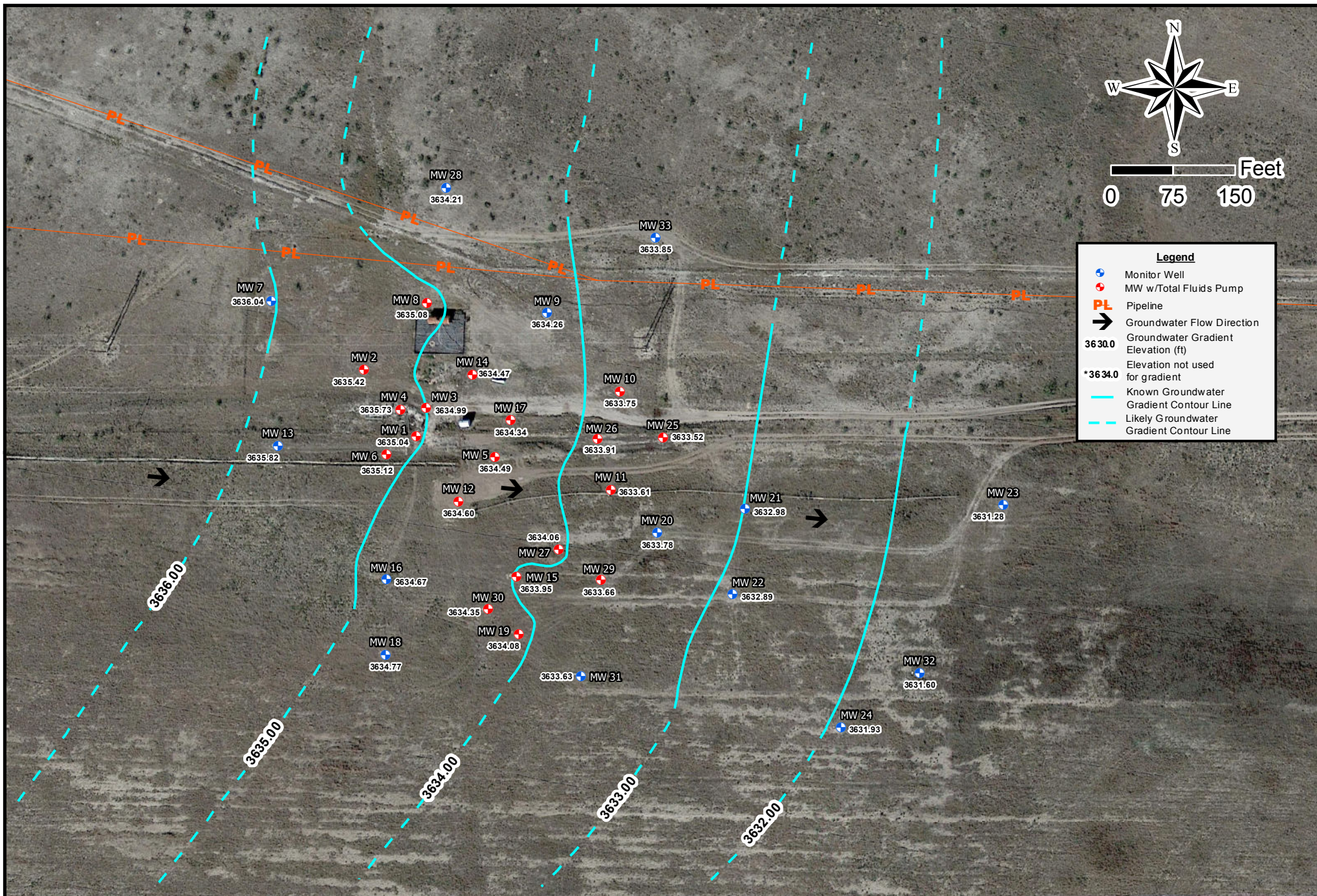
Figure 3c – PSH Thickness & Groundwater Concentration Map – 09/23/2019

Figure 3d – PSH Thickness & Groundwater Concentration Map – 12/11/2019



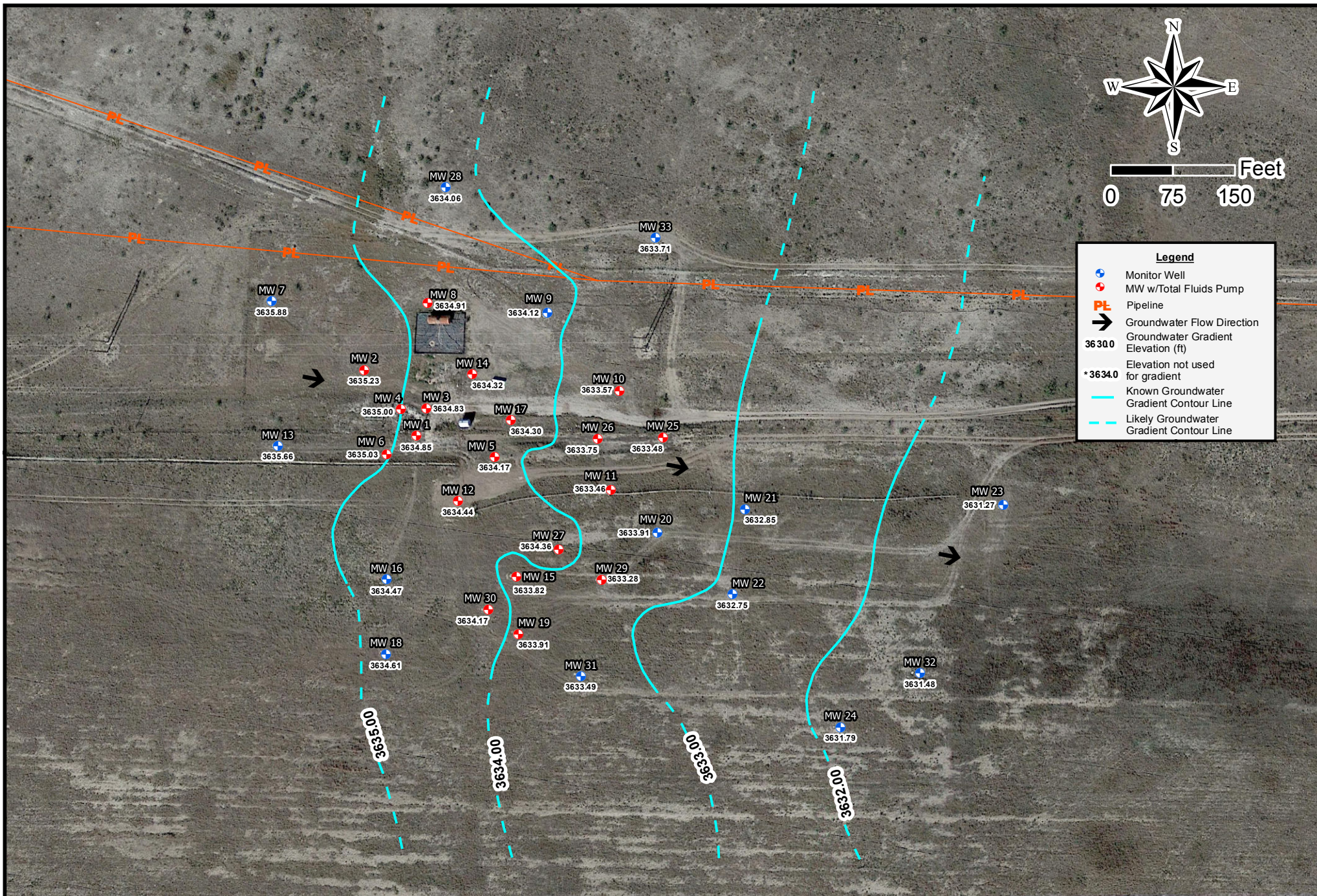
Drafted: 3/1/2018
 1 in = 150 ft
 Drafted By: IJM

Hobbs Junction Mainline
 SRS # 2003-00017, NMOCD REF. # AP-054
 SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
 Figure 1 - Site Plan



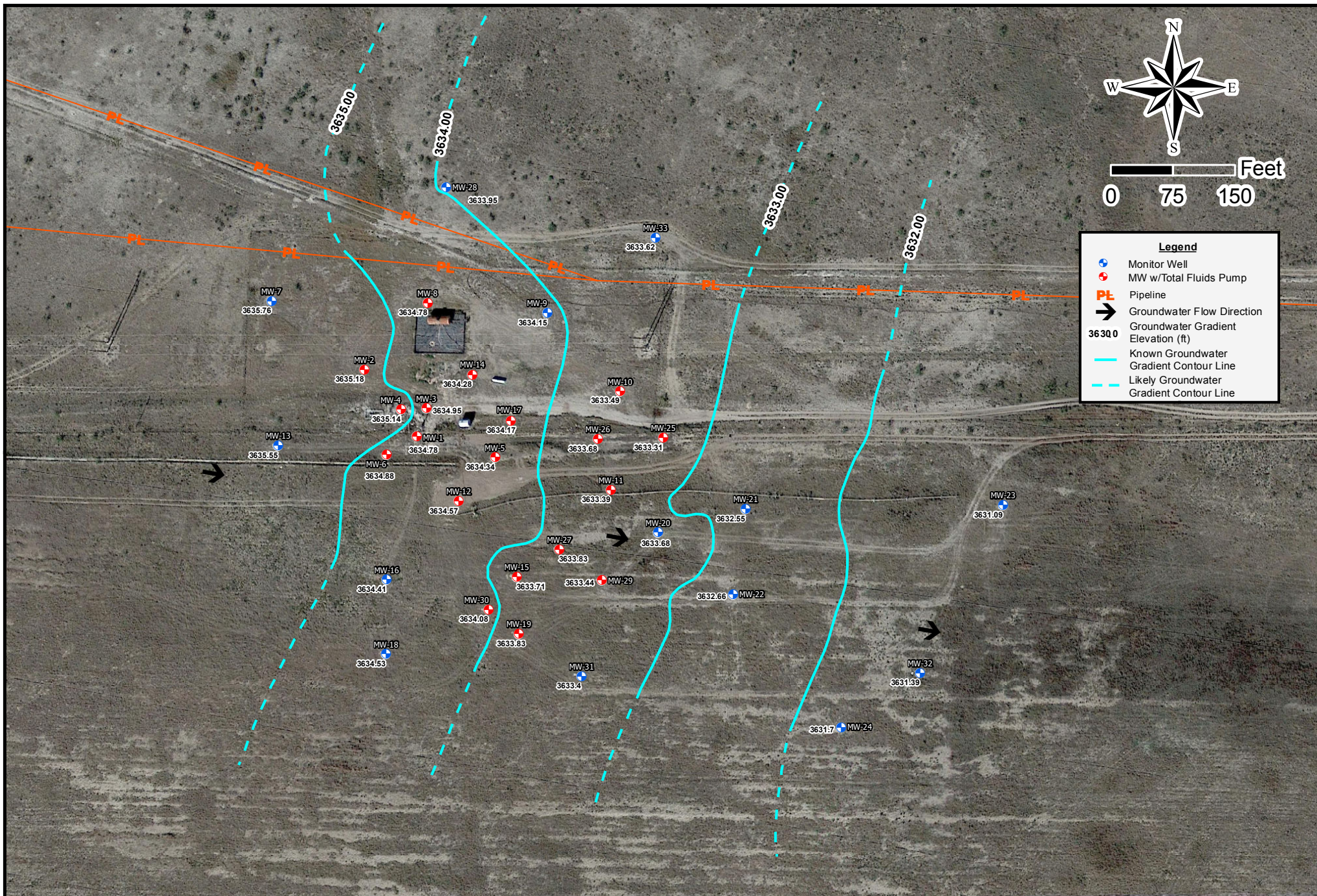
Drafted: 4/19/2019
1 in = 150 ft
Drafted By: IJM

Hobbs Junction Mainline
SRS # 2003-00017, NMOCD REF. # AP-054
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
Figure 2a - Groundwater Gradient Map (03/19/2019)



Drafted: 7/16/2019
1 in = 150 ft
Drafted By: IJM

Hobbs Junction Mainline
SRS # 2003-00017, NMOCD REF. # AP-054
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
Figure 2b - Groundwater Gradient Map (06/26/2019)



Drafted: 10/11/2019

1 in = 150 ft

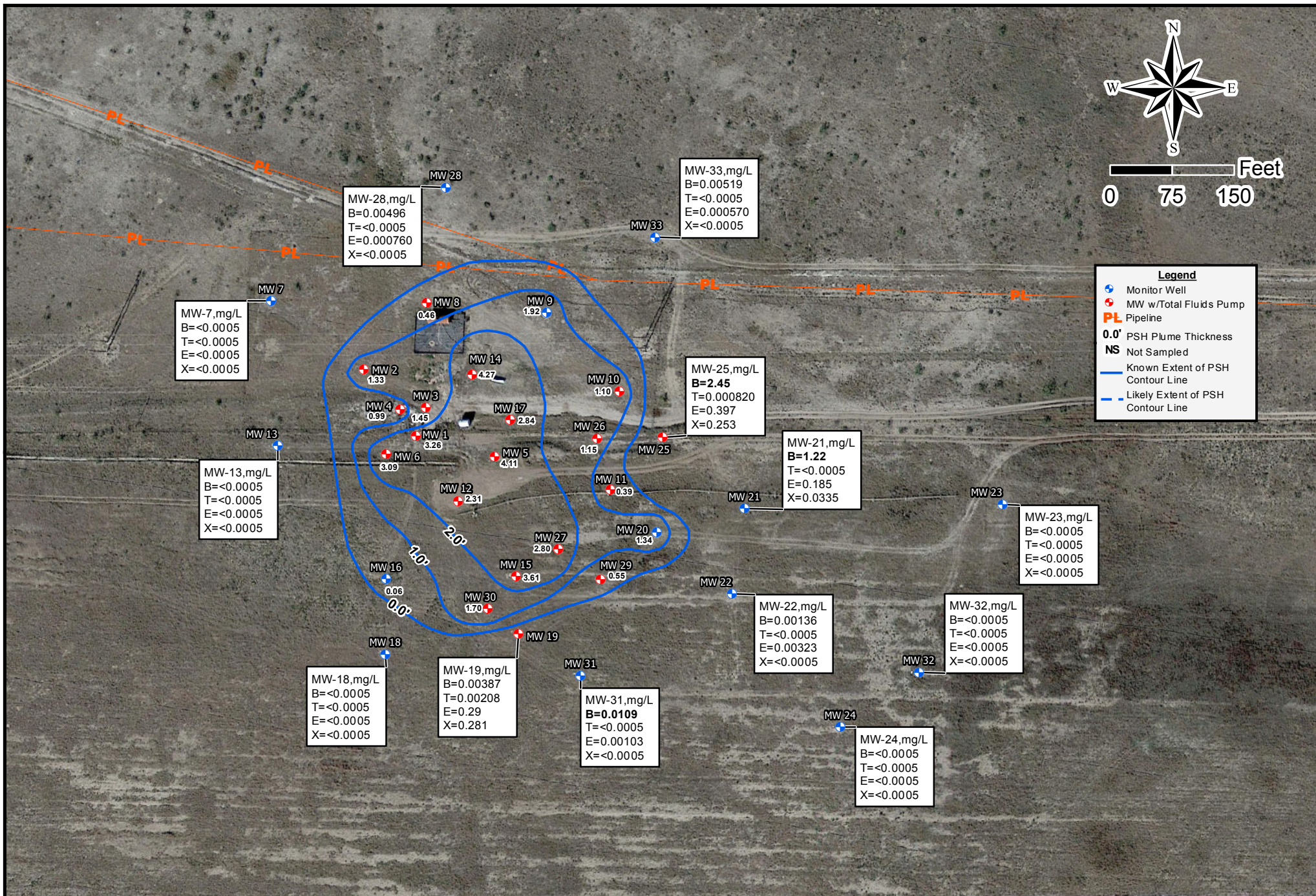
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Hobbs Junction Mainline
 SRS # 2003-00017, NMOCD REF. # AP-054
 SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
 Figure 2c - Groundwater Gradient Map (09/20/2019)



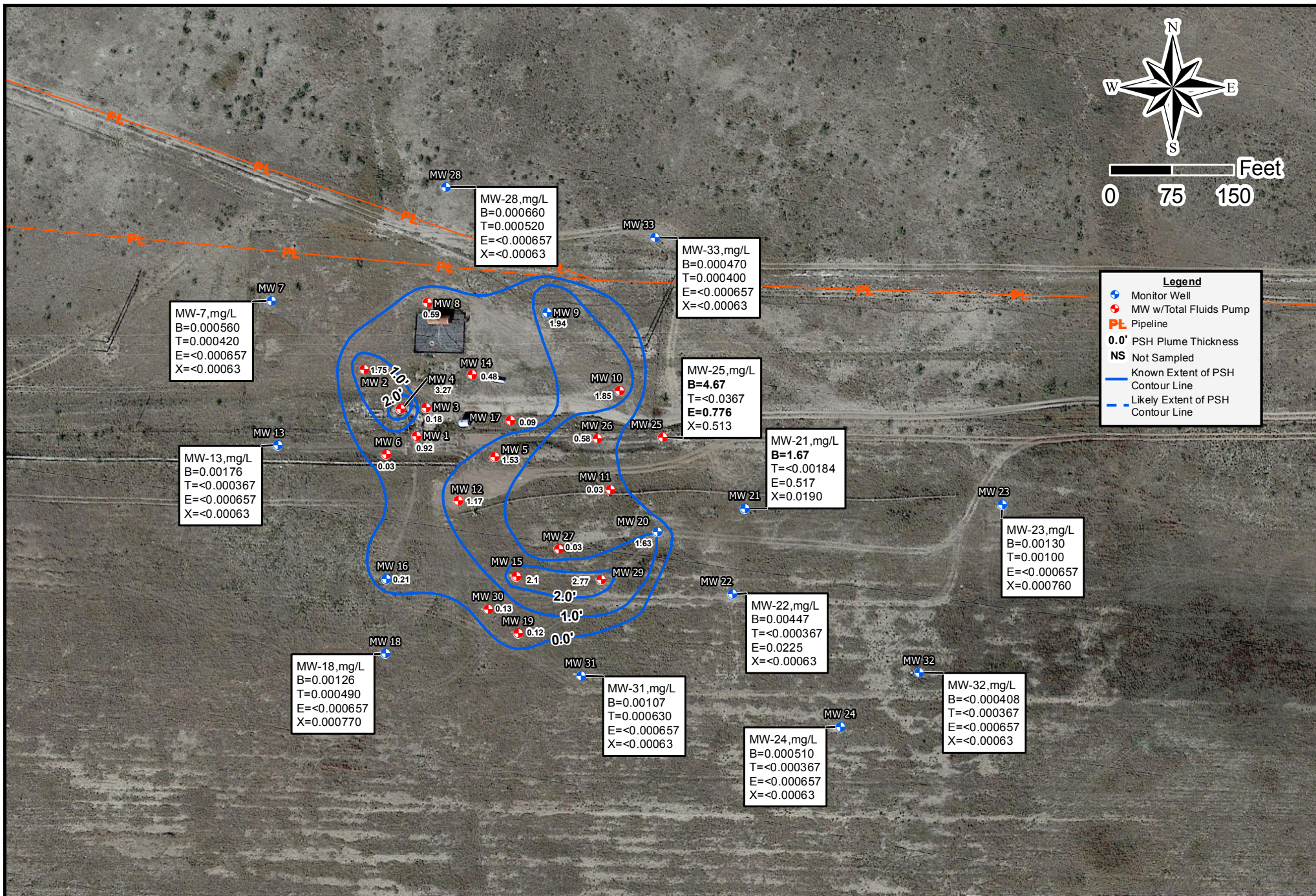
Drafted: 1/30/2020
1 in = 150 ft
Drafted By: JAI

Hobbs Junction Mainline
SRS # 2003-00017, NMOCD REF. # AP-054
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
Figure 2d - Groundwater Gradient Map (12/10-11/2019)



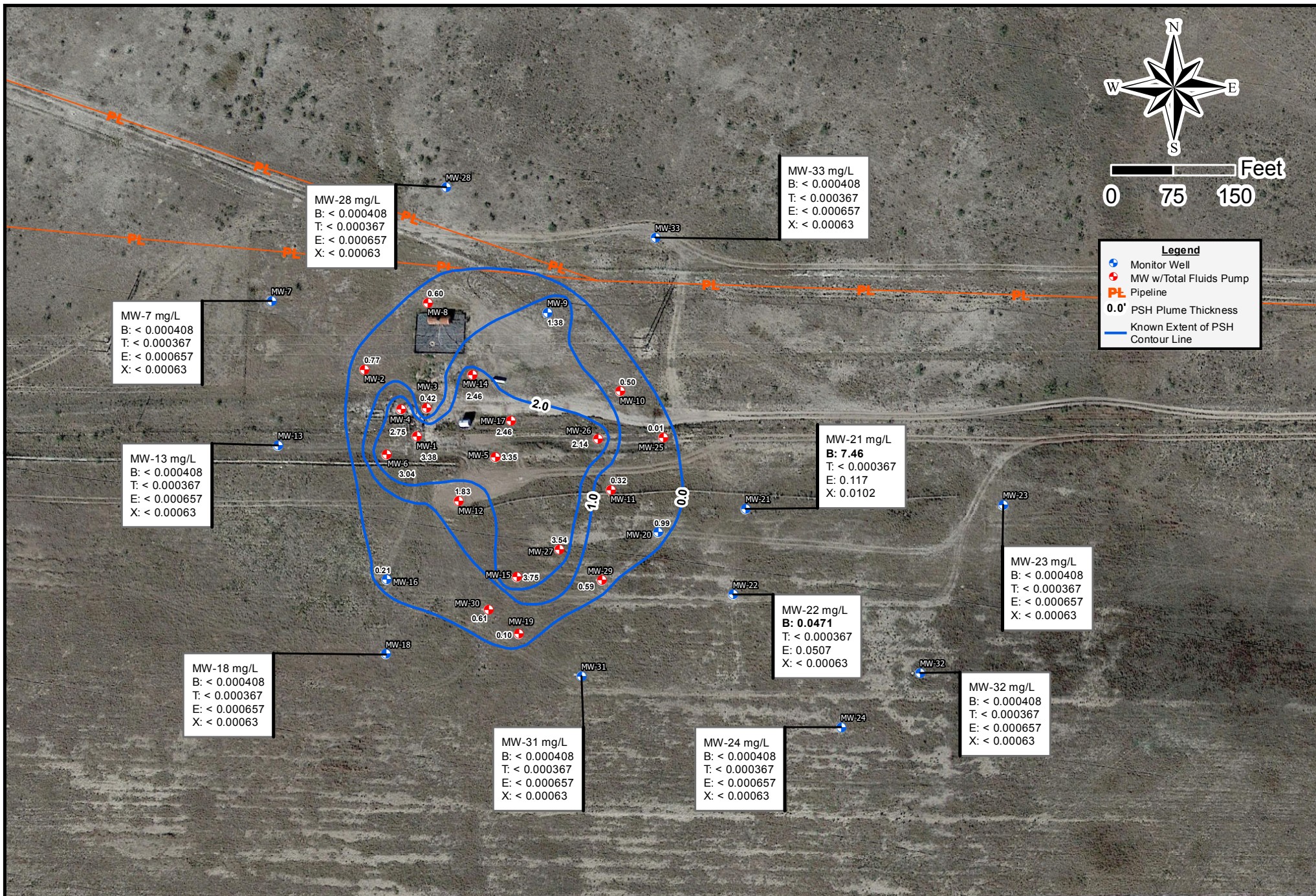
Drafted: 4/19/2019
1 in = 150 ft
Drafted By: IJM

