

REVIEWED

By Nelson Velez at 8:23 am, Jul 19, 2022

Review of 2021 ANNUAL GROUNDWATER
MONITORING REPORT: Content satisfactory

Contractor recommendations approved by
NMOCD and are as follows;

1. Continue monthly MDPE events
2. Perform quarterly groundwater monitoring events in accordance with NMOCD directives
3. Submit annual report to NMOCD no later than March 31, 2023.



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2021 ANNUAL GROUNDWATER MONITORING REPORT

LOVINGTON DEEP 6"
LEA COUNTY, NEW MEXICO
SRS #2002—10312
NMOCD REF. # AP-037, nAPP2109530339

PREPARED FOR:
PLAINS MARKETING, L.P.
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FEBRUARY 21, 2022



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FEBRUARY 21, 2022

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NMOCD - New Mexico Oil Conservation Division

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1.0 INTRODUCTION AND OBJECTIVES

1.1 Site Background

The Lovington Deep 6" site is located approximately 5.8 miles southwest of Lovington, New Mexico in Unit H, Section 6, Township 16 South, and Range 36 East. A release of crude oil from the Deep 6" pipeline occurred on property which is primarily utilized as pasture/range with intermittent oil production facilities and is owned by Chevron. The site is located within the West Lovington oil field and has no residence or surface water located within a 1,000-foot radius of the release point. The remediation area is surrounded by a barbed wire fence and is gated.

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

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

The average elevation of the site area is approximately 3,915 feet above mean sea level with a slight slope to the southeast. The regional slope of the land surface in the Southern High Plains is approximately 100 feet per mile in a southeasterly direction.

In December 2002, a reported release of approximately 25 barrels (bbls) of crude oil occurred at the site due to corrosion of the Deep 6" pipeline. Ten (10) bbls of oil were recovered during initial response activities. Approximately 6,000 square feet of surface area was impacted by the release. During the initial remediation phase, soil that was impacted by the release was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm for treatment. Soil remediation activities were initiated by Environmental Plus, Inc. (EPI) in 2003 and the soil phase of site remediation was closed in October 2005.

On February 5, 2007, Talon/LPE (Talon) was retained by Plains Marketing, L.P. (Plains) to assume groundwater remediation activities at the Lovington Deep 6" release site. Groundwater remediation activities at the site were previously conducted by EPI.

1.2 Site Geology

The surficial 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, Ogallala sediments were deposited by fluvial mechanism as paleovalley fill, which is composed of gravelly to sandy braided stream deposits that trend 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

During initial assessment activities to delineate the extent of impacted soil at the site, six (6) soil borings were advanced from December 27, 2002, through January 2, 2004. During the assessment, soil boring BH-1 encountered groundwater that was impacted by phase separated hydrocarbons (PSH). Subsequently, soil boring BH-1 was completed as groundwater monitor well, MW-2. Soil borings BH-2, BH-4, BH-5, and BH-6 were advanced in order to delineate the extent of impacted groundwater and those soil borings were completed as groundwater monitor wells MW-1, MW-3, MW-4, and MW-5 respectively.

During November and December of 2004, six (6) additional groundwater monitor wells (MW-6 through MW-11) were installed to further delineate the lateral extent of groundwater impacts at the site. In July 2006, six (6) additional groundwater monitor wells (MW-12 through MW-17) were installed to complete assessment of the areal extent of impacted groundwater.

Subsequent groundwater monitoring events indicated that benzene concentrations in the down-gradient sentinel monitor wells, MW-12 and MW-18, consistently exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard. Therefore, two (2) additional monitor wells MW-19 and MW-20 were installed further down-gradient on August 27, 2018.

PSH recovery operations have been performed at the site since March 2003, initially from hand bailing followed by a recovery system that utilized skimmers with bladder pumps for PSH recovery. In April of 2010, a pneumatic total fluid pump was installed in monitor well MW-2. Because the total fluid pump increased groundwater production combined with an insignificant increase in PSH production, the total fluids pump was removed from MW-2 in September of 2010 and replaced with a skimmer and bladder pump. In order to help reduce down-gradient dissolved-phase concentrations, bubblers were installed in monitor wells MW-10 and MW-12 in January of 2011.

At the end of 2012, there were six (6) skimmers with bladder pumps operating in monitor wells MW-2, MW-13, MW-14, MW-15, MW-16, and MW-17. During 2012, three (3) Mobile Dual Phase Extraction (MDPE) events were conducted on site. A total of approximately 27 bbls of liquid and vapor PSH were recovered during these events, and five (5) bbls of crude oil was recovered during 2012 by the skimmer pump system.

Because the MDPE events have proven to be far more efficient at PSH recovery, the on-site recovery system was removed completely in January of 2013. MDPE events are now conducted on a monthly basis. On February 20, 2016 a new compressor was installed for the air bubblers in monitoring wells MW-10, MW-12, and MW-18.

Currently, there are two (2) air sparge bubblers operating in monitoring wells MW-18 and MW-19. In 2021, MDPE events recovered an estimated total of 66.72 bbls of PSH consisting of 14.02 bbls of liquid and 52.70 bbls of vapor phase PSH. To date, approximately 476.67 bbls of PSH have been recovered during the described remediation efforts.

1.4 Regulatory Framework

Groundwater analytical data collected from the Deep 6" site is evaluated to the NMWQCC groundwater standards outlined 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)	0.0007

The subsequent sections of this report provide summaries of the groundwater monitoring activities that were conducted at the subject site during the year 2021 as well as analytical results from each groundwater sampling event. Cumulative analytical results for the four (4) 2021 sampling events are summarized in Table 2, in Appendix B, and Figures 1, 2a through 2d, and 3a through 3d in Appendix A. Laboratory analytical data reports and chain of custody documentation are included in Appendix C.

2.0 SITE ACTIVITIES

The sections that follow summarize groundwater monitoring and PSH recovery activities conducted at the subject site during 2021. The primary function of groundwater monitoring is to measure the depths to fluids and to collect groundwater samples from monitor wells for laboratory analysis. The objective of groundwater monitoring is to evaluate the status of the dissolved-phase and PSH plumes in order to verify the effectiveness of the groundwater 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

A total of four (4) groundwater monitoring events were conducted by Talon during the year 2021 on March 16, 18-19, 29, June 10-11, September 1 and 7, and November 29-30.

During the March 2021 event, groundwater samples were collected from thirteen (13) monitor wells: MW-1, MW-3 through MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, and MW-18 through MW-20. Groundwater samples were not collected from three (3) monitor wells due to the wells being dry (MW-2, MW-6, and MW-10), one (1) well (MW-7) was purged dry without recovery, and three (3) wells (MW-13, MW-14, and MW-17) were impacted by PSH. Details of the gauging, purging, and sampling activities are presented below in Section 2.2.

During the June 2021 event, groundwater samples were collected from thirteen (13) monitor wells: MW-1, MW-3 through MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, and MW-18 through MW-20. Groundwater samples were not collected from two (2) monitor wells due to the wells being dry (MW-6 and MW-10), one (1) well (MW-7) was purged dry without recovery, and four (4) wells were impacted by PSH (MW-2, MW-13, MW-14, and MW-17). Details of the gauging, purging, and sampling activities are presented below in Section 2.2.

During the September 2021 event, groundwater samples were collected from thirteen (13) monitor wells: MW-1, MW-3 through MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, and MW-18 through MW-20. Groundwater samples were not collected from two (2) monitor wells due to the wells being dry (MW-6 and MW-10), one (1) well (MW-7) was purged dry without recovery, and four (4) wells were impacted by PSH (MW-2, MW-13, MW-14, and MW-17). Details of the gauging, purging, and sampling activities are presented below in Section 2.2.

During the November 2021 event, groundwater samples were collected from thirteen (13) monitor wells: MW-1, MW-3 through MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, and MW-18 through MW-20. Groundwater samples were not collected from two (2) monitor wells due to the wells being dry (MW-6 and MW-10), one (1) well (MW-7) was purged dry without recovery, and four (4) wells were impacted by PSH (MW-2, MW-13, MW-14, and MW-17). Details of the gauging, purging, and sampling activities are presented below in Section 2.2.

2.2 Groundwater Gauging, Purging, and Sample Collection Procedures

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

Subsequent to gauging, all monitor wells were purged using a down-hole pump equipped with vinyl tubing. The pump and tubing were decontaminated with Alconox® detergent and rinsed with distilled water after each use. Recovered purge water and water used in the decontamination process was contained in 55-gallon drums. After the groundwater monitoring event, all retained water was placed into the on-site storage tank and removed with a vacuum truck for disposal at Gandy Marley, a NMOCD approved facility.

Groundwater samples were collected from all monitor wells using dedicated disposable polyethylene bailers. Each groundwater sample was contained in laboratory supplied sample containers with the appropriate preservative required for the analysis requested. The groundwater samples were maintained on ice, in the custody of Talon personnel, until they were delivered to Xenco Laboratory in Carlsbad, New Mexico, for analysis. The groundwater samples collected during all four (4) events were quantified for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method SW-846 8021B.

2.3 Phase Separated Hydrocarbon Recovery

PSH recovery has been conducted at the site since 2003, initially by hand bailing. In 2007, an automated skimmer/bladder pump recovery system was installed at the site. The system utilized six (6) skimmers with bladder pumps in monitor wells MW-2, and MW-13 through MW-17 for recovery of PSH and to inhibit migration of the PSH plume. The skimmer assembly consisted of bladder pumps combined with 24-inch traveling float specific gravity skimmers attachments. The skimmer system was powered by a single-phase, 230-volt, 7.5 HP, two-stage reciprocating air compressor.