Hobbs Junction Mainline
SRS # 2003-00017, NMOCD REF. # AP-054
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
Figure 3a - PSH Thickness and Groundwater Concentration Map (03/19/2019)



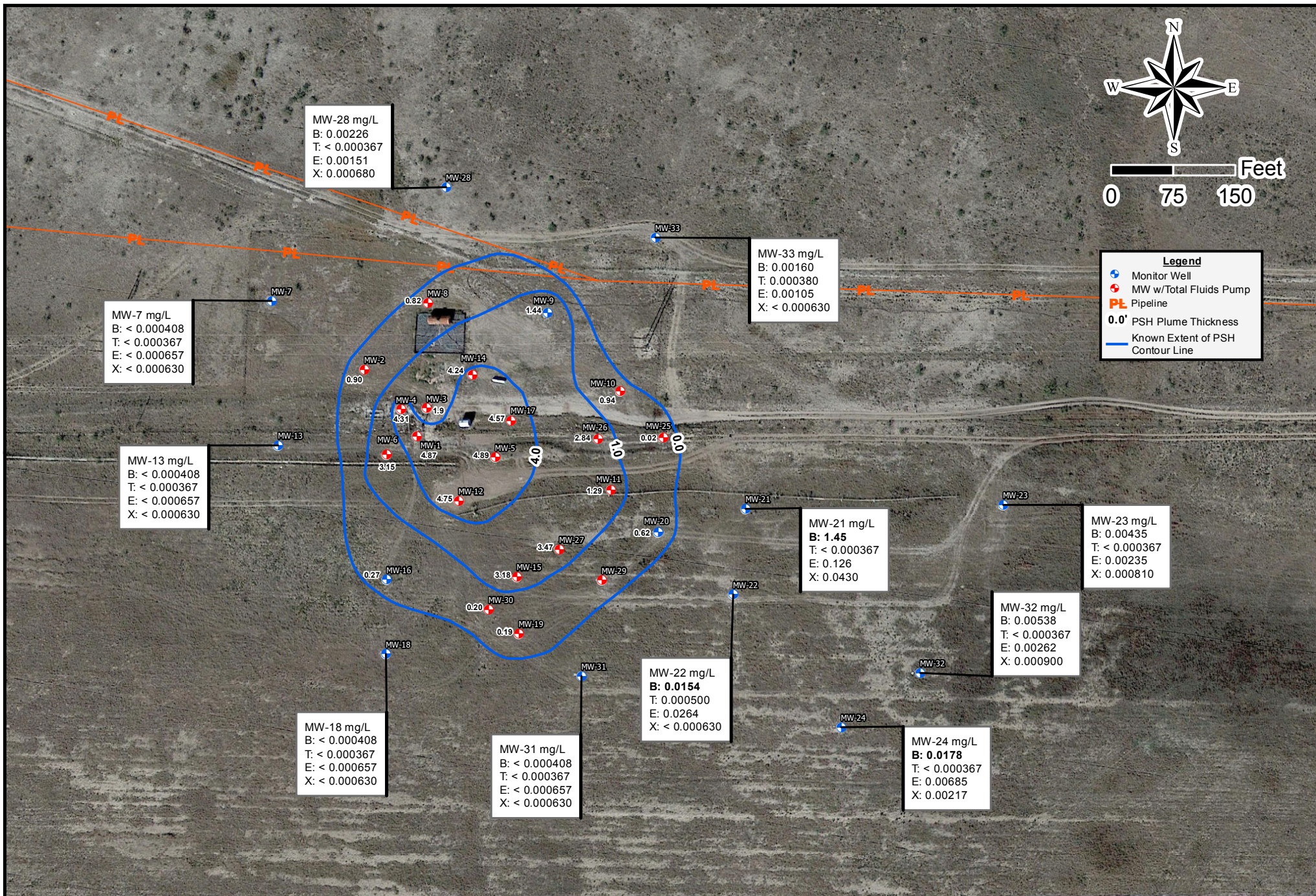
Drafted: 3/26/2020
1 in = 150 ft
Drafted By: JAI

Hobbs Junction Mainline
SRS # 2003-00017, NMOCD REF. # AP-054
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
Figure 3b - PSH Thickness and Groundwater Concentration Map (06/26-27/2019)



Drafted: 10/11/2019
1 in = 150 ft
Drafted By: JAI

Hobbs Junction Mainline
SRS # 2003-00017, NMOCD REF. # AP-054
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
Figure 3c - PSH Thickness and Groundwater Concentration Map (09/23/2019)



Drafted: 1/30/2020
1 in = 150 ft
Drafted By: JAI

Hobbs Junction Mainline
SRS # 2003-00017, NMOCD REF. # AP-054
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
Figure 3d - PSH Thickness and Groundwater Concentration Map (12/11/2019)

APPENDIX B

Tables

Table 1 - Summary of Historical Fluid Level Measurements

Table 2 - Summary of Historical Groundwater Analytical Results – BTEX

Table 3 - Summary of Groundwater Analytical Results – PAH

Table 1 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

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-1 4"	3678.5	39	54	03/09/2016	45.50	41.71	3.79	3636.16
				06/08/2016	45.79	41.71	4.08	3636.12
				09/21/2016	45.90	41.98	3.92	3635.87
				12/07/2016	44.08	42.81	1.27	3635.48
				03/22/2017	45.95	41.90	4.05	3635.93
				05/24/2017	45.98	42.17	3.81	3635.70
				09/18/2017	46.36	42.30	4.06	3635.53
				12/13/2017	46.02	42.52	3.50	3635.40
				03/29/2018	44.04	43.23	0.81	3635.14
				06/19/2018	47.23	42.64	4.59	3635.10
				09/18/2018	44.10	43.50	0.60	3634.90
				01/16/2019	46.29	42.80	3.49	3635.12
				03/19/2019	46.18	42.92	3.26	3635.04
				06/26/2019	44.42	43.50	0.92	3634.85
				09/20/2019	46.54	43.16	3.38	3634.78
				12/11/2019	47.89	43.02	4.87	3634.68
MW-2 4"	3679.47	38	53	03/09/2016	43.11	42.75	0.36	3636.66
				06/08/2016	43.60	42.84	0.76	3636.50
				09/21/2016	43.58	43.12	0.46	3636.27
				12/07/2016	43.49	43.48	0.01	3635.99
				03/22/2017	44.06	43.00	1.06	3636.30
				05/24/2017	43.81	43.47	0.34	3635.94
				09/18/2017	43.76	43.46	0.30	3635.96
				12/13/2017	43.74	43.64	0.10	3635.81
				03/29/2018	44.20	43.86	0.34	3635.55
				06/19/2018	44.72	43.82	0.90	3635.50
				09/18/2018	43.83	43.82	0.01	3635.65
				01/16/2019	44.80	43.85	0.95	3635.46
				03/19/2019	45.16	43.83	1.33	3635.42
				06/26/2019	45.70	43.95	1.75	3635.23
				09/20/2019	44.93	44.16	0.77	3635.18
				12/11/2019	45.20	44.30	0.90	3635.02
MW-3 4"	3679.81	39	54	03/09/2016	45.47	43.32	2.15	3636.14
				06/08/2016	47.00	43.03	3.97	3636.12
				09/21/2016	46.50	43.44	3.06	3635.87
				12/07/2016	44.84	44.26	0.58	3635.45
				03/22/2017	47.42	43.20	4.22	3635.91
				05/24/2017	47.03	43.46	3.57	3635.76
				09/18/2017	46.21	43.89	2.32	3635.54
				12/13/2017	45.35	44.25	1.10	3635.38
				03/29/2018	45.16	44.60	0.56	3635.12
				06/19/2018	47.85	44.09	3.76	3635.10
				09/18/2018	44.63	44.62	0.01	3635.19
				01/16/2019	45.38	44.65	0.73	3635.04
				03/19/2019	46.03	44.58	1.45	3634.99
				06/26/2019	45.13	44.95	0.18	3634.83
				09/20/2019	45.21	44.79	0.42	3634.95
				12/11/2019	46.78	44.88	1.90	3634.62

Table 1 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-4 4"	3679.64	39	54	03/09/2016	45.58	43.88	1.70	3635.48
				06/08/2016	46.06	42.82	3.24	3636.29
				09/21/2016	46.46	43.03	3.43	3636.04
				12/07/2016	44.81	43.81	1.00	3635.66
				03/22/2017	46.60	42.97	3.63	3636.07
				05/24/2017	47.03	43.32	3.71	3635.71
				09/18/2017	47.06	43.31	3.75	3635.71
				12/13/2017	46.95	43.44	3.51	3635.62
				03/29/2018	48.05	44.58	3.47	3634.49
				06/19/2018	48.05	43.65	4.40	3635.26
				09/18/2018	43.89	43.88	0.01	3635.76
				01/16/2019	46.95	43.85	3.10	3635.28
				03/19/2019	44.74	43.75	0.99	3635.73
				06/26/2019	47.37	44.10	3.27	3635.00
MW-5 4"	3679.26	40	55	09/20/2019	46.80	44.05	2.75	3635.14
				12/11/2019	48.44	44.13	4.31	3634.80
				03/09/2016	46.00	43.20	2.80	3635.60
				06/08/2016	47.43	42.85	4.58	3635.65
				09/21/2016	47.23	43.27	3.96	3635.34
				12/07/2016	45.38	44.22	1.16	3634.85
				03/22/2017	47.60	43.10	4.50	3635.42
				05/24/2017	47.45	43.45	4.00	3635.15
				09/18/2017	47.18	43.78	3.40	3634.92
				12/13/2017	47.02	43.93	3.09	3634.82
				03/29/2018	45.89	44.49	1.40	3634.54
				06/19/2018	47.53	44.12	3.41	3634.58
				09/18/2018	46.55	44.50	2.05	3634.42
				01/16/2019	48.62	43.91	4.71	3634.57
MW-6 4"	3680.63	40	55	03/19/2019	48.20	44.09	4.11	3634.49
				06/26/2019	46.37	44.84	1.53	3634.17
				09/20/2019	47.72	44.37	3.35	3634.34
				12/11/2019	49.20	44.31	4.89	3634.14
				03/09/2016	45.49	44.17	1.32	3636.24
				06/08/2016	47.45	43.80	3.65	3636.23
				09/21/2016	47.18	44.15	3.03	3635.98
				12/07/2016	45.51	44.94	0.57	3635.60
				03/22/2017	47.90	43.95	3.95	3636.03
				05/24/2017	47.10	44.40	2.70	3635.78
				09/18/2017	46.92	44.60	2.32	3635.65
				12/13/2017	45.80	44.95	0.85	3635.54
				03/29/2018	45.75	45.28	0.47	3635.27
				06/19/2018	47.85	44.99	2.86	3635.17
				09/18/2018	47.61	45.01	2.60	3635.19
				01/16/2019	47.65	45.00	2.65	3635.19
				03/19/2019	48.09	45.00	3.09	3635.12
				06/26/2019	45.63	45.60	0.03	3635.03
				09/20/2019	48.29	45.25	3.04	3634.88
				12/11/2019	48.35	45.20	3.15	3634.91

Table 1 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

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 2"	3679.85	38	53	03/09/2016	42.67	-	-	3637.18
				06/08/2016	42.71	-	-	3637.14
				09/21/2016	42.88	-	-	3636.97
				12/07/2016	43.10	-	-	3636.75
				03/22/2017	43.02	-	-	3636.83
				05/24/2017	43.08	-	-	3636.77
				09/18/2017	43.28	-	-	3636.57
				12/13/2017	43.36	-	-	3636.49
				03/29/2018	43.57	-	-	3636.28
				06/19/2018	43.73	-	-	3636.12
				09/18/2018	43.78	-	-	3636.07
				01/14/2019	43.76	-	-	3636.09
				03/19/2019	43.81	-	-	3636.04
				06/26/2019	43.97	-	-	3635.88
				09/20/2019	44.09	-	-	3635.76
				12/11/2019	44.19	-	-	3635.66
MW-8 2"	3679.07	35	50	03/09/2016	43.74	42.65	1.09	3636.24
				06/08/2016	43.72	42.76	0.96	3636.15
				09/21/2016	44.22	42.94	1.28	3635.92
				12/07/2016	44.80	43.19	1.61	3635.61
				03/22/2017	43.99	42.98	1.01	3635.92
				05/24/2017	43.58	43.43	0.15	3635.62
				09/18/2017	43.59	43.46	0.13	3635.59
				12/13/2017	43.59	-	-	3635.48
				03/29/2018	43.96	43.75	0.21	3635.29
				06/19/2018	44.25	43.82	0.43	3635.18
				09/18/2018	44.32	43.92	0.40	3635.08
				01/16/2019	44.25	43.85	0.40	3635.15
				03/19/2019	44.37	43.91	0.46	3635.08
				06/26/2019	44.65	44.06	0.59	3634.91
				09/20/2019	44.79	44.19	0.60	3634.78
				12/11/2019	45.07	44.25	0.82	3634.68
MW-9 2"	3678.76	37	52	03/09/2016	45.26	43.00	2.26	3635.39
				06/08/2016	45.72	42.92	2.80	3635.38
				09/21/2016	46.00	43.17	2.83	3635.12
				12/07/2016	46.42	43.49	2.93	3634.79
				03/22/2017	46.05	43.12	2.93	3635.16
				05/24/2017	44.30	43.90	0.40	3634.79
				09/18/2017	44.27	43.90	0.37	3634.80
				12/13/2017	44.39	44.04	0.35	3634.66
				03/29/2018	44.67	44.20	0.47	3634.48
				06/19/2018	45.43	44.20	1.23	3634.36
				09/18/2018	44.25	44.24	0.01	3634.52
				01/14/2019	46.20	44.13	2.07	3634.29
				03/19/2019	46.10	44.18	1.92	3634.26
				06/26/2019	46.26	44.32	1.94	3634.12
				09/20/2019	45.76	44.38	1.38	3634.15
				12/11/2019	45.90	44.46	1.44	3634.06

Table 1 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

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 2"	3678.36	37	52	03/09/2016	45.35	43.10	2.25	3634.89
				06/08/2016	44.52	43.25	1.27	3634.90
				09/21/2016	45.02	43.47	1.55	3634.63
				12/07/2016	45.53	43.82	1.71	3634.26
				03/22/2017	45.15	43.41	1.74	3634.66
				05/24/2017	44.85	43.95	0.90	3634.26
				09/18/2017	44.33	44.06	0.27	3634.26
				12/13/2017	44.42	44.18	0.24	3634.14
				03/29/2018	44.69	44.42	0.27	3633.90
				06/19/2018	44.70	44.40	0.30	3633.91
				09/18/2018	44.78	44.59	0.19	3633.74
				01/16/2019	45.90	44.25	1.65	3633.84
				03/19/2019	45.53	44.43	1.10	3633.75
				06/26/2019	46.33	44.48	1.85	3633.57
MW-11 4"	3678.03	36	51	09/20/2019	45.29	44.79	0.50	3633.49
				12/11/2019	45.77	44.83	0.94	3633.37
				03/09/2016	43.29	43.26	0.03	3634.77
				06/08/2016	44.64	43.06	1.58	3634.71
				09/21/2016	43.60	43.54	0.06	3634.48
				12/07/2016	44.01	-	-	3634.02
				03/22/2017	43.67	43.48	0.19	3634.52
				05/24/2017	43.80	43.72	0.08	3634.30
				09/18/2017	43.99	43.94	0.05	3634.08
				12/13/2017	44.13	44.08	0.05	3633.94
				03/29/2018	44.44	44.35	0.09	3633.67
				06/19/2018	44.43	44.32	0.11	3633.69
				09/18/2018	44.45	44.44	0.01	3633.59
				01/16/2019	44.50	44.37	0.13	3633.64
MW-12 4"	3679.63	36	51	03/19/2019	44.75	44.36	0.39	3633.61
				06/26/2019	44.60	44.57	0.03	3633.46
				09/20/2019	44.91	44.59	0.32	3633.39
				12/11/2019	45.93	44.64	1.29	3633.18
				03/09/2016	45.68	43.58	2.10	3635.70
				06/08/2016	47.40	43.20	4.20	3635.74
				09/21/2016	46.85	43.70	3.15	3635.41
				12/07/2016	45.55	44.56	0.99	3634.91
				03/22/2017	47.70	43.48	4.22	3635.45
				05/24/2017	46.80	43.95	2.85	3635.21
				09/18/2017	46.78	44.16	2.62	3635.04
				12/13/2017	47.24	44.22	3.02	3634.91
				03/29/2018	45.70	44.83	0.87	3634.66
				06/19/2018	46.80	44.59	2.21	3634.68
				09/18/2018	44.87	44.86	0.01	3634.77
				01/16/2019	47.90	44.35	3.55	3634.69
				03/19/2019	46.96	44.65	2.31	3634.60
				06/26/2019	46.17	45.00	1.17	3634.44
				09/20/2019	46.59	44.76	1.83	3634.57
				12/11/2019	49.40	44.65	4.75	3634.20

Table 1 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

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 2"	3681.42	36.3	51.3	03/09/2016	44.45	-	-	3636.97
				06/08/2016	44.50	-	-	3636.92
				09/21/2016	44.69	-	-	3636.73
				12/07/2016	44.93	-	-	3636.49
				03/22/2017	44.81	-	-	3636.61
				05/24/2017	44.90	-	-	3636.52
				09/18/2017	45.05	-	-	3636.37
				12/13/2017	45.17	-	-	3636.25
				03/29/2018	45.38	-	-	3636.04
				06/19/2018	45.59	-	-	3635.83
				09/18/2018	45.56	-	-	3635.86
				01/14/2019	45.54	-	-	3635.88
				03/19/2019	45.60	-	-	3635.82
				06/26/2019	45.76	-	-	3635.66
				09/20/2019	45.87	-	-	3635.55
				12/11/2019	45.97	-	-	3635.45
MW-14 4"	3679	36	51	03/09/2016	44.65	43.15	1.50	3635.60
				06/08/2016	46.78	42.72	4.06	3635.61
				09/21/2016	45.15	43.36	1.79	3635.34
				12/07/2016	44.33	43.99	0.34	3634.95
				03/22/2017	47.10	42.95	4.15	3635.37
				05/24/2017	45.45	43.76	1.69	3634.96
				09/18/2017	44.99	43.81	1.18	3635.00
				12/13/2017	44.58	44.05	0.53	3634.86
				03/29/2018	44.63	44.33	0.30	3634.62
				06/19/2018	45.25	44.26	0.99	3634.58
				09/18/2018	44.83	44.44	0.39	3634.50
				01/16/2019	46.30	44.10	2.20	3634.54
				03/19/2019	48.10	43.83	4.27	3634.47
				06/26/2019	45.08	44.60	0.48	3634.32
				09/20/2019	46.77	44.31	2.46	3634.28
				12/11/2019	48.44	44.20	4.24	3634.10
MW-15 4"	3674.92	34	49	03/09/2016	40.82	39.72	1.10	3635.02
				06/08/2016	42.91	39.24	3.67	3635.07
				09/21/2016	41.58	39.84	1.74	3634.79
				12/07/2016	41.06	40.53	0.53	3634.30
				03/22/2017	42.70	39.55	3.15	3634.85
				05/24/2017	42.65	39.90	2.75	3634.57
				09/18/2017	42.87	40.03	2.84	3634.42
				12/13/2017	43.17	40.12	3.05	3634.30
				03/29/2018	41.95	40.71	1.24	3634.01
				06/19/2018	43.52	40.35	3.17	3634.05
				09/18/2018	40.69	40.68	0.01	3634.24
				01/16/2019	44.25	40.22	4.03	3634.04
				03/19/2019	43.98	40.37	3.61	3633.95
				06/27/2019	42.85	40.75	2.10	3633.82
				09/20/2019	44.34	40.59	3.75	3633.71
				12/11/2019	43.98	40.80	3.18	3633.60

Table 1 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

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 4"	3676.86	33	48	03/09/2016	43.81	40.61	3.20	3635.72
				06/08/2016	43.60	40.70	2.90	3635.68
				09/21/2016	44.10	40.89	3.21	3635.44
				12/07/2016	44.20	41.31	2.89	3635.07
				03/22/2017	43.75	40.90	2.85	3635.49
				05/24/2017	44.30	41.10	3.20	3635.23
				09/18/2017	41.30	41.24	0.06	3635.61
				12/13/2017	41.87	41.83	0.04	3635.02
				03/29/2018	42.18	42.08	0.10	3634.76
				06/19/2018	42.28	42.11	0.17	3634.72
				09/18/2018	42.19	42.18	0.01	3634.68
				01/16/2019	42.26	42.12	0.14	3634.72
				03/19/2019	42.24	42.18	0.06	3634.67
				06/27/2019	42.57	42.36	0.21	3634.47
				09/20/2019	42.63	42.42	0.21	3634.41
				12/11/2019	42.79	42.52	0.27	3634.30
MW-17 4"	3679.01	36	51	03/09/2016	46.20	43.18	3.02	3635.33
				06/08/2016	48.02	42.83	5.19	3635.32
				09/21/2016	48.51	43.12	5.39	3635.00
				12/07/2016	45.56	44.14	1.42	3634.64
				03/22/2017	47.70	43.20	4.50	3635.07
				05/24/2017	48.00	43.58	4.42	3634.70
				09/18/2017	47.00	43.81	3.19	3634.67
				12/13/2017	45.65	44.10	1.55	3634.65
				03/29/2018	45.55	44.54	1.01	3634.30
				06/19/2018	46.75	44.14	2.61	3634.44
				09/18/2018	45.55	45.54	0.01	3633.47
				01/16/2019	47.25	44.05	3.20	3634.43
				03/19/2019	47.04	44.20	2.84	3634.34
				06/26/2019	44.79	44.70	0.09	3634.30
				09/20/2019	46.89	44.43	2.46	3634.17
				12/11/2019	48.87	44.30	4.57	3633.96
MW-18 2"	3675.68	30	45	03/09/2016	39.79	-	-	3635.89
				06/08/2016	39.78	-	-	3635.90
				09/21/2016	40.00	-	-	3635.68
				12/07/2016	40.31	-	-	3635.37
				03/22/2017	41.13	-	-	3634.55
				05/24/2017	40.21	-	-	3635.47
				09/18/2017	40.39	-	-	3635.29
				12/13/2017	40.50	-	-	3635.18
				03/29/2018	40.75	-	-	3634.93
				06/19/2018	40.88	-	-	3634.80
				09/18/2018	NL	-	-	-
				03/19/2019	40.91	-	-	3634.77
				06/27/2019	41.07	-	-	3634.61
				09/20/2019	41.15	-	-	3634.53
				12/11/2019	41.28	-	-	3634.40

Table 1 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

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 2"	3674.96	31	46	03/09/2016	40.30	39.70	0.60	3635.16
				06/08/2016	40.78	39.60	1.18	3635.17
				09/21/2016	40.15	40.08	0.07	3634.87
				12/07/2016	40.52	40.48	0.04	3634.47
				03/22/2017	40.70	40.00	0.70	3634.84
				05/24/2017	40.45	40.20	0.25	3634.72
				09/18/2017	40.40	-	-	3634.56
				12/13/2017	40.52	-	-	3634.44
				03/29/2018	40.78	-	-	3634.18
				06/19/2018	40.73	-	-	3634.23
				09/18/2018	40.88	-	-	3634.08
				01/16/2019	41.77	-	-	3633.19
				03/19/2019	40.88	-	-	3634.08
				06/27/2019	41.15	41.03	0.12	3633.91
				09/20/2019	41.21	41.11	0.10	3633.83
				12/11/2019	41.39	41.20	0.19	3633.73
MW-20 2"	3674.38	31	46	03/09/2016	40.82	39.72	1.10	3634.48
				06/08/2016	43.39	39.18	4.21	3634.51
				09/21/2016	44.17	39.52	4.65	3634.09
				12/07/2016	44.08	39.99	4.09	3633.72
				03/22/2017	44.10	39.50	4.60	3634.12
				05/24/2017	43.96	39.75	4.21	3633.94
				09/18/2017	43.82	40.00	3.82	3633.75
				12/13/2017	46.00	40.15	5.85	3633.26
				03/29/2018	46.00	39.35	6.65	3633.93
				06/19/2018	41.82	40.28	1.54	3633.85
				09/18/2018	40.43	40.42	0.01	3633.96
				01/16/2019	41.60	40.35	1.25	3633.82
				03/19/2019	41.72	40.38	1.34	3633.78
				06/26/2019	42.10	40.47	1.63	3633.64
				09/20/2019	41.53	40.54	0.99	3633.68
				12/11/2019	41.50	40.88	0.62	3633.40
MW-21 2"	3674.38	23	53	03/09/2016	40.21	-	-	3634.17
				06/08/2016	40.15	-	-	3634.23
				09/21/2016	40.40	-	-	3633.98
				12/07/2016	40.75	-	-	3633.63
				03/22/2017	40.54	-	-	3633.84
				05/24/2017	40.64	-	-	3633.74
				09/18/2017	40.79	-	-	3633.59
				12/13/2017	40.98	-	-	3633.40
				03/29/2018	41.21	-	-	3633.17
				06/19/2018	41.20	-	-	3633.18
				09/18/2018	43.34	-	-	3631.04
				01/16/2019	41.30	-	-	3633.08
				03/19/2019	41.40	-	-	3632.98
				06/27/2019	41.53	-	-	3632.85
				09/20/2019	41.83	-	-	3632.55
				12/11/2019	41.76	-	-	3632.62

Table 1 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

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 2"	3674.07	20	50	03/09/2016	40.10	-	-	3633.97
				06/08/2016	39.95	-	-	3634.12
				09/21/2016	40.20	-	-	3633.87
				12/07/2016	40.55	-	-	3633.52
				03/22/2017	40.37	-	-	3633.70
				05/24/2017	40.43	-	-	3633.64
				09/18/2017	40.63	-	-	3633.44
				12/13/2017	40.79	-	-	3633.28
				03/29/2018	40.99	-	-	3633.08
				06/19/2018	41.02	-	-	3633.05
				09/18/2018	41.15	-	-	3632.92
				01/16/2019	41.10	-	-	3632.97
				03/19/2019	41.18	-	-	3632.89
				06/27/2019	41.32	-	-	3632.75
MW-23 2"	3672.39	29	49	09/20/2019	41.41	-	-	3632.66
				12/11/2019	41.52	-	-	3632.55
				03/09/2016	39.80	-	-	3632.59
				06/08/2016	39.77	-	-	3632.62
				09/21/2016	40.02	-	-	3632.37
				12/07/2016	40.18	-	-	3632.21
				03/22/2017	41.28	-	-	3631.11
				05/24/2017	40.22	-	-	3632.17
				09/18/2017	40.40	-	-	3631.99
				12/13/2017	40.60	-	-	3631.79
				03/29/2018	40.68	-	-	3631.71
				06/19/2018	42.88	-	-	3629.51
				09/18/2018	40.90	-	-	3631.49
				01/16/2019	41.03	-	-	3631.36
MW-24 2"	3672.79	30	50	03/19/2019	41.11	-	-	3631.28
				06/26/2019	41.12	-	-	3631.27
				09/20/2019	41.30	-	-	3631.09
				12/10/2019	41.45	-	-	3630.94
				03/09/2016	39.66	-	-	3633.13
				06/08/2016	39.64	-	-	3633.15
				09/21/2016	39.89	-	-	3632.90
				12/07/2016	40.06	-	-	3632.73
				03/22/2017	40.02	-	-	3632.77
				05/24/2017	40.07	-	-	3632.72
				09/18/2017	40.28	-	-	3632.51
				12/13/2017	40.41	-	-	3632.38
				03/29/2018	40.57	-	-	3632.22
				06/19/2018	40.65	-	-	3632.14
				09/18/2018	40.75	-	-	3632.04
				01/16/2019	40.82	-	-	3631.97
				03/19/2019	40.86	-	-	3631.93
				06/27/2019	41.00	-	-	3631.79
				09/20/2019	41.09	-	-	3631.70
				12/10/2019	41.22	-	-	3631.57

Table 1 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

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 4"	3676.83	37	57	03/09/2016	42.55	42.06	0.49	3634.69
				06/08/2016	NL	-	-	-
				09/21/2016	42.91	42.33	0.58	3634.40
				12/07/2016	42.80	-	-	3634.03
				03/22/2017	42.38	-	-	3634.45
				05/24/2017	42.60	-	-	3634.23
				09/18/2017	42.82	-	-	3634.01
				12/13/2017	42.89	-	-	3633.94
				03/29/2018	43.17	-	-	3633.66
				06/19/2018	43.12	-	-	3633.71
				09/18/2018	43.26	-	-	3633.57
				01/16/2019	43.17	-	-	3633.66
				03/19/2019	43.31	-	-	3633.52
				06/26/2019	43.35	-	-	3633.48
09/20/2019	43.53	43.52	0.01	3633.31				
12/11/2019	43.67	43.65	0.02	3633.18				
MW-26 4"	3677.17	36.5	56.5	03/09/2016	43.46	41.88	1.58	3635.03
				06/08/2016	44.67	41.56	3.11	3635.10
				09/21/2016	43.50	42.16	1.34	3634.79
				12/07/2016	43.12	42.77	0.35	3634.34
				03/22/2017	43.50	42.15	1.35	3634.80
				05/24/2017	43.30	42.42	0.88	3634.60
				09/18/2017	43.00	42.72	0.28	3634.40
				12/13/2017	43.11	42.83	0.28	3634.29
				03/29/2018	43.23	43.13	0.10	3634.02
				06/19/2018	43.65	43.01	0.64	3634.05
				09/18/2018	43.60	43.21	0.39	3633.90
				01/16/2019	44.56	42.90	1.66	3634.00
				03/19/2019	44.22	43.07	1.15	3633.91
				06/26/2019	43.90	43.32	0.58	3633.75
09/20/2019	45.28	43.14	2.14	3633.68				
12/11/2019	46.02	43.18	2.84	3633.52				
MW-27 4"	3674.98	34.5	54.5	03/09/2016	41.91	39.41	2.50	3635.16
				06/08/2016	43.25	39.10	4.15	3635.20
				09/21/2016	42.95	39.53	3.42	3634.89
				12/07/2016	41.89	40.34	1.55	3634.38
				03/22/2017	43.10	39.40	3.70	3634.97
				05/24/2017	NL	-	-	-
				09/18/2017	42.50	40.07	2.43	3634.51
				12/13/2017	42.75	40.16	2.59	3634.39
				03/29/2018	42.71	40.52	2.19	3634.10
				06/19/2018	43.35	40.33	3.02	3634.15
				09/18/2018	42.30	40.49	1.81	3634.19
				01/16/2019	47.10	45.20	1.90	3629.47
				03/19/2019	43.26	40.46	2.80	3634.06
				06/27/2019	40.65	40.62	0.03	3634.36
09/20/2019	44.11	40.57	3.54	3633.83				
12/11/2019	44.20	40.73	3.47	3633.68				

Table 1 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

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 2"	3678.86	40	60	03/09/2016	43.43	-	-	3635.43
				06/08/2016	43.45	-	-	3635.41
				09/21/2016	43.65	-	-	3635.21
				12/07/2016	43.85	-	-	3635.01
				03/22/2017	43.80	-	-	3635.06
				05/24/2017	43.88	-	-	3634.98
				09/18/2017	44.05	-	-	3634.81
				12/13/2017	44.16	-	-	3634.70
				03/29/2018	44.34	-	-	3634.52
				06/19/2018	44.47	-	-	3634.39
				09/18/2018	44.56	-	-	3634.30
				01/14/2019	44.60	-	-	3634.26
				03/19/2019	44.65	-	-	3634.21
				06/26/2019	44.80	-	-	3634.06
MW-29 4"	3674.37	40	60	09/20/2019	44.91	-	-	3633.95
				12/10/2019	45.00	-	-	3633.86
				03/09/2016	39.49	-	-	3634.88
				06/08/2016	41.24	39.18	2.06	3634.85
				09/21/2016	42.91	39.22	3.69	3634.54
				12/07/2016	43.30	39.72	3.58	3634.06
				03/22/2017	42.80	39.30	3.50	3634.49
				05/24/2017	42.15	39.70	2.45	3634.27
				09/18/2017	42.40	39.87	2.53	3634.08
				12/13/2017	40.60	40.35	0.25	3633.98
				03/29/2018	40.64	-	-	3633.73
				06/19/2018	41.15	40.56	0.59	3633.71
				09/18/2018	41.70	40.60	1.10	3633.59
				01/16/2019	40.90	40.67	0.23	3633.66
MW-30 4"	3675.39	40	60	03/19/2019	41.17	40.62	0.55	3633.66
				06/27/2019	43.40	40.63	2.77	3633.28
				09/20/2019	41.42	40.83	0.59	3633.44
				12/11/2019	OB	-	-	-
				03/09/2016	39.96	39.95	0.01	3635.44
				06/08/2016	42.30	39.46	2.84	3635.46
				09/21/2016	40.94	40.10	0.84	3635.15
				12/07/2016	41.93	40.58	1.35	3634.59
				03/22/2017	41.15	40.00	1.15	3635.20
				05/24/2017	40.95	40.30	0.65	3634.98
				09/18/2017	41.73	40.33	1.40	3634.83
				12/13/2017	41.23	40.59	0.64	3634.69
				03/29/2018	40.10	39.96	0.14	3635.41
				06/19/2018	41.30	40.90	0.40	3634.42
				09/18/2018	41.04	41.03	0.01	3634.36
				01/16/2019	41.00	40.80	0.20	3634.56
				03/19/2019	42.46	40.76	1.70	3634.35
				06/27/2019	41.33	41.20	0.13	3634.17
				09/20/2019	41.82	41.21	0.61	3634.08
				12/11/2019	41.60	41.40	0.20	3633.96

Table 1 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

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 2"	3674.36	40	60	03/09/2016	39.60	-	-	3634.76
				06/08/2016	40.55	-	-	3633.81
				09/21/2016	39.80	-	-	3634.56
				12/07/2016	40.20	-	-	3634.16
				03/22/2017	39.98	-	-	3634.38
				05/24/2017	40.04	-	-	3634.32
				09/18/2017	40.25	-	-	3634.11
				12/13/2017	40.31	-	-	3634.05
				03/29/2018	40.60	-	-	3633.76
				06/19/2018	40.57	-	-	3633.79
				09/18/2018	40.74	-	-	3633.62
				01/16/2019	40.70	-	-	3633.66
				03/19/2019	40.73	-	-	3633.63
				06/27/2019	40.87	-	-	3633.49
				09/20/2019	40.96	-	-	3633.40
				12/11/2019	41.09	-	-	3633.27
MW-32 2"	3672.48	40	60	03/09/2016	39.62	-	-	3632.86
				06/08/2016	39.63	-	-	3632.85
				09/21/2016	39.85	-	-	3632.63
				12/07/2016	40.04	-	-	3632.44
				03/22/2017	40.00	-	-	3632.48
				05/24/2017	40.06	-	-	3632.42
				09/18/2017	40.26	-	-	3632.22
				12/13/2017	40.38	-	-	3632.10
				03/29/2018	40.55	-	-	3631.93
				06/19/2018	40.59	-	-	3631.89
				09/18/2018	41.73	-	-	3630.75
				01/16/2019	40.91	-	-	3631.57
				03/19/2019	40.88	-	-	3631.60
				06/27/2019	41.00	-	-	3631.48
				09/20/2019	41.09	-	-	3631.39
				12/10/2019	41.23	-	-	3631.25
MW-33 2"	3679.19	40	60	03/09/2016	44.07	-	-	3635.12
				06/08/2016	44.08	-	-	3635.11
				09/21/2016	44.28	-	-	3634.91
				12/07/2016	44.53	-	-	3634.66
				03/22/2017	44.44	-	-	3634.75
				05/24/2017	44.52	-	-	3634.67
				09/18/2017	43.70	-	-	3635.49
				12/13/2017	44.83	-	-	3634.36
				03/29/2018	45.03	-	-	3634.16
				06/19/2018	45.11	-	-	3634.08
				09/18/2018	45.22	-	-	3633.97
				01/14/2019	45.25	-	-	3633.94
				03/19/2019	45.34	-	-	3633.85
				06/26/2019	45.48	-	-	3633.71
				09/20/2019	45.57	-	-	3633.62
				12/10/2019	45.68	-	-	3633.51

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
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
NMOCD - Groundwater		0.01	0.75	0.75	0.62	-
MW-7	03/09/2016	0.000400 J	<0.000238	<0.000238	<0.000243	-
	06/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	09/21/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/07/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/22/2017	0.00728	<0.000367	<0.000657	<0.000630	0.00728
	05/24/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	09/19/2017	0.000910 J	<0.00100	<0.000657	<0.000630	0.000910 J
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/29/2018	0.00379	0.000780 J	<0.000657	<0.000630	0.00457
	06/19/2018	0.00337	<0.000367	0.00138 J	<0.000630	0.00475
	09/19/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/19/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	06/26/2019	0.000560	0.000420	<0.000657	<0.00063	0.000980
	09/23/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/11/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
MW-8	12/20/2017	0.130	0.0133	0.0904	0.203	0.437
MW-13	03/09/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	06/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	09/21/2016	0.000504 J	<0.000621	<0.000763	<0.000256	-
	12/07/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/22/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	05/24/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	09/19/2017	<0.000408	<0.00100	<0.000657	<0.000630	<0.000408
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/29/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/19/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	09/19/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/19/2018	0.000900 J	0.00130	0.00210	0.00300	0.00730
	03/19/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	06/26/2019	0.00176	<0.000367	<0.000657	<0.00063	0.00176
	09/23/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/11/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
MW-18	03/09/2016	0.000400 J	<0.000238	<0.000238	<0.000243	-
	06/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	09/21/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/07/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/22/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	05/24/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	09/19/2017	0.0335	<0.00100	0.00463	0.00209	0.0402
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/29/2018	0.00435	0.000840 J	<0.000657	<0.000630	0.00519
	06/19/2018	0.00352	<0.000367	<0.000657	<0.000630	0.00352
	03/19/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	06/27/2019	0.00126	0.000490	<0.000657	0.000770	0.00252
	09/23/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/11/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367

Table 2 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-19	09/19/2017	0.283	0.286	0.429 D	0.585	1.58
	12/19/2017	0.324	1.03 D	0.662 D	0.983	3.00
	03/29/2018	0.0389	0.186	0.176	0.385	0.786
	06/19/2018	0.0258	0.159	0.149	0.222	0.555
	09/19/2018	0.0897	0.256	0.756 D	1.16	2.26
	12/19/2018	0.0106	0.00570	0.177	0.261	0.454
	03/19/2019	0.00387	0.00208	0.29	0.281	0.577
MW-21	03/09/2016	1.75	<0.00476	0.294	0.0383	-
	06/08/2016	1.74	<0.0248	0.280	0.0467	-
	09/21/2016	3.38	<0.0329	0.364	0.158	-
	12/07/2016	5.32	<0.0250	0.485	0.344	-
	03/22/2017	0.371	<0.000367	0.0460	0.0124	0.429
	05/24/2017	11.6	<0.0500	1.31	<0.0321	12.9
	09/19/2017	8.34 D	<0.00100	1.28 D	0.234	9.85
	12/19/2017	1.96 D	<0.000367	0.0338	0.00700	2.00
	03/29/2018	0.358	0.000850 J	0.0653	0.0109	0.435
	06/19/2018	1.60 D	<0.000367	0.258	0.0508	1.91
	09/19/2018	1.18 D	0.000650 J	0.141	0.0170	1.34
	12/19/2018	0.374	<0.000512	0.0639	0.0140	0.452
	03/20/2019	1.22	<0.0005	0.185	0.0335	1.44
	06/27/2019	1.67	<0.00184	0.517	0.0190	2.21
	09/23/2019	7.46	<0.000367	0.117	0.0102	7.59
	12/11/2019	1.45	<0.000367	0.126	0.0430	1.62
MW-22	03/09/2016	2.05	<0.00476	0.304	<0.00486	-
	06/08/2016	1.88	<0.0248	0.247	<0.0102	-
	09/21/2016	3.20	<0.0329	0.452	0.109	-
	12/07/2016	1.28	<0.0200	0.152	<0.0128	-
	03/22/2017	0.373	<0.000367	0.0477	<0.000630	0.421
	05/24/2017	1.23	<0.00500	0.113	<0.00321	1.34
	09/19/2017	0.928 D	<0.00100	0.289	<0.000630	1.22
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/29/2018	0.00392	0.000750 J	<0.000657	<0.000630	0.00467
	06/19/2018	0.00404	0.00121 J	0.000860 J	<0.000630	0.00611
	09/19/2018	0.000910 J	<0.000367	0.000760 J	0.00175 J	0.00342
	12/19/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/20/2019	0.00136	<0.0005	0.00323	<0.0005	0.00459
	06/27/2019	0.00447	<0.000367	0.0225	<0.00063	0.0270
	09/23/2019	0.0471	<0.000367	0.0507	<0.00063	0.0978
	12/11/2019	0.0154	0.000500	0.0264	<0.000630	0.0423
MW-23	03/09/2016	0.000500 J	<0.000238	<0.000238	<0.000243	-
	06/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	09/21/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/07/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/22/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	05/24/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	09/19/2017	<0.000408	<0.00100	<0.000657	<0.000630	<0.000408
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/29/2018	0.00647	0.000630 J	<0.000657	<0.000630	0.00710
	06/19/2018	0.00521	0.00104 J	0.00209	0.00143 J	0.00977
	09/19/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/19/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/20/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	06/26/2019	0.00130	0.00100	<0.000657	0.000760	0.00306
	09/23/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/11/2019	0.00435	<0.000367	0.00235	0.000810	0.00751