Currently, MDPE events are conducted monthly. This system utilizes vapor pulled by vacuum combined with propane to power an internal combustion engine. In addition, it also powers a compressor and the blower used to create a vacuum for vapor recovery. Compressed air from the system drives pneumatic pumps placed in the various wells containing PSH. Fluid recovered by the pumps is retained in an on-site 1,500-gallon poly tank. The poly tank is equipped with a high level shut off switch to prevent overflow and it is located within a secondary containment compound that is outfitted with a poly-liner. Recovered groundwater and PSH is removed from the poly tank and transported to an NMOCD approved disposal facility, Gandy Marley, via vacuum truck at the end of the MDPE events.

During 2021, the quarterly MDPE PSH and groundwater recovery totals are as follows:

- 1st Quarter – 10.72 bbls PSH and 88.29 bbls of groundwater
- 2nd Quarter – 16.25 bbls PSH and 95.50 bbls of groundwater
- 3rd Quarter – 19.70 bbls PSH and 77.17 bbls of groundwater

- 4th Quarter – 19.99 bbls PSH and 70.12 bbls groundwater

The MDPE individual event recovery totals are as follows:

- January 27, 2021 – 2.12 bbls vapor PSH, 0.93 bbls liquid PSH
- February 24, 2021 – 1.14 bbls vapor PSH, 0.90 bbls liquid PSH
- March 23, 2021 – 4.51 bbls vapor PSH, 1.12 bbls liquid PSH
- April 6, 2021 – 1.92 bbls vapor PSH, 1.76 bbls liquid PSH
- May 17, 2021 – 4.18 bbls vapor PSH, 0.55 bbls liquid PSH
- June 15, 2021 – 6.34 bbls vapor PSH, 1.50 bbls liquid PSH
- July 8, 2021 – 5.03 bbls vapor PSH, 1.12 bbls liquid PSH
- August 5, 2021 – 5.27 bbls vapor PSH, 1.21 bbls liquid PSH
- September 2, 2021 – 4.55 bbls vapor PSH, 2.52 bbls liquid PSH
- October 7, 2021 – 7.58 bbls vapor PSH, 0.74 bbls liquid PSH
- November 23, 2021 – 4.89 bbls vapor PSH, 0.86 bbls liquid PSH
- December 9, 2021 – 5.18 bbls vapor PSH, 0.74 bbls liquid PSH

In 2021, an estimated total of 66.72 bbls of PSH were recovered during the MDPE events. Approximately 476.67 bbls of PSH consisting of 222.53 bbls of vapor phase and 254.14 bbls of liquid phase PSH have 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 Historical Groundwater Analytical Data in Appendix B. Laboratory analytical data reports and chain 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 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 six (6) counties in New Mexico.

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

The Ogallala Aquifer is generally unconfined and the potentiometric surface 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 (7) inches per day. The regional hydraulic conductivity averages 17 gallons per day per square-foot and specific yield averages 16%. The depth to groundwater at the site has historically ranged from 60 to 65 feet below ground surface (bgs) and the groundwater flow direction is to the east. The saturated thickness of the Ogallala formation on the High Plains ranges from 25 feet to 175 feet. The variable thickness is due to the irregularly eroded Triassic surface that underlies it.

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

The depth to fluid measurements were collected during each of the four (4) groundwater monitoring events during the year 2021. The results of the fluid level measurements are summarized in Table 1, Appendix B - Summary of Historical Fluid Level Measurements. The collected data was used to construct potentiometric surface maps in order to interpret the groundwater gradient and flow direction. The maps, designated Figures 2a through 2d, are presented in Appendix A.

The potentiometric surface maps constructed for each of the four (4) groundwater monitoring events indicates that the groundwater flow direction is to the east at an approximate gradient of average 0.0036 feet/foot or approximately 19.01 feet/mile. Groundwater levels at the subject site have declined slightly, approximately 0.18 feet for the year 2021.

3.3 Phase Separated Hydrocarbon (PSH)

An oil/water interface probe was used to determine the thicknesses of PSH during the four (4) groundwater monitoring events. Generally, PSH thicknesses have fluctuated slightly from quarter to quarter during the year 2021.

In addition to potentiometric surface maps, isopleth maps were prepared depicting the measured PSH thicknesses and PSH plume geometry. PSH plume delineation and thickness isopleth maps are presented in Appendix A as Figures 3a through 3d. The PSH plume is delineated by the current monitor well geometry.

- In March 2021, PSH was observed in three (3) monitor wells: MW-13, MW-14, and MW-17. PSH thickness ranged from 0.02 feet to 2.41 feet.
- In June 2021, PSH was observed in four (4) monitor wells: MW-2, MW-13, MW-14, and MW-17. PSH thickness ranged from 0.02 feet to 3.81 feet.
- In September 2021, PSH was observed in four (4) monitor wells: MW-2, MW-13, MW-14, and MW-17. PSH thickness ranged from 0.01 feet to 3.84 feet.
- In November 2021, PSH was observed in four (4) monitor wells MW-2, MW-13, MW-14, and MW-17. PSH thickness ranged from 0.03 feet to 1.65 feet.

3.4 Groundwater Analytical Results

During the March 2021 sampling event, groundwater samples were collected from thirteen (13) monitor wells (MW-1, MW-3 through MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, and MW-18 through MW-20). Groundwater samples were not collected from three (3) monitor wells due to PSH (MW-13, MW-14, and MW-17) and three (3) wells were gauged dry (MW-2, MW-6, and MW-10). Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from less than the laboratory method detection limit (MDL) in wells MW-1, MW-4, MW-5, MW-8, MW-9, MW-11, MW-15, MW-16, and MW-20 to 0.0235 mg/L in MW-19. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor well MW-19.
- Toluene concentrations ranged from less than the laboratory MDL in wells MW-1, MW-4, MW-5, MW-8, MW-9, MW-11, MW-15, MW-16, MW-19, and MW-20 to 0.0236 mg/L in MW-18. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Ethylbenzene concentrations ranged from less than the laboratory MDL in wells MW-1, MW-4, MW-5, MW-8, MW-9, MW-11, MW-15, and MW-18 through MW-20 to 0.0226 mg/L in MW-3. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.

- Xylene concentrations ranged from less than the laboratory MDL in wells MW-1, MW-4, MW-5, MW-8, MW-9, MW-11, MW-15, and MW-18 through MW-20 to 0.00928 mg/L in MW-16. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any monitor wells sampled this quarter.

During the June 2021 sampling event, groundwater samples were collected from thirteen (13) monitor wells (MW-1, MW-3 through MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, and MW-18 through MW-20). Groundwater samples were not collected from four (4) monitor wells due to PSH (MW-2, MW-13, MW-14, and MW-17) and two (2) wells were gauged dry (MW-6 and MW-10). Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from less than the laboratory MDL in wells MW-1, MW-4, MW-5, MW-8, MW-9, MW-11, MW-15, MW-16, and MW-18 to 0.0958 mg/L in MW-19. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor well MW-19.
- Toluene concentrations ranged from less than the laboratory MDL in wells MW-1, MW-3 through MW-5, MW-8, MW-9, MW-11, MW-15, MW-16, MW-19, and MW-20 to 0.0175 mg/L in MW-18. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Ethylbenzene concentrations ranged from less than the laboratory MDL in wells MW-1, MW-4, MW-5, MW-8, MW-9, MW-11, MW-12, MW-19, and MW-20 to 0.0838 mg/L in MW-3. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Xylene concentrations ranged from less than the MDL in wells MW-1, MW-4, MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-18, and MW-20 to 0.107 mg/L in MW-3. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any monitor wells sampled this quarter.

During the September 2021 sampling event, groundwater samples were collected from thirteen (13) monitor wells MW-1, MW-3 through MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, and MW-18 through MW-20. Groundwater samples were not collected from four (4) monitor wells due to PSH (MW-2, MW-13, MW-14, and MW-17) and two (2) wells were gauged dry (MW-6 and MW-10). Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from less than the laboratory MDL in wells MW-1, MW-3 through MW-5, MW-8, MW-9, MW-11, MW-15, MW-16, and MW-20 to 0.11 mg/L in MW-19. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor well MW-19.
- Toluene concentrations ranged from less than the laboratory MDL in wells MW-1, MW-3 through MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, and MW-20 to 0.00218 mg/L in MW-18. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.

- Ethylbenzene concentrations ranged from less than the laboratory MDL in wells MW-1, MW-5, MW-8, MW-9, MW-11, MW-19, and MW-20 to 0.0561 mg/L in MW-3. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Xylene concentrations ranged from less than the laboratory MDL in wells MW-1, MW-5, MW-8, MW-9, MW-11, MW-12, MW-16, and MW-18 through MW-20 to 0.0718 mg/L in MW-3. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any monitor wells sampled this quarter.

During the November 2021 sampling event, groundwater samples were collected from thirteen (13) monitor wells MW-1, MW-3 through MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, and MW-18 through MW-20. Groundwater samples were not collected from four (4) monitor wells due to PSH (MW-2, MW-13, MW-14, and MW-17) and two (2) wells were gauged dry (MW-6 and MW-10). Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged less than the laboratory MDL in MW-1, MW-4, MW-5, MW-8, MW-9, MW-11, MW-15, MW-16, and MW-20 to 0.00575 mg/L in MW-19. Benzene concentrations did not exceed the NMWQCC groundwater standard of 0.010 mg/L in any monitor wells sampled this quarter.
- Toluene concentrations were less than the laboratory MDL in monitor wells MW-1, MW-3 through MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, and MW-20 to 0.00527 mg/L in MW-18. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Ethylbenzene concentrations ranged from less than the laboratory MDL in MW-1, MW-4, MW-5, MW-8, MW-9, MW-11, MW-12, MW-16, MW-19, and MW-20 to 0.0339 mg/L in MW-3. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Xylene concentrations ranged from less than the laboratory MDL in MW-1, MW-4, MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, MW-19, and MW-20 to 0.0448 mg/L in MW-18. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any monitor wells sampled this quarter.