Table 2 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

Sample ID	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-24	03/09/2016	0.000300 J	<0.000238	<0.000238	<0.000243	-
	06/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	09/21/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/07/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/22/2017	0.00480	<0.000367	<0.000657	<0.000630	0.00480
	05/24/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	09/19/2017	0.000930 J	<0.00100	<0.000657	<0.000630	0.000930 J
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/29/2018	0.00399	0.000790 J	<0.000657	0.000650 J	0.00543
	06/19/2018	0.00130 J	<0.000367	0.00197 J	0.000850 J	0.00412
	09/19/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/19/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/20/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	06/27/2019	0.000510	<0.000367	<0.000657	<0.00063	0.000510
MW-25	09/23/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/11/2019	0.0178	<0.000367	0.00685	0.00217	0.0268
	09/19/2017	7.91	0.204	0.852	1.00	9.97
	12/20/2017	4.95 D	0.0112	0.243	0.176	5.38
	03/29/2018	1.15 D	0.00367	0.0851	0.0889	1.33
	06/19/2018	1.48 D	0.000810 J	0.134	0.109	1.72
	09/19/2018	1.40 D	0.00158 J	0.00371	0.0681	1.47
MW-28	12/19/2018	3.64	<0.0051	0.330	0.320	4.29
	03/20/2019	2.45	0.000820	0.397	0.253	3.10
	06/26/2019	4.67	<0.0367	0.776	0.513	5.96
	03/09/2016	0.000900 J	<0.000238	<0.000238	<0.000243	-
	06/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	09/21/2016	0.00130	<0.000621	<0.000763	<0.000256	-
	12/07/2016	0.00485	<0.00100	<0.000657	<0.000642	-
	03/22/2017	0.00392	<0.000367	<0.000657	<0.000630	0.00392
	05/24/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	09/19/2017	0.0171	<0.00100	0.00191 J	0.00130 J	0.0203
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/29/2018	0.00558	0.00101 J	<0.000657	0.000800 J	0.00739
	06/19/2018	0.000960 J	<0.000367	<0.000657	<0.000630	0.000960 J
	09/19/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
MW-29	12/19/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/20/2019	0.00496	<0.0005	0.000760	<0.0005	0.00572
MW-31	06/26/2019	0.000660	0.000520	<0.000657	<0.00063	0.00118
	09/23/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/11/2019	0.00226	<0.000367	0.00151	0.000680	0.00445
	03/29/2018	1.12 D	0.212	0.134	0.219	1.68
	03/09/2016	0.000500 J	<0.000238	<0.000238	<0.000243	-
	06/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	09/21/2016	0.000600 J	<0.000621	<0.000763	<0.000256	-
	12/07/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/22/2017	0.00279	<0.000367	<0.000657	<0.000630	0.00279
	05/24/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	09/19/2017	0.0448	0.00429	0.00745	0.00791	0.0645
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/29/2018	0.00168 J	0.000890 J	<0.000657	<0.000630	0.00257
	06/19/2018	0.000860 J	<0.000367	0.000750 J	<0.000630	0.00161 J
MW-31	09/19/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/19/2018	<0.000480	0.000600 J	0.00100 J	0.00210	0.00370
	03/20/2019	0.0109	<0.0005	0.00103	<0.0005	0.0119
	06/27/2019	0.00107	0.000630	<0.000657	<0.00063	0.00170
	09/23/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/11/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367

Table 2 - Groundwater Analytical Data - Historical
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-32	03/09/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	06/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	09/21/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/07/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/22/2017	0.00533	<0.000367	<0.000657	<0.000630	0.00533
	05/24/2017	0.00440	<0.00100	<0.000657	<0.000642	0.00440
	09/19/2017	0.0100	<0.00100	0.00133 J	0.000860 J	0.0122
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/29/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/19/2018	0.000640 J	<0.000367	<0.000657	<0.000630	0.000640 J
	09/19/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/19/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/20/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	06/27/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
MW-33	09/23/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/11/2019	0.00538	<0.000367	0.00262	0.000900	0.00890
	03/09/2016	0.000700 J	<0.000238	<0.000238	<0.000243	-
	06/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	09/21/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/07/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/22/2017	0.00619	<0.000367	<0.000657	<0.000630	0.00619
	05/24/2017	0.00267	<0.00100	<0.000657	<0.000642	0.00267
	09/19/2017	<0.000408	<0.00100	<0.000657	<0.000630	<0.000408
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/29/2018	0.00466	0.000880 J	<0.000657	<0.000630	0.00554
	06/19/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	09/19/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/19/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/20/2019	0.00519	<0.0005	0.000570	<0.0005	0.00576
	06/26/2019	0.000470	0.000400	<0.000657	<0.00063	0.000870
	09/23/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/11/2019	0.00160	0.000380	0.00105	<0.000630	0.00303

Notes:

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

Analyte concentration exceeds the standard for:

NMOCD - Groundwater

Table 3 - Groundwater Analytical - Historical - PAH Supplement
Hobbs Junction Main Line
Hobbs, NM
SRS#: 2003-00017

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)	Dibenzo(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-21	03/09/2016	<0.0000410	<0.0000718	<0.0000396	<0.0000890	<0.0000516	<0.0000877	<0.0000641	<0.0000693	<0.000100	<0.0000694	0.000199 J	<0.0000788	<0.0000973	<0.0000663	0.000362	<0.0000637	<0.0000512
	03/29/2018	0.0000263 J	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	0.000317	<0.0000090	0.000182	<0.0000049	0.00143	0.000135	<0.0000092
	03/20/2019	0.0000454	<0.0000072	<0.0000075	<0.0000063	<0.0000095	<0.0000090	<0.0000079	<0.0000077	<0.0000087	<0.0000049	0.000453	<0.0000089	0.000270	<0.0000049	0.00111	0.000178	<0.0000091
MW-22	03/09/2016	<0.0000335	<0.0000587	<0.0000324	<0.0000728	<0.0000422	<0.0000717	<0.0000524	<0.0000567	<0.0000819	<0.0000568	<0.0000613	<0.0000644	<0.0000796	<0.0000542	0.000138 J	<0.0000521	<0.0000419
	03/29/2018	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	0.0000630	<0.0000090	<0.0000055	<0.0000049	0.000285 J	<0.0000055	<0.0000092
	03/20/2019	0.0000462	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	0.0000720	<0.0000090	<0.0000055	<0.0000049	0.000143	<0.0000055	<0.0000092
MW-28	03/09/2016	<0.0000373	<0.0000653	<0.0000361	<0.0000810	<0.0000470	<0.0000798	<0.0000583	<0.0000630	<0.0000912	<0.0000632	<0.0000682	<0.0000717	<0.0000886	<0.0000604	<0.0000737	<0.0000580	<0.0000466
	03/29/2018	<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	0.000128 J	<0.0000055	<0.0000092
	03/20/2019	<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-31	03/09/2016	<0.0000361	<0.0000632	<0.0000349	<0.0000784	<0.0000454	<0.0000772	<0.0000564	<0.0000610	<0.0000882	<0.0000611	<0.0000660	<0.0000694	<0.0000856	<0.0000584	<0.0000713	<0.0000561	<0.0000451
	03/29/2018	<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	0.0000973 J	<0.0000055	<0.0000092
	03/20/2019	<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-32	03/09/2016	<0.0000426	<0.0000745	<0.0000412	<0.0000924	<0.0000536	<0.0000910	<0.0000665	<0.0000719	<0.000104	<0.0000720	<0.0000778	<0.0000818	<0.000101	<0.0000688	<0.0000841	<0.0000662	<0.0000532
	03/29/2018	<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
	03/20/2019	<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	0.0000671	<0.0000056	<0.0000093
MW-33	03/09/2016	<0.0000330	<0.0000578	<0.0000319	<0.0000717	<0.0000416	<0.0000706	<0.0000516	<0.0000558	<0.0000807	<0.0000559	<0.0000604	<0.0000635	<0.0000784	<0.0000534	<0.0000653	<0.0000513	<0.0000413
	03/29/2018	<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	0.0000980 J	<0.0000055	<0.0000092
	03/20/2019	<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

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 618401

for

Talon/LPE Co.

Project Manager: David Adkins

Hobbs Junction

700376.052.11

03.28.2019

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)



03.28.2019

Project Manager: **David Adkins**

Talon/LPE Co.

921 N Bivins St

Amarillo, TX 79107

Reference: XENCO Report No(s): **618401**

Hobbs Junction

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) 618401. 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. 618401 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,

A handwritten signature in black ink that reads 'Wendy Walfoort'. The signature is written in a cursive, flowing style.

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 618401

Talon/LPE Co., Amarillo, TX

Hobbs Junction

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-7	W	03.19.2019 15:20		618401-001
MW-13	W	03.19.2019 15:24		618401-002
MW-18	W	03.19.2019 16:00		618401-003
MW-19	W	03.19.2019 16:20		618401-004
MW-23	W	03.20.2019 10:45		618401-005
MW-24	W	03.20.2019 11:10		618401-006
MW-32	W	03.20.2019 11:20		618401-007
MW-22	W	03.20.2019 12:00		618401-008
MW-21	W	03.20.2019 12:15		618401-009
MW-25	W	03.20.2019 12:50		618401-010
MW-31	W	03.20.2019 13:20		618401-011
MW-33	W	03.20.2019 14:10		618401-012
MW-28	W	03.20.2019 14:30		618401-013



CASE NARRATIVE

Client Name: Talon/LPE Co.

Project Name: Hobbs Junction

Project ID: 700376.052.11
Work Order Number(s): 618401

Report Date: 03.28.2019
Date Received: 03.21.2019

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:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-7**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-001

Date Collected: 03.19.2019 15:20

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083590

Date Prep: 03.26.2019 19:00

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674439

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	03.27.2019 04:39	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.27.2019 04:39	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	03.27.2019 04:39	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	03.27.2019 04:39	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	03.27.2019 04:39	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	03.27.2019 04:39	U	
Total BTEX		<0.000500		0.000500	mg/L	03.27.2019 04:39	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	93	75 - 131	%		
1,2-Dichloroethane-D4	102	63 - 144	%		
Toluene-D8	106	80 - 117	%		

Sample Id: **MW-13**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-002

Date Collected: 03.19.2019 15:24

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083590

Date Prep: 03.26.2019 19:00

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674439

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	03.27.2019 03:45	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.27.2019 03:45	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	03.27.2019 03:45	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	03.27.2019 03:45	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	03.27.2019 03:45	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	03.27.2019 03:45	U	
Total BTEX		<0.000500		0.000500	mg/L	03.27.2019 03:45	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	96	75 - 131	%		
1,2-Dichloroethane-D4	101	63 - 144	%		
Toluene-D8	104	80 - 117	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-18**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-003

Date Collected: 03.19.2019 16:00

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083590

Date Prep: 03.26.2019 19:00

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674439

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	03.27.2019 04:57	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.27.2019 04:57	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	03.27.2019 04:57	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	03.27.2019 04:57	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	03.27.2019 04:57	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	03.27.2019 04:57	U	
Total BTEX		<0.000500		0.000500	mg/L	03.27.2019 04:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	96	75 - 131	%		
1,2-Dichloroethane-D4	100	63 - 144	%		
Toluene-D8	108	80 - 117	%		

Sample Id: **MW-19**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-004

Date Collected: 03.19.2019 16:20

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083590

Date Prep: 03.26.2019 19:00

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674439

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00387	0.00100	0.000500	mg/L	03.27.2019 08:32		1
Toluene	108-88-3	0.00208	0.00100	0.000500	mg/L	03.27.2019 08:32		1
Ethylbenzene	100-41-4	0.290	0.0200	0.0100	mg/L	03.27.2019 08:50	D	20
m,p-Xylenes	179601-23-1	0.218	0.00200	0.00100	mg/L	03.27.2019 08:32		1
o-Xylene	95-47-6	0.0631	0.00100	0.000500	mg/L	03.27.2019 08:32		1
Total Xylenes	1330-20-7	0.281		0.000500	mg/L	03.27.2019 08:32		
Total BTEX		0.577		0.000500	mg/L	03.27.2019 08:50		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	97	75 - 131	%		
1,2-Dichloroethane-D4	98	63 - 144	%		
Toluene-D8	94	80 - 117	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-23**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-005

Date Collected: 03.20.2019 10:45

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083491

Date Prep: 03.26.2019 09:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674395

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	03.26.2019 15:56	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.26.2019 15:56	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	03.26.2019 15:56	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	03.26.2019 15:56	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	03.26.2019 15:56	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	03.26.2019 15:56	U	
Total BTEX		<0.000500		0.000500	mg/L	03.26.2019 15:56	U	

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

Sample Id: **MW-24**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-006

Date Collected: 03.20.2019 11:10

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083491

Date Prep: 03.26.2019 09:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674395

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	03.26.2019 14:10	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.26.2019 14:10	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	03.26.2019 14:10	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	03.26.2019 14:10	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	03.26.2019 14:10	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	03.26.2019 14:10	U	
Total BTEX		<0.000500		0.000500	mg/L	03.26.2019 14:10	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	94	75 - 131	%		
1,2-Dichloroethane-D4	97	63 - 144	%		
Toluene-D8	101	80 - 117	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-32**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-007

Date Collected: 03.20.2019 11:20

Date Received: 03.21.2019 11:30

Analytical Method: PAHs by 8270D SIM

Prep Method: 3510C

Analyst: EKL

% Moist:

Tech: EKL

Seq Number: 3083466

Date Prep: 03.26.2019 08:33

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674277

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000505	0.00000412	mg/L	03.26.2019 15:07	U	1
Acenaphthylene	208-96-8	<0.00000740	0.0000505	0.00000738	mg/L	03.26.2019 15:07	U	1
Anthracene	120-12-7	<0.00000770	0.0000505	0.00000765	mg/L	03.26.2019 15:07	U	1
Benzo(a)anthracene	56-55-3	<0.00000640	0.0000505	0.00000638	mg/L	03.26.2019 15:07	U	1
Benzo(a)pyrene	50-32-8	<0.00000970	0.0000505	0.00000965	mg/L	03.26.2019 15:07	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000920	0.0000505	0.00000916	mg/L	03.26.2019 15:07	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000505	0.00000804	mg/L	03.26.2019 15:07	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000790	0.0000505	0.00000787	mg/L	03.26.2019 15:07	U	1
Chrysene	218-01-9	<0.00000890	0.0000505	0.00000889	mg/L	03.26.2019 15:07	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000505	0.00000500	mg/L	03.26.2019 15:07	U	1
Dibenzofuran	132-64-9	<0.00000540	0.0000505	0.00000536	mg/L	03.26.2019 15:07	U	1
Fluoranthene	206-44-0	<0.00000910	0.0000505	0.00000905	mg/L	03.26.2019 15:07	U	1
Fluorene	86-73-7	<0.00000550	0.0000505	0.00000551	mg/L	03.26.2019 15:07	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000505	0.00000500	mg/L	03.26.2019 15:07	U	1
Naphthalene	91-20-3	0.0000671	0.0000505	0.00000455	mg/L	03.26.2019 15:07	J	1
Phenanthrene	85-01-8	<0.00000560	0.0000505	0.00000556	mg/L	03.26.2019 15:07	U	1
Pyrene	129-00-0	<0.00000930	0.0000505	0.00000929	mg/L	03.26.2019 15:07	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	79	41 - 128	%		
2-Fluorobiphenyl	77	55 - 135	%		
Terphenyl-D14	84	54 - 131	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-32**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-007

Date Collected: 03.20.2019 11:20

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083491

Date Prep: 03.26.2019 09:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674395

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	03.26.2019 16:14	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.26.2019 16:14	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	03.26.2019 16:14	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	03.26.2019 16:14	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	03.26.2019 16:14	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	03.26.2019 16:14	U	
Total BTEX		<0.000500		0.000500	mg/L	03.26.2019 16:14	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	96	75 - 131	%		
1,2-Dichloroethane-D4	98	63 - 144	%		
Toluene-D8	100	80 - 117	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-22**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-008

Date Collected: 03.20.2019 12:00

Date Received: 03.21.2019 11:30

Analytical Method: PAHs by 8270D SIM

Prep Method: 3510C

Analyst: EKL

% Moist:

Tech: EKL

Seq Number: 3083466

Date Prep: 03.26.2019 08:36

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674277

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	0.0000462	0.0000500	0.00000408	mg/L	03.26.2019 15:25	J	1
Acenaphthylene	208-96-8	<0.00000730	0.0000500	0.00000731	mg/L	03.26.2019 15:25	U	1
Anthracene	120-12-7	<0.00000760	0.0000500	0.00000757	mg/L	03.26.2019 15:25	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000500	0.00000632	mg/L	03.26.2019 15:25	U	1
Benzo(a)pyrene	50-32-8	<0.00000960	0.0000500	0.00000955	mg/L	03.26.2019 15:25	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000910	0.0000500	0.00000907	mg/L	03.26.2019 15:25	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000500	0.00000796	mg/L	03.26.2019 15:25	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000780	0.0000500	0.00000779	mg/L	03.26.2019 15:25	U	1
Chrysene	218-01-9	<0.00000880	0.0000500	0.00000880	mg/L	03.26.2019 15:25	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000500	0.00000495	mg/L	03.26.2019 15:25	U	1
Dibenzofuran	132-64-9	0.0000720	0.0000500	0.00000530	mg/L	03.26.2019 15:25		1
Fluoranthene	206-44-0	<0.00000900	0.0000500	0.00000896	mg/L	03.26.2019 15:25	U	1
Fluorene	86-73-7	<0.00000550	0.0000500	0.00000546	mg/L	03.26.2019 15:25	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000500	0.00000495	mg/L	03.26.2019 15:25	U	1
Naphthalene	91-20-3	0.000143	0.000500	0.00000451	mg/L	03.26.2019 15:25	J	1
Phenanthrene	85-01-8	<0.00000550	0.0000500	0.00000550	mg/L	03.26.2019 15:25	U	1
Pyrene	129-00-0	<0.00000920	0.0000500	0.00000920	mg/L	03.26.2019 15:25	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	80	41 - 128	%		
2-Fluorobiphenyl	78	55 - 135	%		
Terphenyl-D14	83	54 - 131	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-22**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-008

Date Collected: 03.20.2019 12:00

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083590

Date Prep: 03.26.2019 19:00

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674439

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00136	0.00100	0.000500	mg/L	03.27.2019 05:33		1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.27.2019 05:33	U	1
Ethylbenzene	100-41-4	0.00323	0.00100	0.000500	mg/L	03.27.2019 05:33		1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	03.27.2019 05:33	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	03.27.2019 05:33	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	03.27.2019 05:33	U	
Total BTEX		0.00459		0.000500	mg/L	03.27.2019 05:33		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	94	75 - 131	%		
1,2-Dichloroethane-D4	98	63 - 144	%		
Toluene-D8	104	80 - 117	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-21**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-009

Date Collected: 03.20.2019 12:15

Date Received: 03.21.2019 11:30

Analytical Method: PAHs by 8270D SIM

Prep Method: 3510C

Analyst: EKL

% Moist:

Tech: EKL

Seq Number: 3083466

Date Prep: 03.26.2019 08:39

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674277

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	0.0000454	0.0000495	0.00000404	mg/L	03.26.2019 15:42	J	1
Acenaphthylene	208-96-8	<0.00000720	0.0000495	0.00000723	mg/L	03.26.2019 15:42	U	1
Anthracene	120-12-7	<0.00000750	0.0000495	0.00000750	mg/L	03.26.2019 15:42	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000495	0.00000626	mg/L	03.26.2019 15:42	U	1
Benzo(a)pyrene	50-32-8	<0.00000950	0.0000495	0.00000946	mg/L	03.26.2019 15:42	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000900	0.0000495	0.00000898	mg/L	03.26.2019 15:42	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000790	0.0000495	0.00000788	mg/L	03.26.2019 15:42	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000770	0.0000495	0.00000772	mg/L	03.26.2019 15:42	U	1
Chrysene	218-01-9	<0.00000870	0.0000495	0.00000872	mg/L	03.26.2019 15:42	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000490	0.0000495	0.00000490	mg/L	03.26.2019 15:42	U	1
Dibenzofuran	132-64-9	0.000453	0.0000495	0.00000525	mg/L	03.26.2019 15:42		1
Fluoranthene	206-44-0	<0.00000890	0.0000495	0.00000888	mg/L	03.26.2019 15:42	U	1
Fluorene	86-73-7	0.000270	0.0000495	0.00000540	mg/L	03.26.2019 15:42		1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000490	0.0000495	0.00000490	mg/L	03.26.2019 15:42	U	1
Naphthalene	91-20-3	0.00111	0.000495	0.00000446	mg/L	03.26.2019 15:42		1
Phenanthrene	85-01-8	0.000178	0.0000495	0.00000545	mg/L	03.26.2019 15:42		1
Pyrene	129-00-0	<0.00000910	0.0000495	0.00000911	mg/L	03.26.2019 15:42	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	73	41 - 128	%		
2-Fluorobiphenyl	73	55 - 135	%		
Terphenyl-D14	76	54 - 131	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-21**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-009

Date Collected: 03.20.2019 12:15

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083590

Date Prep: 03.26.2019 19:00

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674439

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	1.22	0.0200	0.0100	mg/L	03.27.2019 09:26	D	20
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.27.2019 09:08	U	1
Ethylbenzene	100-41-4	0.185	0.0200	0.0100	mg/L	03.27.2019 09:26	D	20
m,p-Xylenes	179601-23-1	0.0298	0.00200	0.00100	mg/L	03.27.2019 09:08		1
o-Xylene	95-47-6	0.00372	0.00100	0.000500	mg/L	03.27.2019 09:08		1
Total Xylenes	1330-20-7	0.0335		0.000500	mg/L	03.27.2019 09:08		
Total BTEX		1.44		0.000500	mg/L	03.27.2019 09:26		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	94	75 - 131	%		
1,2-Dichloroethane-D4	84	63 - 144	%		
Toluene-D8	104	80 - 117	%		

Sample Id: **MW-25**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-010

Date Collected: 03.20.2019 12:50

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083590

Date Prep: 03.26.2019 19:00

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674439

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	2.45	0.0250	0.0125	mg/L	03.27.2019 10:02	D	25
Toluene	108-88-3	0.000820	0.00100	0.000500	mg/L	03.27.2019 09:44	J	1
Ethylbenzene	100-41-4	0.397	0.0250	0.0125	mg/L	03.27.2019 10:02	D	25
m,p-Xylenes	179601-23-1	0.236	0.00200	0.00100	mg/L	03.27.2019 09:44		1
o-Xylene	95-47-6	0.0173	0.00100	0.000500	mg/L	03.27.2019 09:44		1
Total Xylenes	1330-20-7	0.253		0.000500	mg/L	03.27.2019 09:44		
Total BTEX		3.10		0.000500	mg/L	03.27.2019 10:02		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	93	75 - 131	%		
1,2-Dichloroethane-D4	76	63 - 144	%		
Toluene-D8	102	80 - 117	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-31**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-011

Date Collected: 03.20.2019 13:20

Date Received: 03.21.2019 11:30

Analytical Method: PAHs by 8270D SIM

Prep Method: 3510C

Analyst: EKL

% Moist:

Tech: EKL

Seq Number: 3083466

Date Prep: 03.26.2019 08:42

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674277

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000500	0.00000408	mg/L	03.26.2019 16:18	U	1
Acenaphthylene	208-96-8	<0.00000730	0.0000500	0.00000731	mg/L	03.26.2019 16:18	U	1
Anthracene	120-12-7	<0.00000760	0.0000500	0.00000757	mg/L	03.26.2019 16:18	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000500	0.00000632	mg/L	03.26.2019 16:18	U	1
Benzo(a)pyrene	50-32-8	<0.00000960	0.0000500	0.00000955	mg/L	03.26.2019 16:18	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000910	0.0000500	0.00000907	mg/L	03.26.2019 16:18	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000500	0.00000796	mg/L	03.26.2019 16:18	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000780	0.0000500	0.00000779	mg/L	03.26.2019 16:18	U	1
Chrysene	218-01-9	<0.00000880	0.0000500	0.00000880	mg/L	03.26.2019 16:18	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000500	0.00000495	mg/L	03.26.2019 16:18	U	1
Dibenzofuran	132-64-9	<0.00000530	0.0000500	0.00000530	mg/L	03.26.2019 16:18	U	1
Fluoranthene	206-44-0	<0.00000900	0.0000500	0.00000896	mg/L	03.26.2019 16:18	U	1
Fluorene	86-73-7	<0.00000550	0.0000500	0.00000546	mg/L	03.26.2019 16:18	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000500	0.00000495	mg/L	03.26.2019 16:18	U	1
Naphthalene	91-20-3	<0.00000450	0.0000500	0.00000451	mg/L	03.26.2019 16:18	U	1
Phenanthrene	85-01-8	<0.00000550	0.0000500	0.00000550	mg/L	03.26.2019 16:18	U	1
Pyrene	129-00-0	<0.00000920	0.0000500	0.00000920	mg/L	03.26.2019 16:18	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	70	41 - 128	%		
2-Fluorobiphenyl	68	55 - 135	%		
Terphenyl-D14	81	54 - 131	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-31**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-011

Date Collected: 03.20.2019 13:20

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083491

Date Prep: 03.26.2019 09:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674395

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.0109	0.00100	0.000500	mg/L	03.26.2019 16:32		1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.26.2019 16:32	U	1
Ethylbenzene	100-41-4	0.00103	0.00100	0.000500	mg/L	03.26.2019 16:32		1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	03.26.2019 16:32	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	03.26.2019 16:32	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	03.26.2019 16:32	U	
Total BTEX		0.0119		0.000500	mg/L	03.26.2019 16:32		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	94	75 - 131	%		
1,2-Dichloroethane-D4	100	63 - 144	%		
Toluene-D8	110	80 - 117	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-33**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-012

Date Collected: 03.20.2019 14:10

Date Received: 03.21.2019 11:30

Analytical Method: PAHs by 8270D SIM

Prep Method: 3510C

Analyst: EKL

% Moist:

Tech: EKL

Seq Number: 3083466

Date Prep: 03.26.2019 08:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674277

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000500	0.00000408	mg/L	03.26.2019 16:36	U	1
Acenaphthylene	208-96-8	<0.00000730	0.0000500	0.00000731	mg/L	03.26.2019 16:36	U	1
Anthracene	120-12-7	<0.00000760	0.0000500	0.00000757	mg/L	03.26.2019 16:36	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000500	0.00000632	mg/L	03.26.2019 16:36	U	1
Benzo(a)pyrene	50-32-8	<0.00000960	0.0000500	0.00000955	mg/L	03.26.2019 16:36	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000910	0.0000500	0.00000907	mg/L	03.26.2019 16:36	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000500	0.00000796	mg/L	03.26.2019 16:36	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000780	0.0000500	0.00000779	mg/L	03.26.2019 16:36	U	1
Chrysene	218-01-9	<0.00000880	0.0000500	0.00000880	mg/L	03.26.2019 16:36	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000500	0.00000495	mg/L	03.26.2019 16:36	U	1
Dibenzofuran	132-64-9	<0.00000530	0.0000500	0.00000530	mg/L	03.26.2019 16:36	U	1
Fluoranthene	206-44-0	<0.00000900	0.0000500	0.00000896	mg/L	03.26.2019 16:36	U	1
Fluorene	86-73-7	<0.00000550	0.0000500	0.00000546	mg/L	03.26.2019 16:36	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000500	0.00000495	mg/L	03.26.2019 16:36	U	1
Naphthalene	91-20-3	<0.00000450	0.0000500	0.00000451	mg/L	03.26.2019 16:36	U	1
Phenanthrene	85-01-8	<0.00000550	0.0000500	0.00000550	mg/L	03.26.2019 16:36	U	1
Pyrene	129-00-0	<0.00000920	0.0000500	0.00000920	mg/L	03.26.2019 16:36	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	75	41 - 128	%		
2-Fluorobiphenyl	75	55 - 135	%		
Terphenyl-D14	82	54 - 131	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-33**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-012

Date Collected: 03.20.2019 14:10

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083491

Date Prep: 03.26.2019 09:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674395

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00519	0.00100	0.000500	mg/L	03.26.2019 16:50		1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.26.2019 16:50	U	1
Ethylbenzene	100-41-4	0.000570	0.00100	0.000500	mg/L	03.26.2019 16:50	J	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	03.26.2019 16:50	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	03.26.2019 16:50	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	03.26.2019 16:50	U	
Total BTEX		0.00576		0.000500	mg/L	03.26.2019 16:50		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	97	75 - 131	%		
1,2-Dichloroethane-D4	98	63 - 144	%		
Toluene-D8	102	80 - 117	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-28**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-013

Date Collected: 03.20.2019 14:30

Date Received: 03.21.2019 11:30

Analytical Method: PAHs by 8270D SIM

Prep Method: 3510C

Analyst: EKL

% Moist:

Tech: EKL

Seq Number: 3083466

Date Prep: 03.26.2019 08:48

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674277

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000500	0.00000408	mg/L	03.26.2019 16:54	U	1
Acenaphthylene	208-96-8	<0.00000730	0.0000500	0.00000731	mg/L	03.26.2019 16:54	U	1
Anthracene	120-12-7	<0.00000760	0.0000500	0.00000757	mg/L	03.26.2019 16:54	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000500	0.00000632	mg/L	03.26.2019 16:54	U	1
Benzo(a)pyrene	50-32-8	<0.00000960	0.0000500	0.00000955	mg/L	03.26.2019 16:54	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000910	0.0000500	0.00000907	mg/L	03.26.2019 16:54	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000500	0.00000796	mg/L	03.26.2019 16:54	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000780	0.0000500	0.00000779	mg/L	03.26.2019 16:54	U	1
Chrysene	218-01-9	<0.00000880	0.0000500	0.00000880	mg/L	03.26.2019 16:54	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000500	0.00000495	mg/L	03.26.2019 16:54	U	1
Dibenzofuran	132-64-9	<0.00000530	0.0000500	0.00000530	mg/L	03.26.2019 16:54	U	1
Fluoranthene	206-44-0	<0.00000900	0.0000500	0.00000896	mg/L	03.26.2019 16:54	U	1
Fluorene	86-73-7	<0.00000550	0.0000500	0.00000546	mg/L	03.26.2019 16:54	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000500	0.00000495	mg/L	03.26.2019 16:54	U	1
Naphthalene	91-20-3	<0.00000450	0.0000500	0.00000451	mg/L	03.26.2019 16:54	U	1
Phenanthrene	85-01-8	<0.00000550	0.0000500	0.00000550	mg/L	03.26.2019 16:54	U	1
Pyrene	129-00-0	<0.00000920	0.0000500	0.00000920	mg/L	03.26.2019 16:54	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	83	41 - 128	%		
2-Fluorobiphenyl	82	55 - 135	%		
Terphenyl-D14	84	54 - 131	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: **MW-28**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 618401-013

Date Collected: 03.20.2019 14:30

Date Received: 03.21.2019 11:30

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083491

Date Prep: 03.26.2019 09:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674395

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00496	0.00100	0.000500	mg/L	03.26.2019 17:08		1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.26.2019 17:08	U	1
Ethylbenzene	100-41-4	0.000760	0.00100	0.000500	mg/L	03.26.2019 17:08	J	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	03.26.2019 17:08	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	03.26.2019 17:08	U	1
Total Xylenes	1330-20-7	<0.000500		0.000500	mg/L	03.26.2019 17:08	U	
Total BTEX		0.00572		0.000500	mg/L	03.26.2019 17:08		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	96	75 - 131	%		
1,2-Dichloroethane-D4	98	63 - 144	%		
Toluene-D8	105	80 - 117	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: 7674277-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7674277-1-BLK

Date Collected:

Date Received:

Analytical Method: PAHs by 8270D SIM

Prep Method: 3510C

Analyst: EKL

% Moist:

Tech: EKL

Seq Number: 3083466

Date Prep: 03.25.2019 14:30

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674277

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.00000410	0.0000500	0.00000408	mg/L	03.25.2019 17:56	U	1
Acenaphthylene	208-96-8	<0.00000730	0.0000500	0.00000731	mg/L	03.25.2019 17:56	U	1
Anthracene	120-12-7	<0.00000760	0.0000500	0.00000757	mg/L	03.25.2019 17:56	U	1
Benzo(a)anthracene	56-55-3	<0.00000630	0.0000500	0.00000632	mg/L	03.25.2019 17:56	U	1
Benzo(a)pyrene	50-32-8	<0.00000960	0.0000500	0.00000955	mg/L	03.25.2019 17:56	U	1
Benzo(b)fluoranthene	205-99-2	<0.00000910	0.0000500	0.00000907	mg/L	03.25.2019 17:56	U	1
Benzo(g,h,i)perylene	191-24-2	<0.00000800	0.0000500	0.00000796	mg/L	03.25.2019 17:56	U	1
Benzo(k)fluoranthene	207-08-9	<0.00000780	0.0000500	0.00000779	mg/L	03.25.2019 17:56	U	1
Chrysene	218-01-9	<0.00000880	0.0000500	0.00000880	mg/L	03.25.2019 17:56	U	1
Dibenz(a,h)anthracene	53-70-3	<0.00000500	0.0000500	0.00000495	mg/L	03.25.2019 17:56	U	1
Dibenzofuran	132-64-9	<0.00000530	0.0000500	0.00000530	mg/L	03.25.2019 17:56	U	1
Fluoranthene	206-44-0	<0.00000900	0.0000500	0.00000896	mg/L	03.25.2019 17:56	U	1
Fluorene	86-73-7	<0.00000550	0.0000500	0.00000546	mg/L	03.25.2019 17:56	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.00000500	0.0000500	0.00000495	mg/L	03.25.2019 17:56	U	1
Naphthalene	91-20-3	<0.00000450	0.0000500	0.00000451	mg/L	03.25.2019 17:56	U	1
Phenanthrene	85-01-8	<0.00000550	0.0000500	0.00000550	mg/L	03.25.2019 17:56	U	1
Pyrene	129-00-0	<0.00000920	0.0000500	0.00000920	mg/L	03.25.2019 17:56	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Nitrobenzene-d5	92	41 - 128	%		
2-Fluorobiphenyl	96	55 - 135	%		
Terphenyl-D14	105	54 - 131	%		



Certificate of Analytical Results

618401

Talon/LPE Co., Amarillo, TX
Hobbs Junction

Sample Id: 7674395-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7674395-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083491

Date Prep: 03.26.2019 09:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674395

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	03.26.2019 13:53	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.26.2019 13:53	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	03.26.2019 13:53	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	03.26.2019 13:53	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	03.26.2019 13:53	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	96	75 - 131	%		
1,2-Dichloroethane-D4	104	63 - 144	%		
Toluene-D8	102	80 - 117	%		

Sample Id: 7674439-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7674439-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by SW 8260B

Prep Method: 5030B

Analyst: KRP

% Moist:

Tech: KRP

Seq Number: 3083590

Date Prep: 03.26.2019 19:00

Subcontractor: SUB: T104704215-19-29

Prep seq: 7674439

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/L	03.27.2019 01:58	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/L	03.27.2019 01:58	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/L	03.27.2019 01:58	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/L	03.27.2019 01:58	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/L	03.27.2019 01:58	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	93	75 - 131	%		
1,2-Dichloroethane-D4	107	63 - 144	%		
Toluene-D8	107	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: Hobbs Junction

Work Orders : 618401

Project ID: 700376.052.11

Lab Batch #: 3083491

Sample: 7674395-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03.26.2019 11:01

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	0.0508	0.0500	102	75-131	
1,2-Dichloroethane-D4	0.0520	0.0500	104	63-144	
Toluene-D8	0.0498	0.0500	100	80-117	

Lab Batch #: 3083491

Sample: 7674395-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03.26.2019 11:28

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	0.0470	0.0500	94	75-131	
1,2-Dichloroethane-D4	0.0464	0.0500	93	63-144	
Toluene-D8	0.0512	0.0500	102	80-117	

Lab Batch #: 3083491

Sample: 618401-006 S / MS

Batch: 1 Matrix: Ground Water

Units: mg/L

Date Analyzed: 03.26.2019 12:22

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	0.0481	0.0500	96	75-131	
1,2-Dichloroethane-D4	0.0491	0.0500	98	63-144	
Toluene-D8	0.0498	0.0500	100	80-117	

Lab Batch #: 3083491

Sample: 7674395-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03.26.2019 13:53

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	0.0478	0.0500	96	75-131	
1,2-Dichloroethane-D4	0.0521	0.0500	104	63-144	
Toluene-D8	0.0508	0.0500	102	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: Hobbs Junction

Work Orders : 618401

Project ID: 700376.052.11

Lab Batch #: 3083590

Sample: 7674439-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03.26.2019 23:55

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	0.0478	0.0500	96	75-131	
1,2-Dichloroethane-D4	0.0516	0.0500	103	63-144	
Toluene-D8	0.0503	0.0500	101	80-117	

Lab Batch #: 3083590

Sample: 7674439-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03.27.2019 00:13

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	0.0479	0.0500	96	75-131	
1,2-Dichloroethane-D4	0.0525	0.0500	105	63-144	
Toluene-D8	0.0510	0.0500	102	80-117	

Lab Batch #: 3083590

Sample: 618401-002 S / MS

Batch: 1 Matrix: Ground Water

Units: mg/L

Date Analyzed: 03.27.2019 01:06

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	0.0467	0.0500	93	75-131	
1,2-Dichloroethane-D4	0.0481	0.0500	96	63-144	
Toluene-D8	0.0522	0.0500	104	80-117	

Lab Batch #: 3083590

Sample: 7674439-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03.27.2019 01:58

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	0.0466	0.0500	93	75-131	
1,2-Dichloroethane-D4	0.0533	0.0500	107	63-144	
Toluene-D8	0.0537	0.0500	107	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: Hobbs Junction

Work Orders : 618401

Project ID: 700376.052.11

Lab Batch #: 3083466

Sample: 7674277-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03.25.2019 17:56

SURROGATE RECOVERY STUDY

PAHs by 8270D SIM Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Nitrobenzene-d5	0.920	1.00	92	41-128	
2-Fluorobiphenyl	0.957	1.00	96	55-135	
Terphenyl-D14	1.05	1.00	105	54-131	

Lab Batch #: 3083466

Sample: 7674277-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03.25.2019 18:14

SURROGATE RECOVERY STUDY

PAHs by 8270D SIM Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Nitrobenzene-d5	0.892	1.00	89	41-128	
2-Fluorobiphenyl	0.936	1.00	94	55-135	
Terphenyl-D14	1.02	1.00	102	54-131	

Lab Batch #: 3083466

Sample: 7674277-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03.25.2019 18:32

SURROGATE RECOVERY STUDY

PAHs by 8270D SIM Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Nitrobenzene-d5	0.907	1.00	91	41-128	
2-Fluorobiphenyl	0.912	1.00	91	55-135	
Terphenyl-D14	1.01	1.00	101	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: Hobbs Junction

Work Order #: 618401

Analyst: KRP

Lab Batch ID: 3083491

Units: mg/L

Date Prepared: 03.26.2019

Sample: 7674395-1-BKS

Batch #: 1

Project ID: 700376.052.11

Date Analyzed: 03.26.2019

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by SW 8260B	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
Analytes											
Benzene	<0.000500	0.0500	0.0494	99	0.0500	0.0483	97	2	66-142	20	
Toluene	<0.000500	0.0500	0.0551	110	0.0500	0.0535	107	3	59-139	20	
Ethylbenzene	<0.000500	0.0500	0.0543	109	0.0500	0.0545	109	0	75-125	20	
m,p-Xylenes	<0.00100	0.100	0.111	111	0.100	0.113	113	2	75-125	20	
o-Xylene	<0.000500	0.0500	0.0544	109	0.0500	0.0549	110	1	75-125	20	

Analyst: KRP

Date Prepared: 03.26.2019

Date Analyzed: 03.26.2019

Lab Batch ID: 3083590

Sample: 7674439-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by SW 8260B	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
Analytes											
Benzene	<0.000500	0.0500	0.0415	83	0.0500	0.0435	87	5	66-142	20	
Toluene	<0.000500	0.0500	0.0456	91	0.0500	0.0486	97	6	59-139	20	
Ethylbenzene	<0.000500	0.0500	0.0466	93	0.0500	0.0487	97	4	75-125	20	
m,p-Xylenes	<0.00100	0.100	0.0945	95	0.100	0.100	100	6	75-125	20	
o-Xylene	<0.000500	0.0500	0.0458	92	0.0500	0.0486	97	6	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: Hobbs Junction

Work Order #: 618401

Analyst: EKL

Lab Batch ID: 3083466

Units: mg/L

Date Prepared: 03.25.2019

Sample: 7674277-1-BKS

Batch #: 1

Project ID: 700376.052.11

Date Analyzed: 03.25.2019

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

PAHs by 8270D SIM	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
Analytes											
Acenaphthene	<0.00000410	0.00100	0.000868	87	0.00100	0.000888	89	2	37-117	25	
Acenaphthylene	<0.00000730	0.00100	0.000864	86	0.00100	0.000878	88	2	37-119	25	
Anthracene	<0.00000760	0.00100	0.000903	90	0.00100	0.000967	97	7	45-121	25	
Benzo(a)anthracene	<0.00000630	0.00100	0.000917	92	0.00100	0.000952	95	4	51-113	25	
Benzo(a)pyrene	<0.00000960	0.00100	0.000929	93	0.00100	0.000960	96	3	45-127	25	
Benzo(b)fluoranthene	<0.00000910	0.00100	0.000951	95	0.00100	0.000983	98	3	56-110	25	
Benzo(g,h,i)perylene	<0.00000800	0.00100	0.000859	86	0.00100	0.000913	91	6	47-122	25	
Benzo(k)fluoranthene	<0.00000780	0.00100	0.000893	89	0.00100	0.000920	92	3	58-123	25	
Chrysene	<0.00000880	0.00100	0.000925	93	0.00100	0.000966	97	4	52-113	25	
Dibenz(a,h)anthracene	<0.00000500	0.00100	0.000915	92	0.00100	0.000960	96	5	48-126	25	
Dibenzofuran	<0.00000530	0.00100	0.000883	88	0.00100	0.000908	91	3	38-118	25	
Fluoranthene	<0.00000900	0.00100	0.000932	93	0.00100	0.000981	98	5	51-124	25	
Fluorene	<0.00000550	0.00100	0.000868	87	0.00100	0.000888	89	2	42-116	25	
Indeno(1,2,3-c,d)Pyrene	<0.00000500	0.00100	0.000907	91	0.00100	0.000953	95	5	48-123	25	
Naphthalene	<0.00000450	0.00100	0.000843	84	0.00100	0.000889	89	5	35-116	25	
Phenanthrene	<0.00000550	0.00100	0.000903	90	0.00100	0.000960	96	6	46-113	25	
Pyrene	<0.00000920	0.00100	0.000964	96	0.00100	0.00100	100	4	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: Hobbs Junction

Work Order #: 618401

Lab Batch #: 3083491

Date Analyzed: 03.26.2019

QC- Sample ID: 618401-006 S

Reporting Units: mg/L

Date Prepared: 03.26.2019

Batch #: 1

Project ID: 700376.052.11

Analyst: KRP

Matrix: Ground Water

MATRIX / MATRIX SPIKE RECOVERY STUDY

BTEX by SW 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	<0.000500	0.0500	0.0486	97	66-142	
Toluene	<0.000500	0.0500	0.0524	105	59-139	
Ethylbenzene	<0.000500	0.0500	0.0550	110	75-125	
m,p-Xylenes	<0.00100	0.100	0.111	111	75-125	
o-Xylene	<0.000500	0.0500	0.0538	108	75-125	

Lab Batch #: 3083590

Date Analyzed: 03.27.2019

QC- Sample ID: 618401-002 S

Reporting Units: mg/L

Date Prepared: 03.26.2019

Batch #: 1

Analyst: KRP

Matrix: Ground Water

MATRIX / MATRIX SPIKE RECOVERY STUDY

BTEX by SW 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	<0.000500	0.0500	0.0434	87	66-142	
Toluene	<0.000500	0.0500	0.0508	102	59-139	
Ethylbenzene	<0.000500	0.0500	0.0520	104	75-125	
m,p-Xylenes	<0.00100	0.100	0.105	105	75-125	
o-Xylene	<0.000500	0.0500	0.0505	101	75-125	

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

Relative Percent Difference [E] = $200 \times (C-A)/(C+B)$

All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit



Work Order No: 102010

Page 1 of 1

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level I ☐ Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	BTEX	PAH
MW-7	GWL	3/19/19	3:20 pm	N/A	3	X	
MW-13		.	3:45 pm		3	X	
MW-18			4:00pm		3	X	
MW-19			4:20pm		3	X	
MW-23		3/20/19	10:45 am		3	X	
MW-24			11:10 am		3	X	
MW-32			11:20am		4	X	X
MW-22			12:00 pm		4	X	X
MW-21			12:15 pm		4	X	X
MW-25			12:50 pm		3	X	

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>M. J. R. R.</i>	<i>Spencer Tandy</i>	3/20/19 4:20	2 <i>Spencer Tandy</i>	<i>B. R. R.</i>	3/21/19 11:30
3			4		
5			6		