The laboratory analytical results are summarized in Table 2 – Summary of Historical Analytical Groundwater Data - BTEX in Appendix B. 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) groundwater monitoring events conducted at the Lovington Deep 6" site and Section 4.2 provides recommendations for future corrective action.

4.1 Summary of Findings

- The groundwater flow direction is to the east with an average gradient of average 0.0036 feet/foot based on the water level measurement data collected in 2021.
- Groundwater levels at the subject site have decreased slightly for the year 2021.
- PSH has impacted monitor wells MW-2, MW-13, MW-14, and MW-17 in 2021. The PSH plume is well defined.
- Approximately 66.72 bbls of PSH were recovered during the year 2021.
- The benzene concentration in MW-19 exceeded the NMWQCC groundwater standard of 0.0100 mg/L in the 1st, 2nd, and 3rd Quarter sampling events. In the 4th Quarter sampling event, no monitor wells sampled exceeded the NMWQCC groundwater standard for benzene of 0.0100 mg/L.
- NMOCD has approved discontinuation of PAH analysis from MW-4, MW-10, MW-12, MW-18, MW-19 and MW-20.

4.2 Recommendations

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

- Continue monthly MDPE events.
- Perform quarterly groundwater monitoring events in accordance with NMOCD directives.

APPENDIX A

Figures

Figure 1 - Site Plan

Figure 2a - Groundwater Gradient Map - 03/16/2021

Figure 2b - Groundwater Gradient Map - 06/10/2021

Figure 2c - Groundwater Gradient Map - 09/01/2021

Figure 2d - Groundwater Gradient Map - 11/29/2021

Figure 3a - PSH Thickness & Groundwater Concentration Map - 03/18-19, 29/2021

Figure 3b - PSH Thickness & Groundwater Concentration Map - 06/11/2021

Figure 3c - PSH Thickness & Groundwater Concentration Map - 09/07/2021

Figure 3d - PSH Thickness & Groundwater Concentration Map – 11/29-30/2021

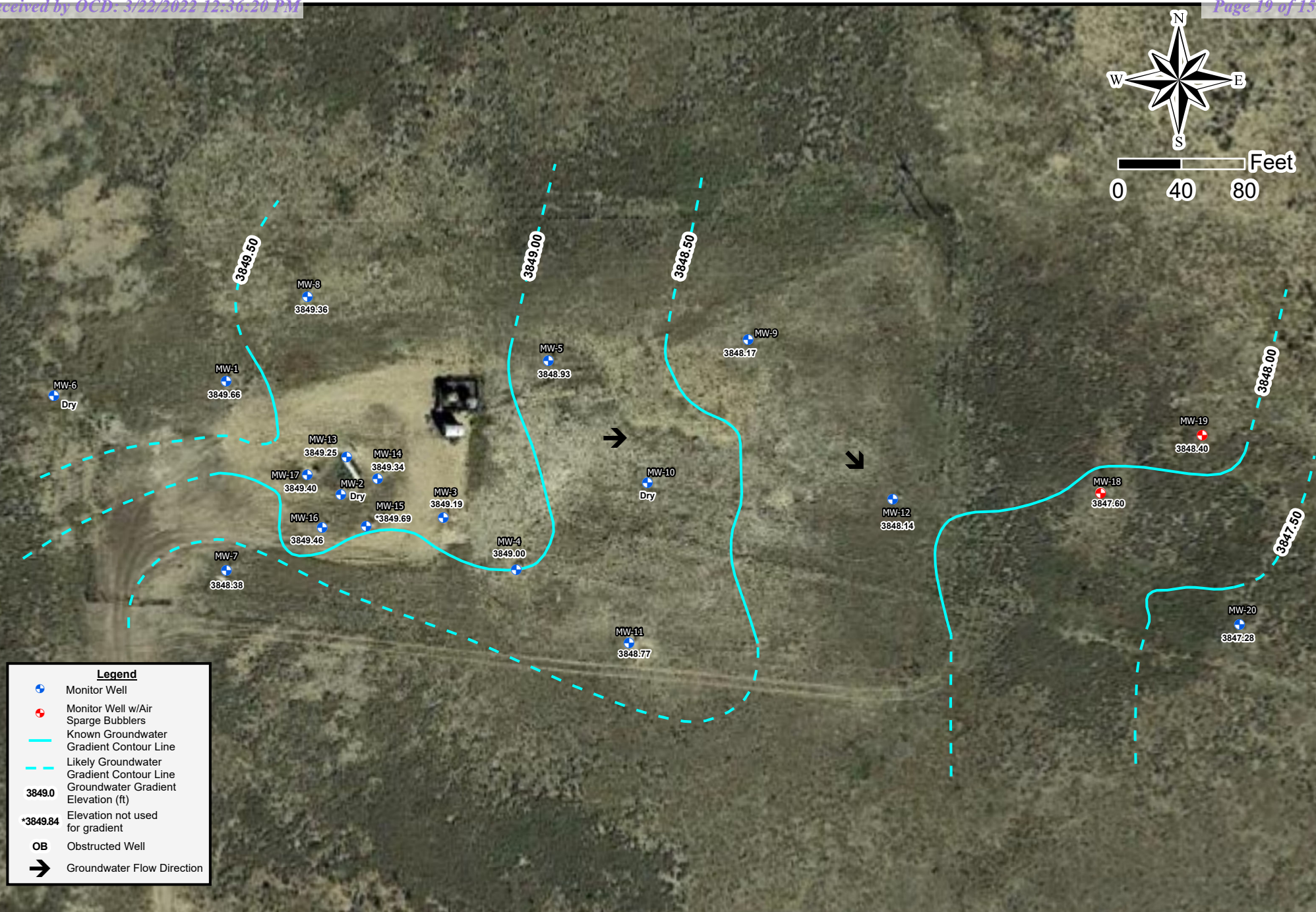


Drafted: 4/23/2021

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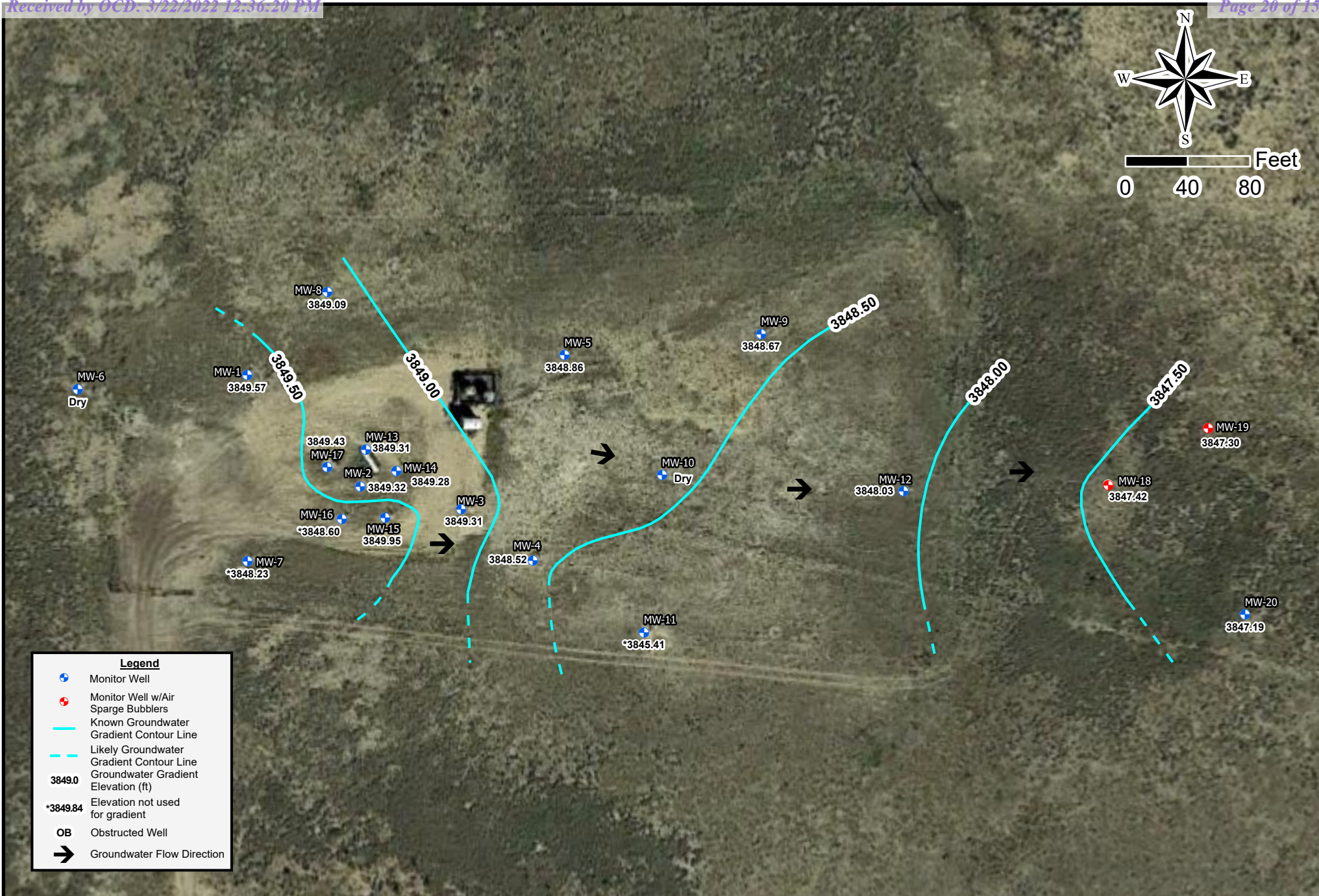
Drafted By: JAI