Chain of Custody

Work Order No: 218401

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 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:	SRS #4
Phone:	575-616-4022 or 575-746-8905	Email:	dadkins@talonpe.com

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

Project Name:	HOBBS JUNCTION	Turn Around	☒ Routine ☐ Rush
Project Number:	700374.052.11		
P.O. Number:	SRS # 2003-00017	Due Date:	
Sampler's Name:	MICHAEL COLLIER		
SAMPLE RECEIPT			
Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Temperature (°C):	1.4	Thermometer ID	28-2.1
Received Intact:	Yes No	Correction Factor:	
Cooler Custody Seals:	Yes No N/A	Total Containers:	
Sample Custody Seals:	Yes No N/A		
ANALYSIS REQUEST			
Sample Identification	Matrix	Date Sampled	Time Sampled
MW-31	GW	3/20/19	1:20 PM
MW-33			2:10
MW-28			2:30
Number of Containers			
BTEX			
PAH			
Work Order Notes			
TAT starts the day received 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 Ti 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 Ti 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 MW 28	3/20/19	4:20	2 Joanna Fuchs	3/20/19	11:30
3			4		
5			6		



Inter-Office Shipment

Page 1 of 1

IOS Number : **124974**

Date/Time: 03/21/19 11:54

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.: 774768863036

E-Mail: wendy.walfoort@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
618401-001	W	MW-7	03/19/19 15:20	SW8260BTX	BTEX by SW 8260B	03/27/19	04/02/19	WEW	BZ BZME EBZ XYLENES	
618401-002	W	MW-13	03/19/19 15:24	SW8260BTX	BTEX by SW 8260B	03/27/19	04/02/19	WEW	BZ BZME EBZ XYLENES	
618401-003	W	MW-18	03/19/19 16:00	SW8260BTX	BTEX by SW 8260B	03/27/19	04/02/19	WEW	BZ BZME EBZ XYLENES	
618401-004	W	MW-19	03/19/19 16:20	SW8260BTX	BTEX by SW 8260B	03/27/19	04/02/19	WEW	BZ BZME EBZ XYLENES	
618401-005	W	MW-23	03/20/19 10:45	SW8260BTX	BTEX by SW 8260B	03/27/19	04/03/19	WEW	BZ BZME EBZ XYLENES	
618401-006	W	MW-24	03/20/19 11:10	SW8260BTX	BTEX by SW 8260B	03/27/19	04/03/19	WEW	BZ BZME EBZ XYLENES	
618401-007	W	MW-32	03/20/19 11:20	SIM_PAH_D	PAHs by 8270D SIM	03/27/19	03/27/19 11:20	WEW	ACNP ACNPY ANTH BZ/	
618401-007	W	MW-32	03/20/19 11:20	SW8260BTX	BTEX by SW 8260B	03/27/19	04/03/19	WEW	BZ BZME EBZ XYLENES	
618401-008	W	MW-22	03/20/19 12:00	SIM_PAH_D	PAHs by 8270D SIM	03/27/19	03/27/19 12:00	WEW	ACNP ACNPY ANTH BZ/	
618401-008	W	MW-22	03/20/19 12:00	SW8260BTX	BTEX by SW 8260B	03/27/19	04/03/19	WEW	BZ BZME EBZ XYLENES	
618401-009	W	MW-21	03/20/19 12:15	SW8260BTX	BTEX by SW 8260B	03/27/19	04/03/19	WEW	BZ BZME EBZ XYLENES	
618401-009	W	MW-21	03/20/19 12:15	SIM_PAH_D	PAHs by 8270D SIM	03/27/19	03/27/19 12:15	WEW	ACNP ACNPY ANTH BZ/	
618401-010	W	MW-25	03/20/19 12:50	SW8260BTX	BTEX by SW 8260B	03/27/19	04/03/19	WEW	BZ BZME EBZ XYLENES	
618401-011	W	MW-31	03/20/19 13:20	SW8260BTX	BTEX by SW 8260B	03/27/19	04/03/19	WEW	BZ BZME EBZ XYLENES	
618401-011	W	MW-31	03/20/19 13:20	SIM_PAH_D	PAHs by 8270D SIM	03/27/19	03/27/19 13:20	WEW	ACNP ACNPY ANTH BZ/	
618401-012	W	MW-33	03/20/19 14:10	SW8260BTX	BTEX by SW 8260B	03/27/19	04/03/19	WEW	BZ BZME EBZ XYLENES	
618401-012	W	MW-33	03/20/19 14:10	SIM_PAH_D	PAHs by 8270D SIM	03/27/19	03/27/19 14:10	WEW	ACNP ACNPY ANTH BZ/	
618401-013	W	MW-28	03/20/19 14:30	SW8260BTX	BTEX by SW 8260B	03/27/19	04/03/19	WEW	BZ BZME EBZ XYLENES	
618401-013	W	MW-28	03/20/19 14:30	SIM_PAH_D	PAHs by 8270D SIM	03/27/19	03/27/19 14:30	WEW	ACNP ACNPY ANTH BZ/	

Inter Office Shipment or Sample Comments:

Relinquished By:

Brianna Teel

Received By:

Taha Hedib

Date Relinquished: 03/21/2019

Date Received: 03/22/2019 09:20

Cooler Temperature: 4.7



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 124974

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: 03/21/2019 11:54 AM

Received By: Taha Hedib

Date Received: 03/22/2019 09:20 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	4.7
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 *Custody Seals Signed and dated for Containers/coolers	N/A
#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:

Taha Hedib

Date: 03/22/2019



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: Talon/LPE Co.

Date/ Time Received: 03/21/2019 11:30:00 AM

Work Order #: 618401

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)?	1.4
#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?	Yes

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

Analyst: BT

PH Device/Lot#: A032690

Checklist completed by: Brianna Teel
Brianna Teel

Date: 03/21/2019

Checklist reviewed by: Wendy Walfoort
Wendy Walfoort

Date: 03/24/2019

Analytical Report 629372

**for
Talon LPE-Artesia**

Project Manager: David Adkins

Hobbs Inc. Mainline

700376 05211

08-JUL-19

Collected By: Client



**1089 N Canal Street
Carlsbad, NM 88220**

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)

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08-JUL-19

Project Manager: **David Adkins**

Talon LPE-Artesia

408 West Texas St.

Artesia, NM 88210

Reference: XENCO Report No(s): **629372**

Hobbs Jnc. Mainline

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) 629372. 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. 629372 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,

A handwritten signature in black ink that reads 'Jessica Kramer'. The signature is written in a cursive, flowing style.

Jessica Kramer

Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 629372

Talon LPE-Artesia, Artesia, NM

Hobbs Jnc. Mainline

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW 18	W	06-27-19 07:45		629372-001
MW 31	W	06-27-19 08:25		629372-002
MW 24	W	06-27-19 09:00		629372-003
MW 32	W	06-27-19 09:40		629372-004
MW 22	W	06-27-19 10:15		629372-005
MW 21	W	06-27-19 10:40		629372-006
MW 28	W	06-26-19 07:25		629372-007
MW 33	W	06-26-19 08:00		629372-008
MW 7	W	06-26-19 08:45		629372-009
MW 23	W	06-26-19 10:00		629372-010
MW 25	W	06-26-19 14:20		629372-011
MW 13	W	06-26-19 15:00		629372-012



CASE NARRATIVE

Client Name: *Talon LPE-Artesia*

Project Name: *Hobbs Inc. Mainline*

Project ID: 700376 05211
Work Order Number(s): 629372

Report Date: 08-JUL-19
Date Received: 06/27/2019

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:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results

629372



Talon LPE-Artesia, Artesia, NM

Hobbs Inc. Mainline

Sample Id: **MW 18** Matrix: Ground Water Sample Depth:
Lab Sample Id: 629372-001 Date Collected: 06.27.19 07.45 Date Received: 06.27.19 15.00
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: AMB % Moist: Tech: DVM
Seq Number: 3094558 Date Prep: 07.05.19 14.00
Subcontractor: SUB: T104704400-18-16 Prep seq: 7681455

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00126	0.00200	0.000408	mg/L	07.05.19 20:05	J	1
Toluene	108-88-3	0.000490	0.00200	0.000367	mg/L	07.05.19 20:05	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	07.05.19 20:05	U	1
m_p-Xylenes	179601-23-1	0.000770	0.00400	0.000630	mg/L	07.05.19 20:05	J	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	07.05.19 20:05	U	1
Xylenes, Total	1330-20-7	0.000770		0.000630	mg/L	07.05.19 20:05	J	
Total BTEX		0.00252		0.000367	mg/L	07.05.19 20:05		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	109	70 - 130	%		

Sample Id: **MW 31** Matrix: Ground Water Sample Depth:
Lab Sample Id: 629372-002 Date Collected: 06.27.19 08.25 Date Received: 06.27.19 15.00
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: AMB % Moist: Tech: DVM
Seq Number: 3094558 Date Prep: 07.05.19 14.00
Subcontractor: SUB: T104704400-18-16 Prep seq: 7681455

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00107	0.00200	0.000408	mg/L	07.05.19 20:28	J	1
Toluene	108-88-3	0.000630	0.00200	0.000367	mg/L	07.05.19 20:28	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	07.05.19 20:28	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	07.05.19 20:28	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	07.05.19 20:28	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	07.05.19 20:28	U	
Total BTEX		0.00170		0.000367	mg/L	07.05.19 20:28	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	114	70 - 130	%		



Certificate of Analytical Results

629372



Talon LPE-Artesia, Artesia, NM

Hobbs Inc. Mainline

Sample Id: MW 24

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 629372-003

Date Collected: 06.27.19 09.00

Date Received: 06.27.19 15.00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMB

% Moist:

Tech: DVM

Seq Number: 3094558

Date Prep: 07.05.19 14.00

Subcontractor: SUB: T104704400-18-16

Prep seq: 7681455

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000510	0.00200	0.000408	mg/L	07.05.19 20:51	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	07.05.19 20:51	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	07.05.19 20:51	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	07.05.19 20:51	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	07.05.19 20:51	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	07.05.19 20:51	U	
Total BTEX		0.000510		0.000367	mg/L	07.05.19 20:51	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	106	70 - 130	%		

Sample Id: MW 32

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 629372-004

Date Collected: 06.27.19 09.40

Date Received: 06.27.19 15.00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMB

% Moist:

Tech: DVM

Seq Number: 3094558

Date Prep: 07.05.19 14.00

Subcontractor: SUB: T104704400-18-16

Prep seq: 7681455

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	07.05.19 21:14	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	07.05.19 21:14	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	07.05.19 21:14	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	07.05.19 21:14	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	07.05.19 21:14	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	07.05.19 21:14	U	
Total BTEX		<0.000367		0.000367	mg/L	07.05.19 21:14	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	114	70 - 130	%		



Certificate of Analytical Results

629372



Talon LPE-Artesia, Artesia, NM

Hobbs Inc. Mainline

Sample Id: **MW 22** Matrix: Ground Water Sample Depth:
Lab Sample Id: 629372-005 Date Collected: 06.27.19 10.15 Date Received: 06.27.19 15.00
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: AMB % Moist: Tech: DVM
Seq Number: 3094558 Date Prep: 07.05.19 14.00
Subcontractor: SUB: T104704400-18-16 Prep seq: 7681455

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00447	0.00200	0.000408	mg/L	07.05.19 21:37		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	07.05.19 21:37	U	1
Ethylbenzene	100-41-4	0.0225	0.00200	0.000657	mg/L	07.05.19 21:37		1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	07.05.19 21:37	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	07.05.19 21:37	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	07.05.19 21:37	U	
Total BTEX		0.0270		0.000367	mg/L	07.05.19 21:37		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	96	70 - 130	%		
4-Bromofluorobenzene	128	70 - 130	%		

Sample Id: **MW 21** Matrix: Ground Water Sample Depth:
Lab Sample Id: 629372-006 Date Collected: 06.27.19 10.40 Date Received: 06.27.19 15.00
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: AMB % Moist: Tech: DVM
Seq Number: 3094558 Date Prep: 07.05.19 14.00
Subcontractor: SUB: T104704400-18-16 Prep seq: 7681455

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	1.67	0.0100	0.00204	mg/L	07.06.19 01:19		5
Toluene	108-88-3	<0.00184	0.0100	0.00184	mg/L	07.06.19 01:19	U	5
Ethylbenzene	100-41-4	0.517	0.0100	0.00329	mg/L	07.06.19 01:19		5
m_p-Xylenes	179601-23-1	0.0190	0.0200	0.00315	mg/L	07.06.19 01:19	J	5
o-Xylene	95-47-6	<0.00321	0.0100	0.00321	mg/L	07.06.19 01:19	U	5
Xylenes, Total	1330-20-7	0.0190		0.00315	mg/L	07.06.19 01:19		
Total BTEX		2.21		0.00184	mg/L	07.06.19 01:19		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	70 - 130	%		
4-Bromofluorobenzene	121	70 - 130	%		



Certificate of Analytical Results

629372



Talon LPE-Artesia, Artesia, NM

Hobbs Inc. Mainline

Sample Id: **MW 28**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 629372-007

Date Collected: 06.26.19 07.25

Date Received: 06.27.19 15.00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMB

% Moist:

Tech: DVM

Seq Number: 3094558

Date Prep: 07.05.19 14.00

Subcontractor: SUB: T104704400-18-16

Prep seq: 7681455

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000660	0.00200	0.000408	mg/L	07.05.19 22:00	J	1
Toluene	108-88-3	0.000520	0.00200	0.000367	mg/L	07.05.19 22:00	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	07.05.19 22:00	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	07.05.19 22:00	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	07.05.19 22:00	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	07.05.19 22:00	U	
Total BTEX		0.00118		0.000367	mg/L	07.05.19 22:00	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	112	70 - 130	%		

Sample Id: **MW 33**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 629372-008

Date Collected: 06.26.19 08.00

Date Received: 06.27.19 15.00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMB

% Moist:

Tech: DVM

Seq Number: 3094558

Date Prep: 07.05.19 14.00

Subcontractor: SUB: T104704400-18-16

Prep seq: 7681455

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000470	0.00200	0.000408	mg/L	07.05.19 23:47	J	1
Toluene	108-88-3	0.000400	0.00200	0.000367	mg/L	07.05.19 23:47	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	07.05.19 23:47	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	07.05.19 23:47	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	07.05.19 23:47	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	07.05.19 23:47	U	
Total BTEX		0.000870		0.000367	mg/L	07.05.19 23:47	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	89	70 - 130	%		
4-Bromofluorobenzene	106	70 - 130	%		



Certificate of Analytical Results

629372



Talon LPE-Artesia, Artesia, NM

Hobbs Inc. Mainline

Sample Id: **MW 7** Matrix: Ground Water Sample Depth:
Lab Sample Id: 629372-009 Date Collected: 06.26.19 08.45 Date Received: 06.27.19 15.00
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: AMB % Moist: Tech: DVM
Seq Number: 3094558 Date Prep: 07.05.19 14.00
Subcontractor: SUB: T104704400-18-16 Prep seq: 7681455

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000560	0.00200	0.000408	mg/L	07.06.19 00:10	J	1
Toluene	108-88-3	0.000420	0.00200	0.000367	mg/L	07.06.19 00:10	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	07.06.19 00:10	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	07.06.19 00:10	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	07.06.19 00:10	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	07.06.19 00:10	U	
Total BTEX		0.000980		0.000367	mg/L	07.06.19 00:10	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	70 - 130	%		
4-Bromofluorobenzene	117	70 - 130	%		

Sample Id: **MW 23** Matrix: Ground Water Sample Depth:
Lab Sample Id: 629372-010 Date Collected: 06.26.19 10.00 Date Received: 06.27.19 15.00
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: AMB % Moist: Tech: DVM
Seq Number: 3094558 Date Prep: 07.05.19 14.00
Subcontractor: SUB: T104704400-18-16 Prep seq: 7681455

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00130	0.00200	0.000408	mg/L	07.06.19 00:33	J	1
Toluene	108-88-3	0.00100	0.00200	0.000367	mg/L	07.06.19 00:33	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	07.06.19 00:33	U	1
m_p-Xylenes	179601-23-1	0.000760	0.00400	0.000630	mg/L	07.06.19 00:33	J	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	07.06.19 00:33	U	1
Xylenes, Total	1330-20-7	0.000760		0.000630	mg/L	07.06.19 00:33	J	
Total BTEX		0.00306		0.000367	mg/L	07.06.19 00:33		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	92	70 - 130	%		
4-Bromofluorobenzene	117	70 - 130	%		



Certificate of Analytical Results

629372



Talon LPE-Artesia, Artesia, NM

Hobbs Inc. Mainline

Sample Id: **MW 25** Matrix: Ground Water Sample Depth:
Lab Sample Id: 629372-011 Date Collected: 06.26.19 14.20 Date Received: 06.27.19 15.00
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: JHB % Moist: Tech: JHB
Seq Number: 3094562 Date Prep: 07.06.14 00.07
Subcontractor: SUB: T104704400-18-16 Prep seq: 7681469

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	4.67	0.200	0.0408	mg/L	07.07.19 12:35		100
Toluene	108-88-3	<0.0367	0.200	0.0367	mg/L	07.07.19 12:35	U	100
Ethylbenzene	100-41-4	0.776	0.200	0.0657	mg/L	07.07.19 12:35		100
m_p-Xylenes	179601-23-1	0.513	0.400	0.0630	mg/L	07.07.19 12:35		100
o-Xylene	95-47-6	<0.0642	0.200	0.0642	mg/L	07.07.19 12:35	U	100
Xylenes, Total	1330-20-7	0.513		0.0630	mg/L	07.07.19 12:35		
Total BTEX		5.96		0.0367	mg/L	07.07.19 12:35		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	70 - 130	%		
4-Bromofluorobenzene	110	70 - 130	%		

Sample Id: **MW 13** Matrix: Ground Water Sample Depth:
Lab Sample Id: 629372-012 Date Collected: 06.26.19 15.00 Date Received: 06.27.19 15.00
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: AMB % Moist: Tech: DVM
Seq Number: 3094558 Date Prep: 07.05.19 14.00
Subcontractor: SUB: T104704400-18-16 Prep seq: 7681455

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00176	0.00200	0.000408	mg/L	07.06.19 00:56	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	07.06.19 00:56	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	07.06.19 00:56	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	07.06.19 00:56	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	07.06.19 00:56	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	07.06.19 00:56	U	
Total BTEX		0.00176		0.000367	mg/L	07.06.19 00:56	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	92	70 - 130	%		
4-Bromofluorobenzene	117	70 - 130	%		



Certificate of Analytical Results

629372



Talon LPE-Artesia, Artesia, NM

Hobbs Inc. Mainline

Sample Id: **7681455-1-BLK** Matrix: Water Sample Depth:
Lab Sample Id: 7681455-1-BLK Date Collected: Date Received:
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: AMB % Moist: Tech: DVM
Seq Number: 3094558 Date Prep: 07.05.19 14.00
Subcontractor: SUB: T104704400-18-16 Prep seq: 7681455

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	07.05.19 15:12	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	07.05.19 15:12	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	07.05.19 15:12	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	07.05.19 15:12	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	07.05.19 15:12	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	07.05.19 15:12	U	
Total BTEX		<0.000367		0.000367	mg/L	07.05.19 15:12	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	92	70 - 130	%		
4-Bromofluorobenzene	102	70 - 130	%		

Sample Id: **7681469-1-BLK** Matrix: Water Sample Depth:
Lab Sample Id: 7681469-1-BLK Date Collected: Date Received:
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: JHB % Moist: Tech: JHB
Seq Number: 3094562 Date Prep: 07.06.14 00.07
Subcontractor: SUB: T104704400-18-16 Prep seq: 7681469

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	07.07.19 11:03	U	1
Toluene	108-88-3	0.000430	0.00200	0.000367	mg/L	07.07.19 11:03	BJ	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	07.07.19 11:03	U	1
m_p-Xylenes	179601-23-1	0.000700	0.00400	0.000630	mg/L	07.07.19 11:03	BJ	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	07.07.19 11:03	U	1
Xylenes, Total	1330-20-7	0.000700		0.000630	mg/L	07.07.19 11:03	BJ	
Total BTEX		0.00113		0.000367	mg/L	07.07.19 11:03	BJ	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	89	70 - 130	%		
4-Bromofluorobenzene	112	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: Hobbs Inc. Mainline

Work Orders : 629372,

Project ID: 700376 05211

Lab Batch #: 3094558

Sample: 7681455-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 07/05/19 10:49	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0288	0.0300	96	70-130
4-Bromofluorobenzene		0.0304	0.0300	101	70-130

Lab Batch #: 3094558

Sample: 7681455-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 07/05/19 11:12	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0285	0.0300	95	70-130
4-Bromofluorobenzene		0.0315	0.0300	105	70-130

Lab Batch #: 3094558

Sample: 7681455-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 07/05/19 15:12	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0276	0.0300	92	70-130
4-Bromofluorobenzene		0.0307	0.0300	102	70-130

Lab Batch #: 3094558

Sample: 629393-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 07/05/19 16:45	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0286	0.0300	95	70-130
4-Bromofluorobenzene		0.0309	0.0300	103	70-130

Lab Batch #: 3094558

Sample: 629393-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 07/05/19 17:08	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0283	0.0300	94	70-130
4-Bromofluorobenzene		0.0306	0.0300	102	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: Hobbs Inc. Mainline

Work Orders : 629372,

Project ID: 700376 05211

Lab Batch #: 3094562

Sample: 7681469-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 07/07/19 09:00	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0264	0.0300	88	70-130
4-Bromofluorobenzene		0.0341	0.0300	114	70-130

Lab Batch #: 3094562

Sample: 7681469-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 07/07/19 09:23	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0276	0.0300	92	70-130
4-Bromofluorobenzene		0.0323	0.0300	108	70-130

Lab Batch #: 3094562

Sample: 630025-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 07/07/19 09:46	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0277	0.0300	92	70-130
4-Bromofluorobenzene		0.0311	0.0300	104	70-130

Lab Batch #: 3094562

Sample: 630025-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 07/07/19 10:09	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0279	0.0300	93	70-130
4-Bromofluorobenzene		0.0321	0.0300	107	70-130

Lab Batch #: 3094562

Sample: 7681469-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 07/07/19 11:03	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0267	0.0300	89	70-130
4-Bromofluorobenzene		0.0337	0.0300	112	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: Hobbs Inc. Mainline

Work Order #: 629372

Project ID: 700376 05211

Analyst: AMB

Date Prepared: 07/05/2019

Date Analyzed: 07/05/2019

Lab Batch ID: 3094558

Sample: 7681455-1-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	<0.000408	0.100	0.0968	97	0.100	0.0951	95	2	70-130	25	
Toluene	<0.000367	0.100	0.103	103	0.100	0.104	104	1	70-130	25	
Ethylbenzene	<0.000657	0.100	0.110	110	0.100	0.112	112	2	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.218	109	0.200	0.222	111	2	70-130	25	
o-Xylene	<0.000642	0.100	0.104	104	0.100	0.106	106	2	70-130	25	

Analyst: JHB

Date Prepared: 07/06/1914

Date Analyzed: 07/07/2019

Lab Batch ID: 3094562

Sample: 7681469-1-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	<0.000408	0.100	0.0817	82	0.100	0.0926	93	13	70-130	25	
Toluene	0.000430	0.100	0.0995	100	0.100	0.105	105	5	70-130	25	
Ethylbenzene	<0.000657	0.100	0.114	114	0.100	0.115	115	1	70-130	25	
m_p-Xylenes	0.000700	0.200	0.228	114	0.200	0.227	114	0	70-130	25	
o-Xylene	<0.000642	0.100	0.109	109	0.100	0.110	110	1	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: Hobbs Jnc. Mainline

Work Order # : 629372

Project ID: 700376 05211

Lab Batch ID: 3094558

QC- Sample ID: 629393-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 07/05/2019

Date Prepared: 07/05/2019

Analyst: AMB

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	<0.000408	0.100	0.0951	95	0.100	0.0919	92	3	70-130	25	
Toluene	<0.000367	0.100	0.103	103	0.100	0.100	100	3	70-130	25	
Ethylbenzene	<0.000657	0.100	0.111	111	0.100	0.108	108	3	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.219	110	0.200	0.214	107	2	70-130	25	
o-Xylene	<0.000642	0.100	0.105	105	0.100	0.102	102	3	70-130	25	

Lab Batch ID: 3094562

QC- Sample ID: 630025-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 07/07/2019

Date Prepared: 07/06/1914

Analyst: JHB

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	<0.000408	0.100	0.0876	88	0.100	0.0925	93	5	70-130	25	
Toluene	<0.000367	0.100	0.0996	100	0.100	0.105	105	5	70-130	25	
Ethylbenzene	<0.000657	0.100	0.111	111	0.100	0.116	116	4	70-130	25	
m_p-Xylenes	0.000710	0.200	0.215	107	0.200	0.227	113	5	70-130	25	
o-Xylene	<0.000642	0.100	0.101	101	0.100	0.106	106	5	70-130	25	

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

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

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.