Lovington Deep 6"
SRS # 2002-10312, NMOCD REF. #nAPP2109530339
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico
32.867039, -103.387542
Figure 1 - Site Plan



Drafted: 2/1/2022
1 in = 80 ft
Drafted By: JAI

Lovington Deep 6"
SRS # 2002-10312, NMOCD REF. #nAPP2109530339
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico
32.867039, -103.387542
Figure 2a - Groundwater Gradient Map (03/16/2021)



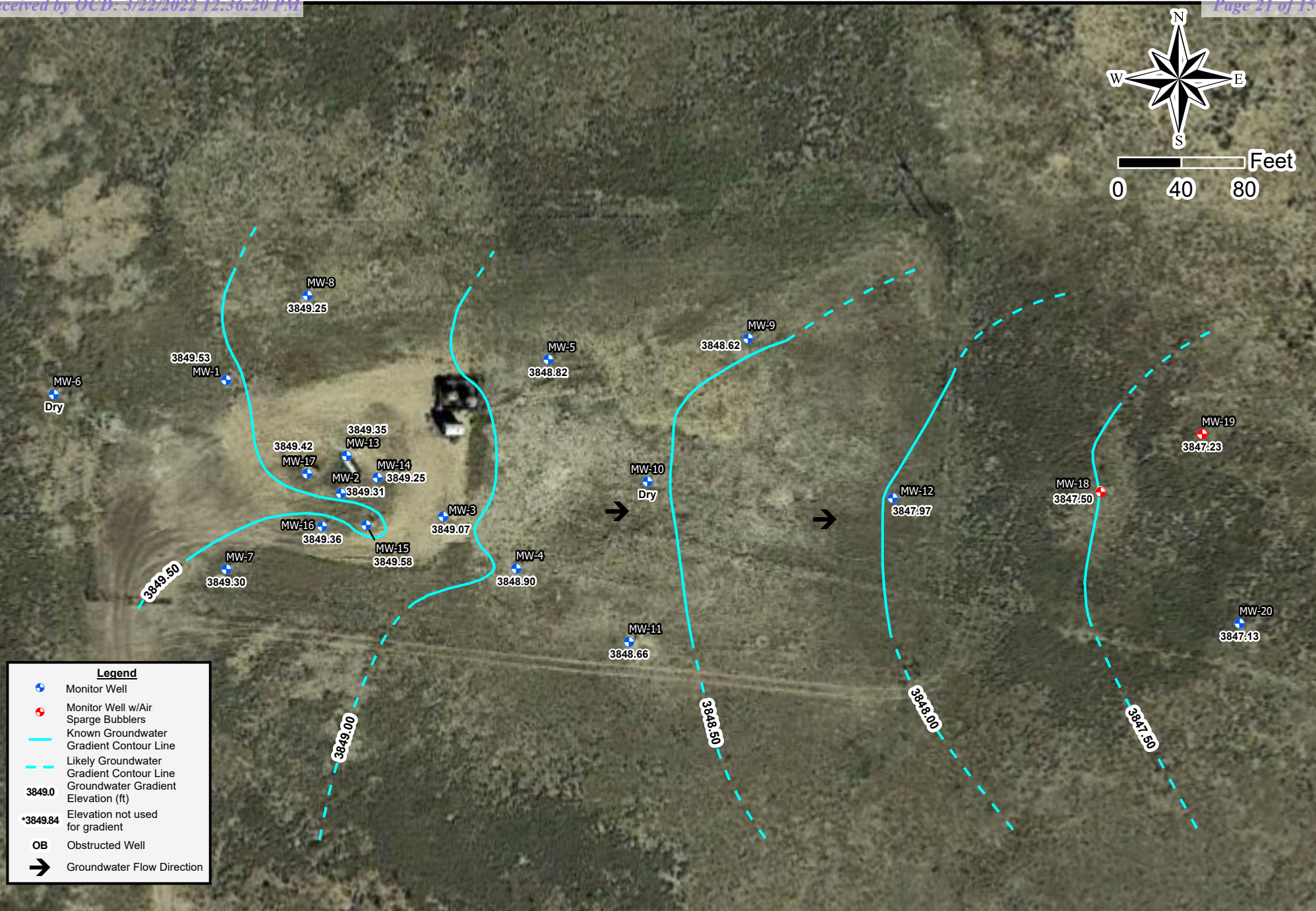
Drafted: 2/1/2022

1 in = 80 ft

Drafted By: IJM

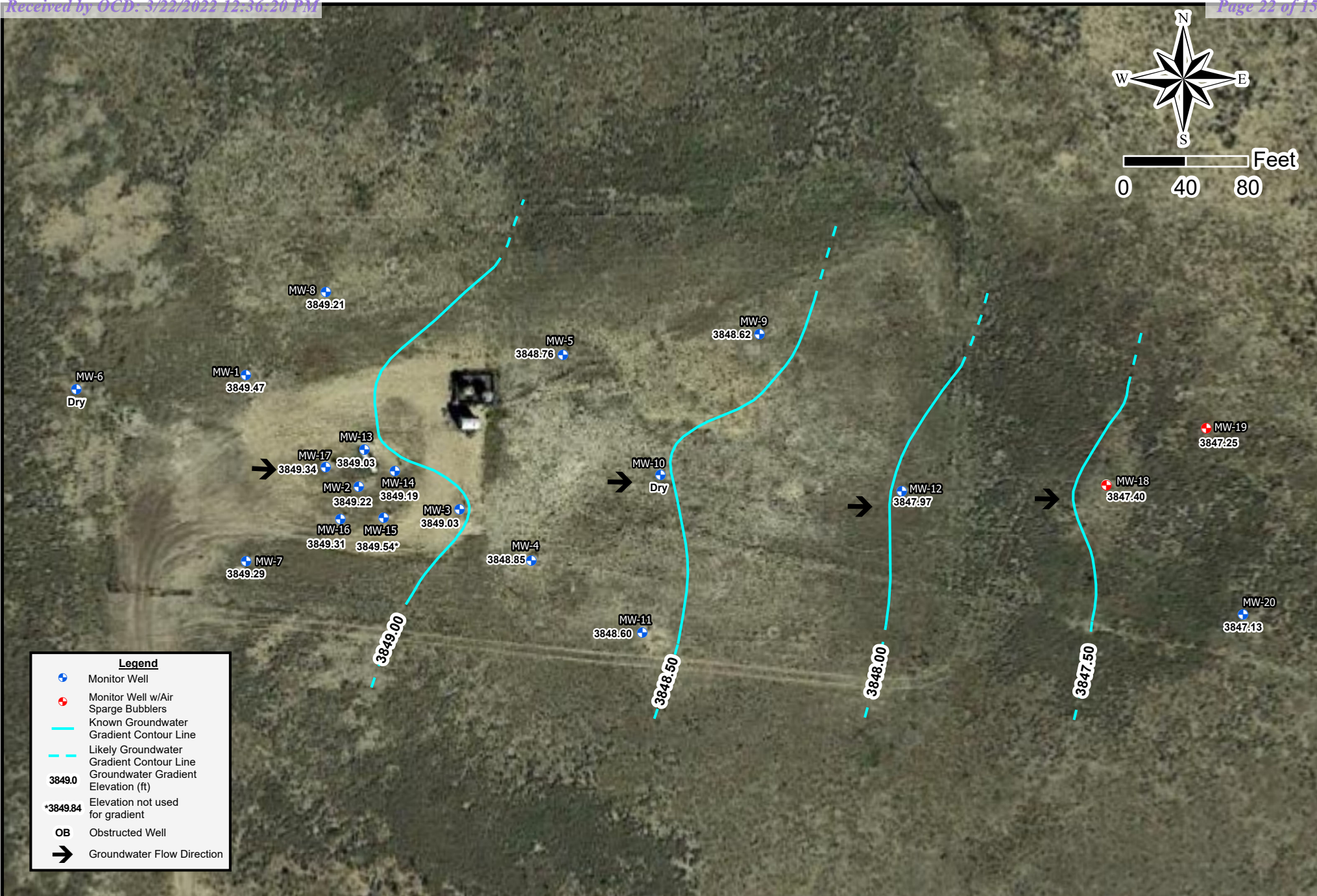
Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. #nAPP2109530339
 SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico
 32.867039, -103.387542
 Figure 2b - Groundwater Gradient Map (06/10/2021)



Drafted: 2/1/2022
1 in = 80 ft
Drafted By: IJM

Lovington Deep 6"
SRS # 2002-10312, NMOCD REF. #nAPP2109530339
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico
32.867039, -103.387542
Figure 2c - Groundwater Gradient Map (09/01/2021)



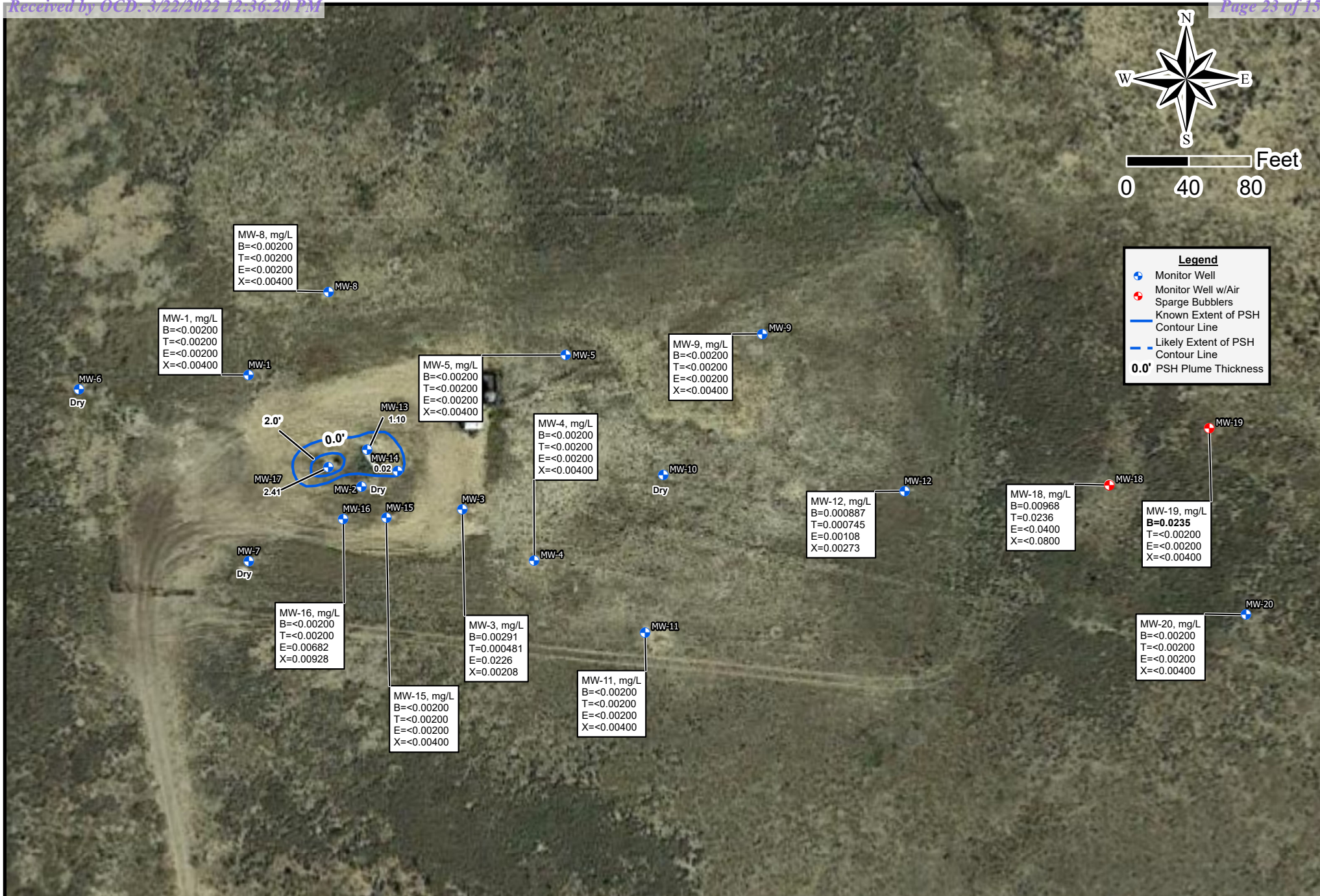
Drafted: 2/1/2022

1 in = 80 ft

Drafted By: IJR

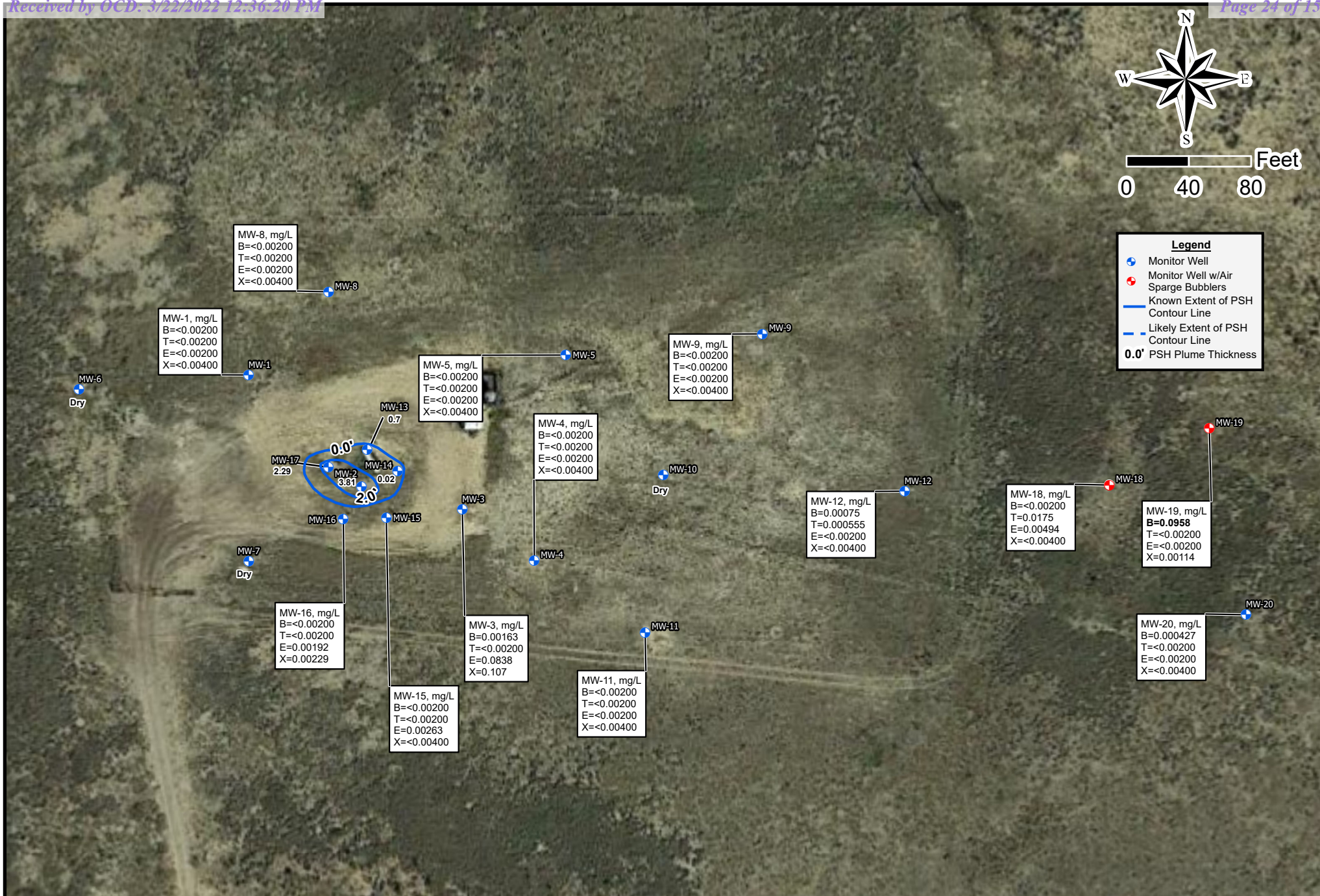
Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. #nAPP2109530339
 SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico
 32.867039, -103.387542
 Figure 2d - Groundwater Gradient Map (11/29/2021)



Drafted: 2/1/2022
1 in = 80 ft
Drafted By: JAI

Lovington Deep 6"
SRS # 2002-10312, NMOCD REF. #nAPP2109530339
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico
32.867039, -103.387542
Figure 3a - PSH Thickness and Groundwater Concentration Map to 03/18-19, 29/2021



Drafted: 8/5/2021

1 in = 80 ft

Drafted By: IJM

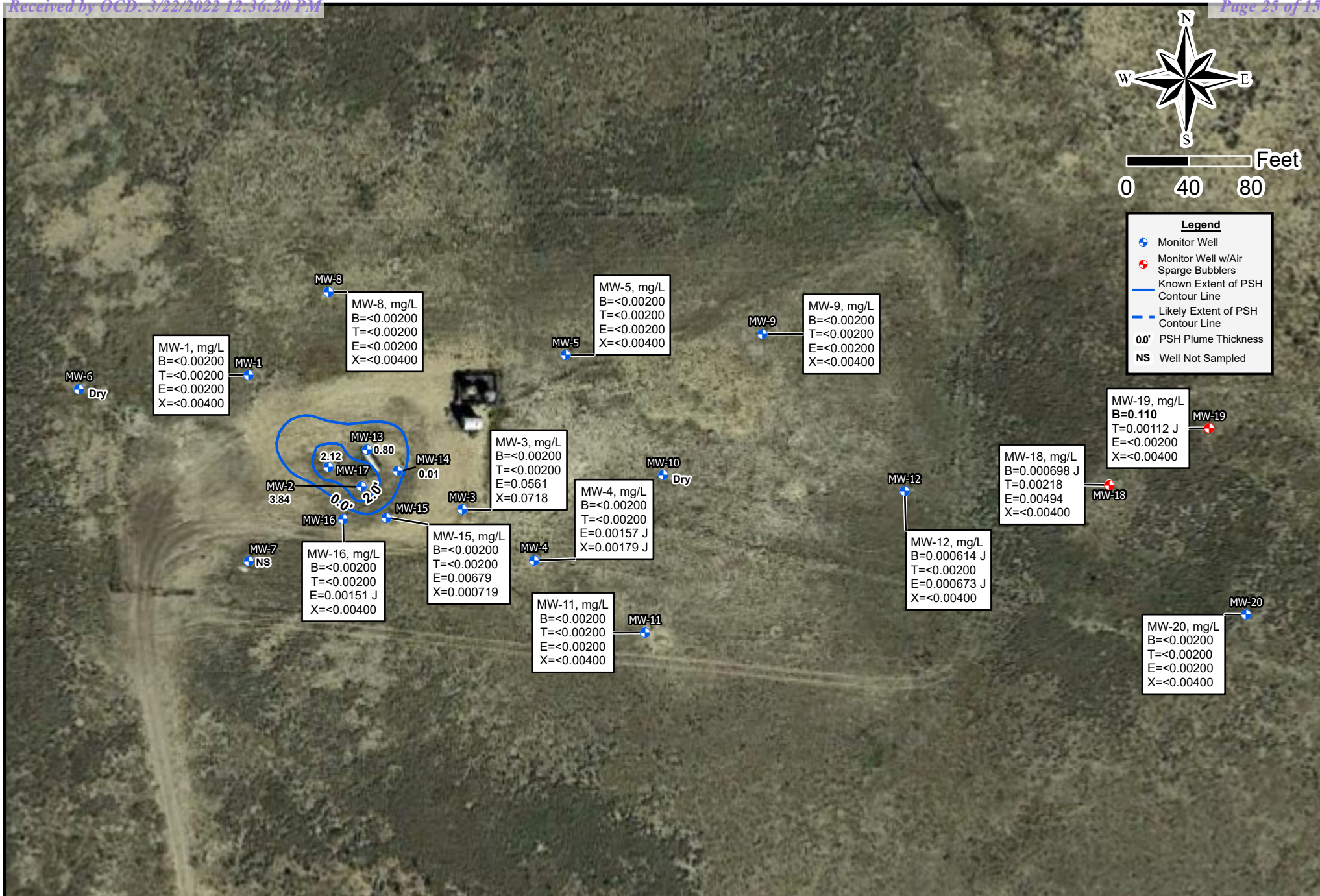
Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. #nAPP2109530339

SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico

32.867039, -103.387542

Figure 3b - PSH Thickness and Groundwater Concentration Map (06/11/2021)



Drafted: 12/3/2021

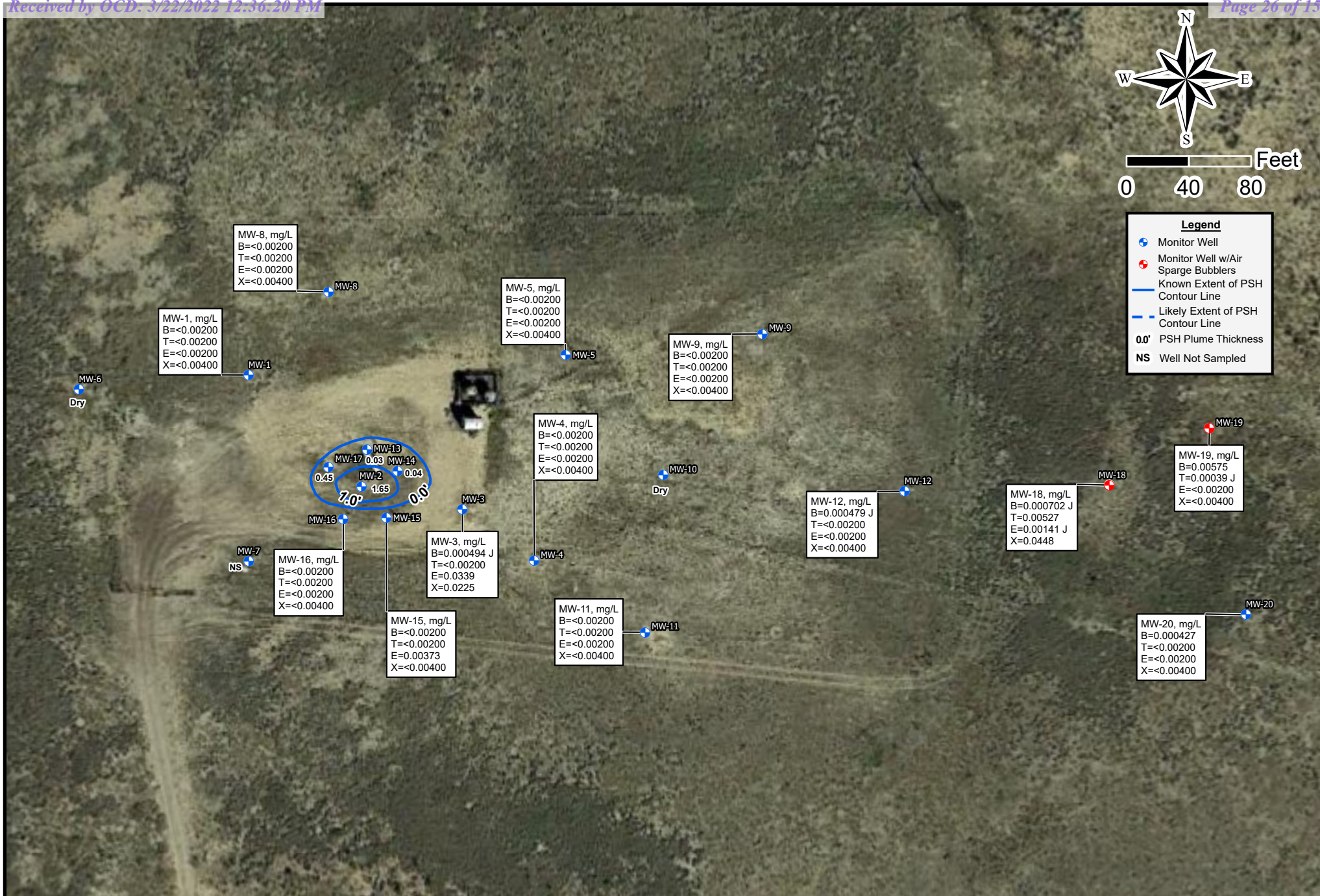
1 in = 80 ft

Drafted By: IJM

Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. #nAPP2109530339
 SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico
 32.867039, -103.387542

Figure 3c - PSH Thickness and Groundwater Concentration Map (09/07/2021)



Drafted: 12/15/2021

1 in = 80 ft

Drafted By: IJR

Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. #nAPP2109530339

SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico

32.867039, -103.387542

Figure 3d - PSH Thickness and Groundwater Concentration Map (11/29-30/2021)

APPENDIX B

Tables

Table 1 - Summary of Historical Fluid Level Measurements

Table 2 - Summary of Historical Groundwater Analytical Results for BTEX

Table 3 - Summary of Groundwater Analytical Results for PAH

Table 1 - Gauging and NAPL Thickness - Historical
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-1 4"	3915.51	54	74	03/08/2016	64.98	-	-	3850.53
				05/24/2016	65.02	-	-	3850.49
				09/08/2016	65.06	-	-	3850.45
				12/05/2016	64.76	-	-	3850.75
				03/08/2017	64.80	-	-	3850.71
				06/13/2017	65.21	-	-	3850.30
				09/12/2017	65.22	-	-	3850.29
				12/13/2017	65.28	-	-	3850.23
				03/23/2018	65.33	-	-	3850.18
				06/12/2018	65.38	-	-	3850.13
				09/10/2018	65.34	-	-	3850.17
				12/11/2018	65.49	-	-	3850.02
				03/13/2019	65.54	-	-	3849.97
				06/10/2019	64.59	-	-	3850.92
				09/25/2019	65.83	-	-	3849.68
				12/06/2019	65.65	-	-	3849.86
				03/11/2020	65.73	-	-	3849.78
				05/06/2020	65.70	-	-	3849.81
				06/09/2020	65.77	-	-	3849.74
				09/04/2020	65.83	-	-	3849.68
				12/11/2020	65.84	-	-	3849.67
				03/16/2021	65.85	-	-	3849.66
				06/11/2021	65.94	-	-	3849.57
				09/01/2021	65.98	-	-	3849.53
				11/29/2021	66.04	-	-	3849.47
MW-2 4"	3915.04	54	74	03/08/2016	68.80	63.91	4.89	3850.32
				05/24/2016	68.57	64.00	4.57	3850.29
				09/08/2016	68.32	64.08	4.24	3850.26
				12/01/2016	68.67	64.10	4.57	3850.19
				03/08/2017	68.33	64.20	4.13	3850.16
				06/13/2017	68.42	64.20	4.22	3850.14
				09/12/2017	68.30	64.30	4.00	3850.08
				12/13/2017	68.00	64.40	3.60	3850.05
				03/23/2018	65.22	65.05	0.17	3849.96
				06/12/2018	67.10	64.50	2.60	3850.11
				09/10/2018	66.52	64.50	2.02	3850.21
				12/11/2018	68.28	64.60	3.68	3849.83
				03/13/2019	66.82	65.12	1.70	3849.64
				06/10/2019	DR	-	-	-
				12/06/2019	DR	-	-	-
				03/11/2020	65.79	65.40	0.39	3849.58
				05/06/2020	66.92	65.20	1.72	3849.56
				06/09/2020	DR	-	-	-
				09/04/2020	67.75	65.10	2.65	3849.50
				12/11/2020	65.73	65.65	0.08	3849.38
				03/16/2021	DR	-	-	-
				06/11/2021	68.90	65.09	3.81	3849.32
				09/01/2021	68.94	65.10	3.84	3849.31
				11/29/2021	67.20	65.55	1.65	3849.22
MW-3 4"	3915.24	54	74	03/08/2016	65.16	-	-	3850.08
				05/24/2016	65.21	-	-	3850.03
				09/08/2016	65.25	-	-	3849.99
				12/05/2016	65.27	-	-	3849.97
				03/08/2017	65.33	-	-	3849.91
				06/13/2017	65.39	-	-	3849.85
				09/12/2017	65.44	-	-	3849.80
				12/13/2017	65.70	-	-	3849.54
				03/23/2018	65.50	-	-	3849.74
				06/12/2018	65.59	-	-	3849.65
				09/10/2018	65.52	-	-	3849.72
				12/11/2018	65.66	-	-	3849.58
				03/13/2019	65.69	-	-	3849.55
				06/10/2019	65.75	-	-	3849.49
				09/25/2019	65.80	-	-	3849.44
				12/06/2019	65.85	-	-	3849.39
				03/11/2020	65.89	-	-	3849.35
				06/09/2020	65.97	-	-	3849.27
				09/04/2020	65.97	-	-	3849.27
				12/11/2020	66.04	-	-	3849.20
				03/16/2021	66.05	-	-	3849.19
				06/11/2021	65.93	-	-	3849.31
				09/01/2021	66.17	-	-	3849.07
				11/29/2021	66.21	-	-	3849.03