Chain of Custody

Work Order No: 629372

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) 794-1298
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 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:	575-616-4022 or 575-746-8905	Email:	dadkins@talonpe.com

Project Name:	Hobbs Jet Marine	Turn Around	☒
Project Number:	2003-05211	Rush:	
P.O. Number:	SRS# 2003-00017	Due Date:	
Sampler's Name:	Bill Riggs		

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

SAMPLE RECEIPT		Temp Blank:	Yes ☐ No ☒	Well Ice:	Yes ☐ No ☒	Thermometer ID	TNM 007
Temperature (°C):	4.2	Received In tact:	Yes ☒ No ☐	Correction Factor:	-0.2	Total Containers:	36
Cooler Custody Seals:	Yes ☐ No ☒						
Sample Custody Seals:	Yes ☐ No ☒						

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTX	PAH	ANALYSIS REQUEST	Work Order Notes
MU 18	GW	6-27-19	745 AM	3	X				TAT starts the day received by the lab, if received by 4:30pm
MU 31	GW	6-27-19	8:35 AM	3	X				Sample Comments
MU 34	GW	6-27-19	9 AM	3	X				EMAIL ANALYTICALS
MU 32	GW	6-27-19	9:40 AM	3	X				Camille Bryant
MU 22	GW	6-27-19	10:15 AM	3	X				
MU 21	GW	6-27-19	10:40 AM	3	X				
MU 28	GW	6-26-19	7:25 AM	3	X				
MU 33	GW	6-26-19	8 AM	3	X				
MU 7	GW	6-26-19	8:45 AM	3	X				
MU 23	GW	6-26-19	10 AM	3	X				

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti 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 Ti 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
Bill Hooper	Camille Bryant	6/27/19 15:00			



Work Order No: 1099377

Work Order No: 629372

Work Order Comments	
Program: UST/PST ☐ PPR ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

[illegible][illegible][illegible]

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	Ti	Sn	U	V	Zn
<i>Circle Method(s) and Metal(s) to be analyzed</i>		TCLP / SPLP 6010:		8RCRA	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	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 <i>Bills</i>	<i>[Signature]</i>	6/27/19 15:00	2		
3			4		
5			6		



Inter-Office Shipment

Page 1 of 1

IOS Number **42518**

Date/Time: 06/28/19 10:07

Created by: Elizabeth McClellan

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

Air Bill No.:

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
629372-001	W	MW 18	06/27/19 07:45	SW8021B	BTEX by EPA 8021	07/04/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629372-002	W	MW 31	06/27/19 08:25	SW8021B	BTEX by EPA 8021	07/04/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629372-003	W	MW 24	06/27/19 09:00	SW8021B	BTEX by EPA 8021	07/04/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629372-004	W	MW 32	06/27/19 09:40	SW8021B	BTEX by EPA 8021	07/04/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629372-005	W	MW 22	06/27/19 10:15	SW8021B	BTEX by EPA 8021	07/04/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629372-006	W	MW 21	06/27/19 10:40	SW8021B	BTEX by EPA 8021	07/04/19	07/11/19	JKR	BR4FBZ BZ BZME EBZ T	
629372-007	W	MW 28	06/26/19 07:25	SW8021B	BTEX by EPA 8021	07/04/19	07/10/19	JKR	BR4FBZ BZ BZME EBZ T	
629372-008	W	MW 33	06/26/19 08:00	SW8021B	BTEX by EPA 8021	07/04/19	07/10/19	JKR	BR4FBZ BZ BZME EBZ T	
629372-009	W	MW 7	06/26/19 08:45	SW8021B	BTEX by EPA 8021	07/04/19	07/10/19	JKR	BR4FBZ BZ BZME EBZ T	
629372-010	W	MW 23	06/26/19 10:00	SW8021B	BTEX by EPA 8021	07/04/19	07/10/19	JKR	BR4FBZ BZ BZME EBZ T	
629372-011	W	MW 25	06/26/19 14:20	SW8021B	BTEX by EPA 8021	07/04/19	07/10/19	JKR	BR4FBZ BZ BZME EBZ T	
629372-012	W	MW 13	06/26/19 15:00	SW8021B	BTEX by EPA 8021	07/04/19	07/10/19	JKR	BR4FBZ BZ BZME EBZ T	

Inter Office Shipment or Sample Comments:

Relinquished By:

Elizabeth McClellan

Date Relinquished: 06/28/2019

Received By:

Brianna Teel

Date Received: 07/01/2019 07:26

Cooler Temperature: 0.6



XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 42518

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sent By: Elizabeth McClellan

Date Sent: 06/28/2019 10:07 AM

Received By: Brianna Teel

Date Received: 07/01/2019 07:26 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 *Custody Seals Signed and dated for Containers/coolers	N/A
#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

Brianna Teel

Date: 07/01/2019



XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In



Client: Talon LPE-Artesia

Date/ Time Received: 06/27/2019 03:00:00 PM

Work Order #: 629372

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)?	4.2
#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 Subbed to Xenco Midland.
#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:


Elizabeth McClellan

Date: 06/27/2019

Checklist reviewed by:


Jessica Kramer

Date: 06/28/2019

Analytical Report 637789

for Talon LPE-Artesia

Project Manager: David Adkins

Hobbs Junction

700376.052.11

30-SEP-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)

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30-SEP-19

Project Manager: **David Adkins**

Talon LPE-Artesia

408 West Texas St.

Artesia, NM 88210

Reference: XENCO Report No(s): **637789**

Hobbs Junction

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) 637789. 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. 637789 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,

A handwritten signature in black ink that reads 'Jessica Kramer'. The signature is written in a cursive, flowing style.

Jessica Kramer

Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 637789

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-28	W	09-23-19 10:20		637789-001
MW-33	W	09-23-19 11:10		637789-002
MW-23	W	09-23-19 11:50		637789-003
MW-32	W	09-23-19 12:25		637789-004
MW-24	W	09-23-19 13:10		637789-005
MW-22	W	09-23-19 13:50		637789-006
MW-21	W	09-23-19 14:20		637789-007
MW-31	W	09-23-19 14:50		637789-008
MW-18	W	09-23-19 15:40		637789-009
MW-13	W	09-23-19 16:05		637789-010
MW-7	W	09-23-19 16:20		637789-011



CASE NARRATIVE

Client Name: Talon LPE-Artesia

Project Name: Hobbs Junction

Project ID: 700376.052.11
Work Order Number(s): 637789

Report Date: 30-SEP-19
Date Received: 09/24/2019

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:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3102570 BTEX by EPA 8021

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 637583-001 S, 637583-001 SD, 637789-006, 637789-007, 637789-008, 637789-009, 637789-001, 637789-003.



Certificate of Analytical Results

637789

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id: **MW-28**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 637789-001

Date Collected: 09.23.19 10.20

Date Received: 09.24.19 08.45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3102570

Date Prep: 09.25.19 10.00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7686822

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.26.19 07:51	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.26.19 07:51	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.26.19 07:51	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.26.19 07:51	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.26.19 07:51	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.26.19 07:51	U	
Total BTEX		<0.000367		0.000367	mg/L	09.26.19 07:51	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	132	70 - 130	%		**

Sample Id: **MW-33**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 637789-002

Date Collected: 09.23.19 11.10

Date Received: 09.24.19 08.45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3102570

Date Prep: 09.25.19 10.00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7686822

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.26.19 08:11	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.26.19 08:11	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.26.19 08:11	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.26.19 08:11	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.26.19 08:11	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.26.19 08:11	U	
Total BTEX		<0.000367		0.000367	mg/L	09.26.19 08:11	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	90	70 - 130	%		
4-Bromofluorobenzene	127	70 - 130	%		



Certificate of Analytical Results

637789

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id: **MW-23** Matrix: Ground Water Sample Depth:
Lab Sample Id: 637789-003 Date Collected: 09.23.19 11.50 Date Received: 09.24.19 08.45
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: KTL % Moist: Tech: KTL
Seq Number: 3102570 Date Prep: 09.25.19 10.00
Subcontractor: SUB: T104704400-19-19 Prep seq: 7686822

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.26.19 08:31	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.26.19 08:31	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.26.19 08:31	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.26.19 08:31	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.26.19 08:31	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.26.19 08:31	U	
Total BTEX		<0.000367		0.000367	mg/L	09.26.19 08:31	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	132	70 - 130	%		**

Sample Id: **MW-32** Matrix: Ground Water Sample Depth:
Lab Sample Id: 637789-004 Date Collected: 09.23.19 12.25 Date Received: 09.24.19 08.45
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: KTL % Moist: Tech: KTL
Seq Number: 3102570 Date Prep: 09.25.19 10.00
Subcontractor: SUB: T104704400-19-19 Prep seq: 7686822

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.26.19 08:51	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.26.19 08:51	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.26.19 08:51	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.26.19 08:51	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.26.19 08:51	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.26.19 08:51	U	
Total BTEX		<0.000367		0.000367	mg/L	09.26.19 08:51	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	90	70 - 130	%		
4-Bromofluorobenzene	126	70 - 130	%		



Certificate of Analytical Results

637789

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id: **MW-24**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 637789-005

Date Collected: 09.23.19 13.10

Date Received: 09.24.19 08.45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3102570

Date Prep: 09.25.19 10.00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7686822

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.26.19 10:10	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.26.19 10:10	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.26.19 10:10	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.26.19 10:10	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.26.19 10:10	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.26.19 10:10	U	
Total BTEX		<0.000367		0.000367	mg/L	09.26.19 10:10	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	88	70 - 130	%		
4-Bromofluorobenzene	123	70 - 130	%		

Sample Id: **MW-22**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 637789-006

Date Collected: 09.23.19 13.50

Date Received: 09.24.19 08.45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3102570

Date Prep: 09.25.19 10.00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7686822

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.0471	0.00200	0.000408	mg/L	09.26.19 10:30		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.26.19 10:30	U	1
Ethylbenzene	100-41-4	0.0507	0.00200	0.000657	mg/L	09.26.19 10:30		1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.26.19 10:30	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.26.19 10:30	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.26.19 10:30	U	
Total BTEX		0.0978		0.000367	mg/L	09.26.19 10:30		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	90	70 - 130	%		
4-Bromofluorobenzene	137	70 - 130	%		**



Certificate of Analytical Results

637789

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id: **MW-21** Matrix: Ground Water Sample Depth:
Lab Sample Id: 637789-007 Date Collected: 09.23.19 14.20 Date Received: 09.24.19 08.45
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: KTL % Moist: Tech: KTL
Seq Number: 3102570 Date Prep: 09.25.19 10.00
Subcontractor: SUB: T104704400-19-19 Prep seq: 7686822

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	7.46	0.0400	0.00816	mg/L	09.28.19 04:28	D	20
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.26.19 10:50	U	1
Ethylbenzene	100-41-4	0.117	0.00200	0.000657	mg/L	09.26.19 10:50		1
m_p-Xylenes	179601-23-1	0.0102	0.00400	0.000630	mg/L	09.26.19 10:50		1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.26.19 10:50	U	1
Xylenes, Total	1330-20-7	0.0102		0.000630	mg/L	09.26.19 10:50		
Total BTEX		7.59		0.000367	mg/L	09.28.19 04:28		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	104	70 - 130	%		
4-Bromofluorobenzene	138	70 - 130	%		**

Sample Id: **MW-31** Matrix: Ground Water Sample Depth:
Lab Sample Id: 637789-008 Date Collected: 09.23.19 14.50 Date Received: 09.24.19 08.45
Analytical Method: BTEX by EPA 8021 Prep Method: 5030B
Analyst: KTL % Moist: Tech: KTL
Seq Number: 3102570 Date Prep: 09.25.19 10.00
Subcontractor: SUB: T104704400-19-19 Prep seq: 7686822

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.26.19 11:11	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.26.19 11:11	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.26.19 11:11	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.26.19 11:11	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.26.19 11:11	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.26.19 11:11	U	
Total BTEX		<0.000367		0.000367	mg/L	09.26.19 11:11	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	93	70 - 130	%		
4-Bromofluorobenzene	133	70 - 130	%		**



Certificate of Analytical Results

637789

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id: **MW-18**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 637789-009

Date Collected: 09.23.19 15.40

Date Received: 09.24.19 08.45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3102570

Date Prep: 09.25.19 10.00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7686822

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.26.19 11:31	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.26.19 11:31	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.26.19 11:31	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.26.19 11:31	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.26.19 11:31	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.26.19 11:31	U	
Total BTEX		<0.000367		0.000367	mg/L	09.26.19 11:31	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	93	70 - 130	%		
4-Bromofluorobenzene	132	70 - 130	%		**

Sample Id: **MW-13**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 637789-010

Date Collected: 09.23.19 16.05

Date Received: 09.24.19 08.45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3102570

Date Prep: 09.25.19 10.00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7686822

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.26.19 11:51	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.26.19 11:51	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.26.19 11:51	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.26.19 11:51	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.26.19 11:51	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.26.19 11:51	U	
Total BTEX		<0.000367		0.000367	mg/L	09.26.19 11:51	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	90	70 - 130	%		
4-Bromofluorobenzene	128	70 - 130	%		



Certificate of Analytical Results

637789

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id: MW-7

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 637789-011

Date Collected: 09.23.19 16.20

Date Received: 09.24.19 08.45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3102570

Date Prep: 09.25.19 10.00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7686822

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.26.19 12:11	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.26.19 12:11	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.26.19 12:11	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.26.19 12:11	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.26.19 12:11	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.26.19 12:11	U	
Total BTEX		<0.000367		0.000367	mg/L	09.26.19 12:11	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	90	70 - 130	%		
4-Bromofluorobenzene	123	70 - 130	%		



Certificate of Analytical Results

637789

Talon LPE-Artesia, Artesia, NM
Hobbs Junction

Sample Id: 7686822-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7686822-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3102570

Date Prep: 09.25.19 10.00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7686822

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.26.19 05:30	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.26.19 05:30	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.26.19 05:30	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.26.19 05:30	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.26.19 05:30	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.26.19 05:30	U	
Total BTEX		<0.000367		0.000367	mg/L	09.26.19 05:30	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	90	70 - 130	%		
4-Bromofluorobenzene	129	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: Hobbs Junction

Work Orders : 637789,

Project ID: 700376.052.11

Lab Batch #: 3102570

Sample: 7686822-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 09/24/19 07:44	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					Flags
1,4-Difluorobenzene		0.0266	0.0300	89	70-130
4-Bromofluorobenzene		0.0378	0.0300	126	70-130

Lab Batch #: 3102570

Sample: 7686822-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 09/24/19 08:04	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					Flags
1,4-Difluorobenzene		0.0273	0.0300	91	70-130
4-Bromofluorobenzene		0.0389	0.0300	130	70-130

Lab Batch #: 3102570

Sample: 637583-001 S / MS

Batch: 1 Matrix: Ground Water

Units: mg/L	Date Analyzed: 09/26/19 04:31	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					Flags
1,4-Difluorobenzene		0.0275	0.0300	92	70-130
4-Bromofluorobenzene		0.0401	0.0300	134	70-130 **

Lab Batch #: 3102570

Sample: 637583-001 SD / MSD

Batch: 1 Matrix: Ground Water

Units: mg/L	Date Analyzed: 09/26/19 04:51	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					Flags
1,4-Difluorobenzene		0.0288	0.0300	96	70-130
4-Bromofluorobenzene		0.0405	0.0300	135	70-130 **

Lab Batch #: 3102570

Sample: 7686822-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L	Date Analyzed: 09/26/19 05:30	SURROGATE RECOVERY STUDY			
BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					Flags
1,4-Difluorobenzene		0.0269	0.0300	90	70-130
4-Bromofluorobenzene		0.0388	0.0300	129	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: Hobbs Junction

Work Order #: 637789

Project ID: 700376.052.11

Analyst: KTL

Date Prepared: 09/25/2019

Date Analyzed: 09/24/2019

Lab Batch ID: 3102570

Sample: 7686822-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021	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
Analytes											
Benzene	<0.000408	0.100	0.0998	100	0.100	0.101	101	1	70-130	25	
Toluene	<0.000367	0.100	0.0965	97	0.100	0.0986	99	2	70-130	25	
Ethylbenzene	<0.000657	0.100	0.114	114	0.100	0.115	115	1	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.238	119	0.200	0.241	121	1	70-130	25	
o-Xylene	<0.000642	0.100	0.113	113	0.100	0.118	118	4	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: Hobbs Junction

Work Order # : 637789

Project ID: 700376.052.11

Lab Batch ID: 3102570

QC- Sample ID: 637583-001 S

Batch #: 1 Matrix: Ground Water

Date Analyzed: 09/26/2019

Date Prepared: 09/25/2019

Analyst: KTL

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	<0.000408	0.100	0.102	102	0.100	0.112	112	9	70-130	25	
Toluene	<0.000367	0.100	0.102	102	0.100	0.109	109	7	70-130	25	
Ethylbenzene	<0.000657	0.100	0.122	122	0.100	0.124	124	2	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.257	129	0.200	0.260	130	1	70-130	25	
o-Xylene	<0.000642	0.100	0.127	127	0.100	0.129	129	2	70-130	25	

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

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

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.



Chain of Custody

Work Order No: 1037-785

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
Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Project Manager:	David Adkins	Bill to: (if different)	Plains All American Pipeline
Company Name:	Talon LPE	Company Name:	Attn: Camille Bryant
Address:	408 W Texas Ave	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575-746-8768	Email:	dadkins@talonlpe.com

Project Name:	Hobbs Junction	Turn Around	☒
Project Number:	700376.052.11	Pres. Code	
Project Location:	Lea County	Rush:	
Sampler's Name:	Brandon Sinclair	Due Date:	
PO #:	700376.052.11	Quote #:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	1.2			Thermometer ID	TNM007	
Received Intact:	Yes	No		Correction Factor:	-0.2	
Cooler Custody Seals:	Yes	No		Total Containers:	33	
Sample Custody Seals:	Yes	No				

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST	Preservative Codes	Sample Comments
MW-28	GW	9-23-19	10:20	N/A	3	BTEX		MeOH: Me	
MW-33								None: NO	
MW-23								HNO3: HN	
MW-32								H2SO4: H2	
MW-24								HCL: HL	
MW-22								NaOH: Na	
MW-21								Zn Acetate+ NaOH: Zn	
MW-31									
MW-18									
MW-13									

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 Ti 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 Ti U

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
Brandon Sinclair	Brandon Sinclair	9/24/19 08:45			



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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 ☐ ABAPT ☐ Other: _____

ANALYSIS REQUEST								Preservative Codes
								MeOH: Me
								None: NO
								HNO ₃ : HN
								H ₂ SO ₄ : H2

HCL: HL NaOH: Na Zn Acetate+ NaOH: Zn	TAT starts the day received by the lab, if received by 4:00pm
--	--

[illegible]

Circle Method(s) and Metal(s) to be analyzed

TCLP / SPLP 6010:	BRCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U
-------------------	-------	--

	1631 / 245.1 / 7470 / 7471 :	Hg
--	------------------------------	----

1631 / 245.1 / 7470 / 7471 : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Barbara Linder</i>	<i>[Signature]</i>	9/24/19 08:45	2		
3			4		
5			6		



Inter-Office Shipment

Page 1 of 1

IOS Number **48650**

Date/Time: 09/24/19 12:14

Created by: Elizabeth McClellan

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

Air Bill No.:

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
637789-001	W	MW-28	09/23/19 10:20	SW8021B	BTEX by EPA 8021	09/30/19	10/07/19	JKR	BR4FBZ BZ BZME EBZ T	
637789-002	W	MW-33	09/23/19 11:10	SW8021B	BTEX by EPA 8021	09/30/19	10/07/19	JKR	BR4FBZ BZ BZME EBZ T	
637789-003	W	MW-23	09/23/19 11:50	SW8021B	BTEX by EPA 8021	09/30/19	10/07/19	JKR	BR4FBZ BZ BZME EBZ T	
637789-004	W	MW-32	09/23/19 12:25	SW8021B	BTEX by EPA 8021	09/30/19	10/07/19	JKR	BR4FBZ BZ BZME EBZ T	
637789-005	W	MW-24	09/23/19 13:10	SW8021B	BTEX by EPA 8021	09/30/19	10/07/19	JKR	BR4FBZ BZ BZME EBZ T	
637789-006	W	MW-22	09/23/19 13:50	SW8021B	BTEX by EPA 8021	09/30/19	10/07/19	JKR	BR4FBZ BZ BZME EBZ T	
637789-007	W	MW-21	09/23/19 14:20	SW8021B	BTEX by EPA 8021	09/30/19	10/07/19	JKR	BR4FBZ BZ BZME EBZ T	
637789-008	W	MW-31	09/23/19 14:50	SW8021B	BTEX by EPA 8021	09/30/19	10/07/19	JKR	BR4FBZ BZ BZME EBZ T	
637789-009	W	MW-18	09/23/19 15:40	SW8021B	BTEX by EPA 8021	09/30/19	10/07/19	JKR	BR4FBZ BZ BZME EBZ T	
637789-010	W	MW-13	09/23/19 16:05	SW8021B	BTEX by EPA 8021	09/30/19	10/07/19	JKR	BR4FBZ BZ BZME EBZ T	
637789-011	W	MW-7	09/23/19 16:20	SW8021B	BTEX by EPA 8021	09/30/19	10/07/19	JKR	BR4FBZ BZ BZME EBZ T	

Inter Office Shipment or Sample Comments:

Relinquished By:

Elizabeth McClellan

Date Relinquished: 09/24/2019

Received By:

Jessica Kramer

Date Received: 09/25/2019 11:45

Cooler Temperature: 2.1



XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 48650

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R

Sent By: Elizabeth McClellan

Date Sent: 09/24/2019 12:14 PM

Received By: Jessica Kramer

Date Received: 09/25/2019 11:45 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.1
#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:

Jessica Kramer

Jessica Kramer

Date: 09/25/2019



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: Talon LPE-Artesia

Date/ Time Received: 09/24/2019 08:45:00 AM

Work Order #: 637789

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)?	1.2
#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 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: 09/24/2019

Checklist reviewed by:


Jessica Kramer

Date: 09/25/2019



Analytical Report 646081

for

Talon LPE-Artesia

Project Manager: David Adkins

Hobbs Junction

700376.032.11

12.17.2019

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: TN102385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



12.17.2019

Project Manager: **David Adkins**

Talon LPE-Artesia

408 West Texas St.

Artesia, NM 88210

Reference: XENCO Report No(s): **646081**

Hobbs Junction

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) 646081. 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. 646081 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,

A handwritten signature in black ink that reads 'Jessica Kramer'. The signature is written in a cursive, flowing style.

Jessica Kramer

Project Assistant

A Small Business and Minority Company

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



Sample Cross Reference 646081

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-13	W	12.11.2019 12:05		646081-001
MW-7	W	12.11.2019 12:25		646081-002
MW-18	W	12.11.2019 12:45		646081-003
MW-31	W	12.11.2019 13:15		646081-004
MW-22	W	12.11.2019 13:40		646081-005
MW-21	W	12.11.2019 14:10		646081-006
MW-24	W	12.11.2019 14:30		646081-007
MW-32	W	12.11.2019 14:55		646081-008
MW-23	W	12.11.2019 15:10		646081-009
MW-28	W	12.11.2019 15:30		646081-010
MW-33	W	12.11.2019 15:50		646081-011



CASE NARRATIVE

Client Name: Talon LPE-Artesia

Project Name: Hobbs Junction

Project ID: 700376.032.11
Work Order Number(s): 646081

Report Date: 12.17.2019
Date Received: 12.12.2019

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:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3110615 BTEX by EPA 8021

Surrogate 1,4-Difluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 646081-006.



Certificate of Analytical Results

646081

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id: **MW-13**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 646081-001

Date Collected: 12.11.2019 12:05

Date Received: 12.12.2019 08:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3110615

Date Prep: 12.16.2019 10:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7692481

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.16.2019 12:01	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.16.2019 12:01	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.16.2019 12:01	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.16.2019 12:01	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.16.2019 12:01	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.16.2019 12:01	U	
Total BTEX		<0.000367		0.000367	mg/L	12.16.2019 12:01	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	108	70 - 130	%		

Sample Id: **MW-7**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 646081-002

Date Collected: 12.11.2019 12:25

Date Received: 12.12.2019 08:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3110615

Date Prep: 12.16.2019 10:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7692481

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.16.2019 12:21	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.16.2019 12:21	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.16.2019 12:21	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.16.2019 12:21	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.16.2019 12:21	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.16.2019 12:21	U	
Total BTEX		<0.000367		0.000367	mg/L	12.16.2019 12:21	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	93	70 - 130	%		
4-Bromofluorobenzene	98	70 - 130	%		



Certificate of Analytical Results

646081

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id: **MW-18**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 646081-003

Date Collected: 12.11.2019 12:45

Date Received: 12.12.2019 08:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3110615

Date Prep: 12.16.2019 10:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7692481

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.16.2019 12:41	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.16.2019 12:41	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.16.2019 12:41	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.16.2019 12:41	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.16.2019 12:41	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.16.2019 12:41	U	
Total BTEX		<0.000367		0.000367	mg/L	12.16.2019 12:41	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	92	70 - 130	%		
4-Bromofluorobenzene	99	70 - 130	%		

Sample Id: **MW-31**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 646081-004

Date Collected: 12.11.2019 13:15

Date Received: 12.12.2019 08:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3110615

Date Prep: 12.16.2019 10:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7692481

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.16.2019 13:02	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.16.2019 13:02	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.16.2019 13:02	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.16.2019 13:02	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.16.2019 13:02	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.16.2019 13:02	U	
Total BTEX		<0.000367		0.000367	mg/L	12.16.2019 13:02	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	99	70 - 130	%		



Certificate of Analytical Results

646081

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id: MW-22

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 646081-005

Date Collected: 12.11.2019 13:40

Date Received: 12.12.2019 08:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3110615

Date Prep: 12.16.2019 10:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7692481

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.0154	0.00200	0.000408	mg/L	12.16.2019 13:22		1
Toluene	108-88-3	0.000500	0.00200	0.000367	mg/L	12.16.2019 13:22	J	1
Ethylbenzene	100-41-4	0.0264	0.00200	0.000657	mg/L	12.16.2019 13:22		1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.16.2019 13:22	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.16.2019 13:22	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.16.2019 13:22	U	
Total BTEX		0.0423		0.000367	mg/L	12.16.2019 13:22		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	70 - 130	%		
4-Bromofluorobenzene	111	70 - 130	%		

Sample Id: MW-21

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 646081-006

Date Collected: 12.11.2019 14:10

Date Received: 12.12.2019 08:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3110615

Date Prep: 12.16.2019 10:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7692481

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	1.45	0.200	0.0408	mg/L	12.16.2019 17:22	D	100
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.16.2019 13:42	U	1
Ethylbenzene	100-41-4	0.126	0.00200	0.000657	mg/L	12.16.2019 13:42		1
m_p-Xylenes	179601-23-1	0.0423	0.00400	0.000630	mg/L	12.16.2019 13:42		1
o-Xylene	95-47-6	0.000670	0.00200	0.000642	mg/L	12.16.2019 13:42	J	1
Xylenes, Total	1330-20-7	0.0430		0.000630	mg/L	12.16.2019 13:42		
Total BTEX		1.62		0.000367	mg/L	12.16.2019 17:22		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	131	70 - 130	%		**
4-Bromofluorobenzene	115	70 - 130	%		



Certificate of Analytical Results

646081

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id: MW-24

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 646081-007

Date Collected: 12.11.2019 14:30

Date Received: 12.12.2019 08:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3110615

Date Prep: 12.16.2019 10:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7692481

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.0178	0.00200	0.000408	mg/L	12.16.2019 17:02		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.16.2019 17:02	U	1
Ethylbenzene	100-41-4	0.00685	0.00200	0.000657	mg/L	12.16.2019 17:02		1
m_p-Xylenes	179601-23-1	0.00217	0.00400	0.000630	mg/L	12.16.2019 17:02	J	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.16.2019 17:02	U	1
Xylenes, Total	1330-20-7	0.00217		0.000630	mg/L	12.16.2019 17:02		
Total BTEX		0.0268		0.000367	mg/L	12.16.2019 17:02		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	96	70 - 130	%		
4-Bromofluorobenzene	102	70 - 130	%		

Sample Id: MW-32

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 646081-008

Date Collected: 12.11.2019 14:55

Date Received: 12.12.2019 08:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3110615

Date Prep: 12.16.2019 10:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7692481

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00538	0.00200	0.000408	mg/L	12.16.2019 14:22		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.16.2019 14:22	U	1
Ethylbenzene	100-41-4	0.00262	0.00200	0.000657	mg/L	12.16.2019 14:22		1
m_p-Xylenes	179601-23-1	0.000900	0.00400	0.000630	mg/L	12.16.2019 14:22	J	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.16.2019 14:22	U	1
Xylenes, Total	1330-20-7	0.000900		0.000630	mg/L	12.16.2019 14:22	J	
Total BTEX		0.00890		0.000367	mg/L	12.16.2019 14:22		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	93	70 - 130	%		
4-Bromofluorobenzene	102	70 - 130	%		



Certificate of Analytical Results

646081

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id: MW-23

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 646081-009

Date Collected: 12.11.2019 15:10

Date Received: 12.12.2019 08:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3110615

Date Prep: 12.16.2019 10:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7692481

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00435	0.00200	0.000408	mg/L	12.16.2019 14:42		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.16.2019 14:42	U	1
Ethylbenzene	100-41-4	0.00235	0.00200	0.000657	mg/L	12.16.2019 14:42		1
m_p-Xylenes	179601-23-1	0.000810	0.00400	0.000630	mg/L	12.16.2019 14:42	J	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.16.2019 14:42	U	1
Xylenes, Total	1330-20-7	0.000810		0.000630	mg/L	12.16.2019 14:42	J	
Total BTEX		0.00751		0.000367	mg/L	12.16.2019 14:42		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	100	70 - 130	%		

Sample Id: MW-28

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 646081-010

Date Collected: 12.11.2019 15:30

Date Received: 12.12.2019 08:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3110615

Date Prep: 12.16.2019 10:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7692481

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00226	0.00200	0.000408	mg/L	12.16.2019 16:01		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.16.2019 16:01	U	1
Ethylbenzene	100-41-4	0.00151	0.00200	0.000657	mg/L	12.16.2019 16:01	J	1
m_p-Xylenes	179601-23-1	0.000680	0.00400	0.000630	mg/L	12.16.2019 16:01	J	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.16.2019 16:01	U	1
Xylenes, Total	1330-20-7	0.000680		0.000630	mg/L	12.16.2019 16:01	J	
Total BTEX		0.00445		0.000367	mg/L	12.16.2019 16:01		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	89	70 - 130	%		
4-Bromofluorobenzene	100	70 - 130	%		



Certificate of Analytical Results

646081

Talon LPE-Artesia, Artesia, NM

Hobbs Junction

Sample Id: MW-33

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 646081-011

Date Collected: 12.11.2019 15:50

Date Received: 12.12.2019 08:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3110615

Date Prep: 12.16.2019 10:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7692481

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00160	0.00200	0.000408	mg/L	12.16.2019 16:21	J	1
Toluene	108-88-3	0.000380	0.00200	0.000367	mg/L	12.16.2019 16:21	J	1
Ethylbenzene	100-41-4	0.00105	0.00200	0.000657	mg/L	12.16.2019 16:21	J	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.16.2019 16:21	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.16.2019 16:21	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	12.16.2019 16:21	U	
Total BTEX		0.00303		0.000367	mg/L	12.16.2019 16:21		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	102	70 - 130	%		



Certificate of Analytical Results

646081

Talon LPE-Artesia, Artesia, NM
Hobbs Junction

Sample Id: 7692481-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7692481-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3110615

Date Prep: 12.16.2019 10:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7692481

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.16.2019 11:21	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.16.2019 11:21	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.16.2019 11:21	U	1
m_p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.16.2019 11:21	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.16.2019 11:21	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	87	70 - 130	%		
4-Bromofluorobenzene	97	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: Hobbs Junction

Work Orders : 646081

Project ID: 700376.032.11

Lab Batch #: 3110615

Sample: 7692481-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12.16.2019 09:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	70-130	
4-Bromofluorobenzene	0.0318	0.0300	106	70-130	

Lab Batch #: 3110615

Sample: 7692481-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12.16.2019 10:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	70-130	
4-Bromofluorobenzene	0.0325	0.0300	108	70-130	

Lab Batch #: 3110615

Sample: 646081-001 S / MS

Batch: 1 Matrix: Ground Water

Units: mg/L

Date Analyzed: 12.16.2019 10:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 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	0.0370	0.0300	123	70-130	

Lab Batch #: 3110615

Sample: 646081-001 SD / MSD

Batch: 1 Matrix: Ground Water

Units: mg/L

Date Analyzed: 12.16.2019 10:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 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	0.0322	0.0300	107	70-130	

Lab Batch #: 3110615

Sample: 7692481-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12.16.2019 11:21

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	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.



BS / BSD Recoveries

Project Name: Hobbs Junction

Work Order #: 646081

Project ID: 700376.032.11

Analyst: KTL

Date Prepared: 12.16.2019

Date Analyzed: 12.16.2019

Lab Batch ID: 3110615

Sample: 7692481-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021	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
Analytes											
Benzene	<0.000408	0.100	0.107	107	0.100	0.105	105	2	70-130	25	
Toluene	<0.000367	0.100	0.103	103	0.100	0.101	101	2	70-130	25	
Ethylbenzene	<0.000657	0.100	0.100	100	0.100	0.0982	98	2	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.202	101	0.200	0.199	100	1	70-130	25	
o-Xylene	<0.000642	0.100	0.0984	98	0.100	0.0989	99	1	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: Hobbs Junction

Work Order #: 646081

Lab Batch ID: 3110615

Date Analyzed: 12.16.2019

Reporting Units: mg/L

QC- Sample ID: 646081-001 S

Date Prepared: 12.16.2019

Project ID: 700376.032.11

Batch #: 1 Matrix: Ground Water

Analyst: KTL

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	<0.000408	0.100	0.118	118	0.100	0.111	111	6	70-130	25	
Toluene	<0.000367	0.100	0.112	112	0.100	0.106	106	6	70-130	25	
Ethylbenzene	<0.000657	0.100	0.110	110	0.100	0.104	104	6	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.221	111	0.200	0.210	105	5	70-130	25	
o-Xylene	<0.000642	0.100	0.110	110	0.100	0.103	103	7	70-130	25	

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

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

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.



Chain of Custody

Work Order No: 1610081

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
Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Project Manager:	DAVID ADKINS	Bill to: (if different)	PLAINS ALL AMERICAN
Company Name:	TALON CFE	Company Name:	PIPE LINE
Address:	408 W. TEXAS AVE	Address:	ATTN: CAMILLE BRYANT
City, State ZIP:	ARRESTA NM 88210	City, State ZIP:	
Phone:	575-746-8768	Email:	dadkins@taloncf.com

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level: I ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	HOBBS JUNCTION	Turn Around	☒
Project Number:	700376.052.11	Routine	☒
Project Location:	LEA COUNTY	Rush:	
Sampler's Name:	MICHAEL COLLIER	Due Date:	
PO #:	2003-0017	Quote #:	

SAMPLE RECEIPT		Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Temperature (°C):	0.3	Thermometer ID	TNM007		
Received Inact:	☒ Yes ☐ No	Correction Factor:	-0.2		
Cooler Custody Seals:	☒ Yes ☐ No	Total Containers:	33		
Sample Custody Seals:	☒ Yes ☐ No				

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST	Preservative Codes
MW-13		LU	12-11-19	12:05 PM	N/A	3	BTEX	MeOH: Me None: NO HNO3: HN H2SO4: H2 HCL: HL NaOH: Na Zn Acetate+ NaOH: Zn
MW-7				12:25 PM				
MW-18				12:45 PM				EMAIL ANALYTICALS
MW-31				1:15 PM				TO
MW-22				1:40 PM				CAMILLE BRYANT
MW-21				2:10 PM				
MW-24				2:30 PM				
MW-32				2:55 PM				
MW-23				3:10 PM				
MW-28				3:30 PM				

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 Ti 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 Ti 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
<u>[Signature]</u>	<u>[Signature]</u>	12/19 08:00			



Chain of Custody

Work Order No: 14408

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 Casabad, 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

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Page 2 of 2

Project Manager:	DANIEL ADKINS	Bill to: (if different)	PLAINS AC AMERICAN
Company Name:	TALON LPE	Company Name:	PIPE LINE
Address:	408 W. TEXAS AVE.	Address:	ATTN: CAMILLE BRYANT
City, State ZIP:	ARTESA, NM 88210	City, State ZIP:	
Phone:	575-746-8768	Email:	dadkins@talonlpe.com

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

Project Name:	HOBBS DIVISION	Turn Around	Pres. Code
Project Number:	7005716.052.11	☒	
Project Location:	LEA COUNTY	Rush:	
Sampler's Name:	MICHAEL POWER	Due Date:	
PO #:	2003-00017	Quote #:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):		Thermometer ID				
Received Intact:	Yes	No	Correction Factor:			
Cooler Custody Seals:	Yes	No	Total Containers:			
Sample Custody Seal:	Yes	No				

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST	Preservative Codes
MW-33	613	12-1-19	3:50pm	N/A	3	✓	BTEX	MeOH: Me None: NO HNO3: HN H2SO4: H2 HCL: HL NaOH: Na Zn Acetate+ NaOH: Zn
								TAT starts the day received by the lab, if received by 4:00pm
								Sample Comments
								EMAK 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 Pb Mn Mo Ni K Se Ag SiO2 Na Sr Ti 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 Ti U 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
MJP ell.		12/12/19 08:00			

Inter-Office Shipment

IOS Number : 54194

Date/Time: 12.12.2019

Created by: Elizabeth McClellan

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

Air Bill No.: 777232466613

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
646081-001	W	MW-13	12.11.2019 12:05	SW8021B	BTEX by EPA 8021	12.18.2019	12.25.2019	JKR	BR4FBZ BZ BZME EBZ	
646081-002	W	MW-7	12.11.2019 12:25	SW8021B	BTEX by EPA 8021	12.18.2019	12.25.2019	JKR	BR4FBZ BZ BZME EBZ	
646081-003	W	MW-18	12.11.2019 12:45	SW8021B	BTEX by EPA 8021	12.18.2019	12.25.2019	JKR	BR4FBZ BZ BZME EBZ	
646081-004	W	MW-31	12.11.2019 13:15	SW8021B	BTEX by EPA 8021	12.18.2019	12.25.2019	JKR	BR4FBZ BZ BZME EBZ	
646081-005	W	MW-22	12.11.2019 13:40	SW8021B	BTEX by EPA 8021	12.18.2019	12.25.2019	JKR	BR4FBZ BZ BZME EBZ	
646081-006	W	MW-21	12.11.2019 14:10	SW8021B	BTEX by EPA 8021	12.18.2019	12.25.2019	JKR	BR4FBZ BZ BZME EBZ	
646081-007	W	MW-24	12.11.2019 14:30	SW8021B	BTEX by EPA 8021	12.18.2019	12.25.2019	JKR	BR4FBZ BZ BZME EBZ	
646081-008	W	MW-32	12.11.2019 14:55	SW8021B	BTEX by EPA 8021	12.18.2019	12.25.2019	JKR	BR4FBZ BZ BZME EBZ	
646081-009	W	MW-23	12.11.2019 15:10	SW8021B	BTEX by EPA 8021	12.18.2019	12.25.2019	JKR	BR4FBZ BZ BZME EBZ	
646081-010	W	MW-28	12.11.2019 15:30	SW8021B	BTEX by EPA 8021	12.18.2019	12.25.2019	JKR	BR4FBZ BZ BZME EBZ	
646081-011	W	MW-33	12.11.2019 15:50	SW8021B	BTEX by EPA 8021	12.18.2019	12.25.2019	JKR	BR4FBZ BZ BZME EBZ	

Inter Office Shipment or Sample Comments:

Relinquished By:



Elizabeth McClellan

Date Relinquished: 12.12.2019

Received By:



Brianna Teel

Date Received: 12.13.2019

Cooler Temperature: 0.6



XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 54194

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sent By: Elizabeth McClellan

Date Sent: 12/12/2019 11:48 AM

Received By:

Date Received:

Sample Receipt Checklist

Comments

- #1 *Temperature of cooler(s)? _____
- #2 *Shipping container in good condition? _____
- #3 *Samples received with appropriate temperature? _____
- #4 *Custody Seals intact on shipping container/ cooler? _____
- #5 *Custody Seals Signed and dated for Containers/coolers _____
- #6 *IOS present? _____
- #7 Any missing/extra samples? _____
- #8 IOS agrees with sample label(s)/matrix? _____
- #9 Sample matrix/ properties agree with IOS? _____
- #10 Samples in proper container/ bottle? _____
- #11 Samples properly preserved? _____
- #12 Sample container(s) intact? _____
- #13 Sufficient sample amount for indicated test(s)? _____
- #14 All samples received within hold time? _____

*** 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: _____



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: Talon LPE-Artesia

Date/ Time Received: 12/12/2019 08:00:00 AM

Work Order #: 646081

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)?	.3
#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 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: 12/12/2019

Checklist reviewed by:


Jessica Kramer

Date: 12/12/2019