Table 1 - Gauging and NAPL Thickness - Historical
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-4 2"	3915.3	54	74	03/08/2016	65.41	-	-	3849.89
				05/24/2016	65.44	-	-	3849.86
				09/08/2016	65.47	-	-	3849.83
				12/05/2016	65.50	-	-	3849.80
				03/08/2017	65.55	-	-	3849.75
				06/13/2017	65.61	-	-	3849.69
				09/12/2017	65.64	-	-	3849.66
				12/13/2017	65.70	-	-	3849.60
				03/23/2018	65.73	-	-	3849.57
				06/12/2018	65.81	-	-	3849.49
				09/10/2018	65.74	-	-	3849.56
				12/11/2018	65.90	-	-	3849.40
				03/13/2019	65.96	-	-	3849.34
				06/10/2019	66.00	-	-	3849.30
				09/25/2019	66.04	-	-	3849.26
				12/06/2019	66.13	-	-	3849.17
				03/11/2020	66.17	-	-	3849.13
				05/06/2020	66.12	-	-	3849.18
				06/09/2020	66.18	-	-	3849.12
				09/04/2020	66.23	-	-	3849.07
				12/11/2020	66.27	-	-	3849.03
				03/16/2021	66.30	-	-	3849.00
				06/11/2021	66.78	-	-	3848.52
				09/01/2021	66.40	-	-	3848.90
				11/29/2021	66.45	-	-	3848.85
MW-5 4"	3915.26	54	74	03/08/2016	65.42	-	-	3849.84
				05/24/2016	65.47	-	-	3849.79
				09/08/2016	65.51	-	-	3849.75
				12/05/2016	65.52	-	-	3849.74
				03/08/2017	65.59	-	-	3849.67
				06/13/2017	65.65	-	-	3849.61
				09/12/2017	65.70	-	-	3849.56
				12/13/2017	65.75	-	-	3849.51
				03/23/2018	65.78	-	-	3849.48
				06/12/2018	65.90	-	-	3849.36
				09/10/2018	65.78	-	-	3849.48
				12/11/2018	65.93	-	-	3849.33
				03/13/2019	65.95	-	-	3849.31
				06/10/2019	66.02	-	-	3849.24
				09/25/2019	66.06	-	-	3849.20
				12/06/2019	66.15	-	-	3849.11
				03/11/2020	66.15	-	-	3849.11
				05/06/2020	65.90	-	-	3849.36
				06/09/2020	66.22	-	-	3849.04
				09/04/2020	66.25	-	-	3849.01
				12/11/2020	66.31	-	-	3848.95
				03/16/2021	66.33	-	-	3848.93
				06/11/2021	66.40	-	-	3848.86
				09/01/2021	66.44	-	-	3848.82
				11/29/2021	66.50	-	-	3848.76
MW-6 2"	3915.45	52	72	03/08/2016	64.71	-	-	3850.74
				05/24/2016	64.74	-	-	3850.71
				09/08/2016	64.80	-	-	3850.65
				12/05/2016	64.85	-	-	3850.60
				03/08/2017	64.90	-	-	3850.55
				06/13/2017	64.91	-	-	3850.54
				09/12/2017	64.97	-	-	3850.48
				12/13/2017	65.02	-	-	3850.43
				03/23/2018	65.04	-	-	3850.41
				06/12/2018	65.11	-	-	3850.34
				09/10/2018	65.04	-	-	3850.41
				12/11/2018	65.22	-	-	3850.23
				03/13/2019	65.23	-	-	3850.22
				06/10/2019	68.27	-	-	3847.18
				09/25/2019	DR	-	-	-
				12/06/2019	DR	-	-	-
				03/11/2020	DR	-	-	-
				05/06/2020	DR	-	-	-
				06/09/2020	DR	-	-	-
				09/04/2020	DR	-	-	-
				12/11/2020	DR	-	-	-
				03/16/2021	DR	-	-	-
				06/10/2021	DR	-	-	-
				09/01/2021	DR	-	-	-
				11/29/2021	DR	-	-	-

Table 1 - Gauging and NAPL Thickness - Historical
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-7 2"	3914.73	51	71	03/08/2016	64.39	-	-	3850.34
				05/24/2016	64.46	-	-	3850.27
				09/08/2016	64.49	-	-	3850.24
				12/05/2016	64.50	-	-	3850.23
				03/08/2017	64.29	-	-	3850.44
				06/13/2017	64.61	-	-	3850.12
				09/12/2017	64.67	-	-	3850.06
				12/13/2017	64.72	-	-	3850.01
				03/23/2018	65.75	-	-	3848.98
				06/12/2018	64.86	-	-	3849.87
				09/10/2018	64.78	-	-	3849.95
				12/11/2018	64.91	-	-	3849.82
				03/13/2019	64.91	-	-	3849.82
				06/10/2019	64.98	-	-	3849.75
				09/25/2019	65.04	-	-	3849.69
				12/06/2019	65.10	-	-	3849.63
				03/11/2020	OB	-	-	-
				05/06/2020	OB	-	-	-
				06/09/2020	OB	-	-	-
				09/04/2020	66.37	-	-	3848.36
				12/11/2020	65.31	-	-	3849.42
				03/16/2021	66.35	-	-	3848.38
				06/11/2021	66.50	-	-	3848.23
				09/01/2021	65.43	-	-	3849.30
				11/29/2021	65.45	-	-	3849.28
MW-8 2"	3915.19	53	73	03/08/2016	64.95	-	-	3850.24
				05/24/2016	65.00	-	-	3850.19
				09/08/2016	65.04	-	-	3850.15
				12/05/2016	65.07	-	-	3850.12
				03/08/2017	65.10	-	-	3850.09
				06/13/2017	65.17	-	-	3850.02
				09/12/2017	65.21	-	-	3849.98
				12/13/2017	65.26	-	-	3849.93
				03/23/2018	65.28	-	-	3849.91
				06/12/2018	65.36	-	-	3849.83
				09/10/2018	65.31	-	-	3849.88
				12/11/2018	65.45	-	-	3849.74
				03/13/2019	65.49	-	-	3849.70
				06/10/2019	65.52	-	-	3849.67
				09/25/2019	65.60	-	-	3849.59
				12/06/2019	65.83	-	-	3849.36
				03/11/2020	65.68	-	-	3849.51
				05/06/2020	65.68	-	-	3849.51
				06/09/2020	65.74	-	-	3849.45
				09/04/2020	65.74	-	-	3849.45
				12/11/2020	65.81	-	-	3849.38
				03/16/2021	65.83	-	-	3849.36
				06/11/2021	66.10	-	-	3849.09
				09/01/2021	65.94	-	-	3849.25
				11/29/2021	65.98	-	-	3849.21
MW-9 2"	3913.92	55	75	03/08/2016	64.33	-	-	3849.59
				05/24/2016	64.32	-	-	3849.60
				09/08/2016	64.35	-	-	3849.57
				12/05/2016	64.36	-	-	3849.56
				03/08/2017	63.38	-	-	3850.54
				06/13/2017	65.46	-	-	3848.46
				09/12/2017	64.53	-	-	3849.39
				12/13/2017	64.59	-	-	3849.33
				03/23/2018	64.75	-	-	3849.17
				06/12/2018	64.68	-	-	3849.24
				09/10/2018	64.71	-	-	3849.21
				12/11/2018	64.76	-	-	3849.16
				03/13/2019	64.80	-	-	3849.12
				06/10/2019	64.85	-	-	3849.07
				09/25/2019	64.90	-	-	3849.02
				12/06/2019	64.97	-	-	3848.95
				03/11/2020	64.99	-	-	3848.93
				05/06/2020	65.00	-	-	3848.92
				06/09/2020	65.05	-	-	3848.87
				09/04/2020	65.60	-	-	3848.32
				12/11/2020	65.67	-	-	3848.25
				03/16/2021	65.75	-	-	3848.17
				06/11/2021	65.25	-	-	3848.67
				09/01/2021	65.30	-	-	3848.62
				11/29/2021	65.30	-	-	3848.62

Table 1 - Gauging and NAPL Thickness - Historical
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-10 2"	3914.96	53	73	03/08/2016	65.32	-	-	3849.64
				05/24/2016	65.40	-	-	3849.56
				09/08/2016	65.41	-	-	3849.55
				12/05/2016	65.48	-	-	3849.48
				03/08/2017	65.50	-	-	3849.46
				06/13/2017	65.54	-	-	3849.42
				09/12/2017	65.46	-	-	3849.50
				12/13/2017	65.66	-	-	3849.30
				03/23/2018	65.64	-	-	3849.32
				06/12/2018	65.30	-	-	3849.66
				09/10/2018	65.72	-	-	3849.24
				12/11/2018	65.82	-	-	3849.14
				03/13/2019	65.87	-	-	3849.09
				06/10/2019	65.92	-	-	3849.04
				09/25/2019	65.97	-	-	3848.99
				12/06/2019	66.02	-	-	3848.94
				03/11/2020	66.05	-	-	3848.91
				05/06/2020	66.00	-	-	3848.96
				06/09/2020	66.07	-	-	3848.89
				09/04/2020	66.98	-	-	3847.98
				12/11/2020	DR	-	-	-
				03/16/2021	DR	-	-	-
				06/11/2021	DR	-	-	-
				09/01/2021	DR	-	-	-
				11/29/2021	DR	-	-	-
MW-11 2"	3914.4	52	72	03/08/2016	64.70	-	-	3849.70
				05/24/2016	65.77	-	-	3848.63
				09/08/2016	64.80	-	-	3849.60
				12/05/2016	64.81	-	-	3849.59
				03/08/2017	64.90	-	-	3849.50
				06/13/2017	64.93	-	-	3849.47
				09/12/2017	64.97	-	-	3849.43
				12/13/2017	65.04	-	-	3849.36
				03/23/2018	65.03	-	-	3849.37
				06/12/2018	65.19	-	-	3849.21
				09/10/2018	65.08	-	-	3849.32
				12/11/2018	65.21	-	-	3849.19
				03/13/2019	65.25	-	-	3849.15
				06/10/2019	65.34	-	-	3849.06
				09/25/2019	65.36	-	-	3849.04
				12/06/2019	65.43	-	-	3848.97
				03/11/2020	65.47	-	-	3848.93
				05/06/2020	65.45	-	-	3848.95
				06/09/2020	65.47	-	-	3848.93
				09/04/2020	65.52	-	-	3848.88
				12/11/2020	65.80	-	-	3848.60
				03/16/2021	65.63	-	-	3848.77
				06/11/2021	68.99	-	-	3845.41
				09/01/2021	65.74	-	-	3848.66
				11/29/2021	65.80	-	-	3848.60
MW-12 2"	3913.97	58	78	03/08/2016	64.93	-	-	3849.04
				05/24/2016	64.98	-	-	3848.99
				09/08/2016	65.02	-	-	3848.95
				12/05/2016	65.05	-	-	3848.92
				03/08/2017	65.07	-	-	3848.90
				06/13/2017	65.18	-	-	3848.79
				09/12/2017	64.95	-	-	3849.02
				12/13/2017	64.76	-	-	3849.21
				03/23/2018	64.45	-	-	3849.52
				06/12/2018	65.20	-	-	3848.77
				09/10/2018	65.31	-	-	3848.66
				12/11/2018	65.45	-	-	3848.52
				03/13/2019	65.46	-	-	3848.51
				06/10/2019	65.57	-	-	3848.40
				09/25/2019	65.59	-	-	3848.38
				12/06/2019	65.67	-	-	3848.30
				03/11/2020	65.68	-	-	3848.29
				05/06/2020	65.70	-	-	3848.27
				06/09/2020	65.71	-	-	3848.26
				09/04/2020	67.75	-	-	3846.22
				12/11/2020	65.83	-	-	3848.14
				03/16/2021	65.83	-	-	3848.14
				06/11/2021	65.94	-	-	3848.03
				09/01/2021	66.00	-	-	3847.97
				11/29/2021	66.00	-	-	3847.97

Table 1 - Gauging and NAPL Thickness - Historical
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-13 4"	3915.83	54	79	03/08/2016	67.60	65.10	2.50	3850.32
				05/24/2016	66.69	65.31	1.38	3850.29
				09/08/2016	66.53	65.42	1.11	3850.23
				12/01/2016	66.94	65.41	1.53	3850.17
				03/08/2017	66.80	65.42	1.38	3850.18
				06/13/2017	66.45	65.57	0.88	3850.11
				09/12/2017	66.45	65.58	0.87	3850.11
				12/13/2017	66.20	65.71	0.49	3850.04
				03/23/2018	65.81	65.80	0.01	3850.03
				06/12/2018	66.55	65.80	0.75	3849.91
				09/10/2018	65.88	65.78	0.10	3850.03
				12/11/2018	67.00	65.80	1.20	3849.83
				03/13/2019	66.27	66.12	0.15	3849.69
				06/10/2019	67.20	66.00	1.20	3849.63
				09/25/2019	66.55	66.04	0.51	3849.71
				12/06/2019	66.80	66.25	0.55	3849.49
				03/11/2020	66.30	66.24	0.06	3849.58
				05/06/2020	66.35	66.20	0.15	3849.61
				06/09/2020	66.86	66.10	0.76	3849.60
				09/04/2020	DR	-	-	-
				12/11/2020	66.55	66.54	0.01	3849.29
				03/16/2021	67.50	66.40	1.10	3849.25
				06/11/2021	67.10	66.40	0.70	3849.31
				09/01/2021	67.15	66.35	0.80	3849.35
				11/29/2021	66.83	66.80	0.03	3849.03
MW-14 4"	3915.72	53	78	03/08/2016	68.35	64.91	3.44	3850.24
				05/24/2016	65.62	65.49	0.13	3850.21
				09/08/2016	65.73	65.54	0.19	3850.15
				12/01/2016	66.31	65.50	0.81	3850.09
				03/08/2017	66.25	65.50	0.75	3850.10
				06/13/2017	66.72	65.50	1.22	3850.02
				09/12/2017	67.05	65.50	1.55	3849.96
				12/13/2017	66.90	65.45	1.45	3850.03
				03/23/2018	67.75	65.42	2.33	3849.92
				06/12/2018	68.09	65.49	2.60	3849.80
				09/10/2018	65.19	65.18	0.01	3850.54
				12/11/2018	66.08	65.95	0.13	3849.75
				03/13/2019	66.05	66.03	0.02	3849.69
				06/10/2019	66.12	66.08	0.04	3849.63
				09/25/2019	66.12	66.10	0.02	3849.62
				12/06/2019	66.20	66.17	0.03	3849.55
				03/11/2020	66.25	66.20	0.05	3849.51
				05/06/2020	66.25	66.20	0.05	3849.51
				06/09/2020	66.27	66.22	0.05	3849.49
				09/04/2020	66.30	66.29	0.01	3849.43
				12/11/2020	66.37	66.36	0.01	3849.36
				03/16/2021	66.40	66.38	0.02	3849.34
				06/11/2021	66.46	66.44	0.02	3849.28
				09/01/2021	66.48	66.47	0.01	3849.25
				11/29/2021	66.56	66.52	0.04	3849.19
MW-15 4"	3915.84	54	79	03/08/2016	65.81	65.20	0.61	3850.54
				05/24/2016	65.87	65.21	0.66	3850.52
				09/08/2016	65.42	65.36	0.06	3850.47
				12/01/2016	65.48	65.42	0.06	3850.41
				03/08/2017	65.45	65.40	0.05	3850.43
				06/13/2017	65.68	65.46	0.22	3850.34
				09/12/2017	65.57	65.52	0.05	3850.31
				12/13/2017	65.65	65.59	0.06	3850.24
				03/23/2018	65.68	65.59	0.09	3850.24
				06/12/2018	65.80	65.65	0.15	3850.17
				09/10/2018	65.61	-	-	3850.23
				12/11/2018	65.77	-	-	3850.07
				03/13/2019	65.79	-	-	3850.05
				06/10/2019	65.84	-	-	3850.00
				09/25/2019	65.90	-	-	3849.94
				12/06/2019	65.97	-	-	3849.87
				03/11/2020	66.00	-	-	3849.84
				05/06/2020	66.00	-	-	3849.84
				06/09/2020	66.08	-	-	3849.76
				09/04/2020	66.05	-	-	3849.79
				12/11/2020	66.12	-	-	3849.72
				03/16/2021	66.15	-	-	3849.69
				06/11/2021	65.89	-	-	3849.95
				09/01/2021	66.26	-	-	3849.58
				11/29/2021	66.30	-	-	3849.54

Table 1 - Gauging and NAPL Thickness - Historical
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-16 4"	3915.43	54	79	03/08/2016	65.78	65.00	0.78	3850.30
				05/24/2016	65.85	65.00	0.85	3850.29
				09/08/2016	65.23	65.20	0.03	3850.23
				12/01/2016	65.32	65.23	0.09	3850.19
				03/08/2017	65.27	65.21	0.06	3850.21
				06/13/2017	65.35	65.29	0.06	3850.13
				09/12/2017	65.40	65.33	0.07	3850.09
				12/13/2017	65.44	65.38	0.06	3850.04
				03/23/2018	65.48	65.40	0.08	3850.02
				06/12/2018	65.65	65.45	0.20	3849.95
				09/10/2018	65.45	-	-	3849.98
				12/11/2018	65.60	-	-	3849.83
				03/13/2019	65.60	-	-	3849.83
				06/10/2019	65.65	-	-	3849.78
				09/25/2019	65.75	-	-	3849.68
				12/06/2019	65.86	-	-	3849.57
				03/11/2020	65.81	-	-	3849.62
				05/06/2020	65.82	-	-	3849.61
				06/09/2020	65.87	-	-	3849.56
				09/04/2020	65.90	-	-	3849.53
				12/11/2020	65.96	-	-	3849.47
				03/16/2021	65.97	-	-	3849.46
				06/11/2021	66.83	-	-	3848.60
				09/01/2021	66.07	-	-	3849.36
				11/29/2021	66.12	-	-	3849.31
MW-17 4"	3915.59	58	78	03/08/2016	68.59	64.51	4.08	3850.41
				05/24/2016	67.19	64.85	2.34	3850.35
				09/08/2016	66.61	65.04	1.57	3850.29
				12/01/2016	67.28	65.96	1.32	3849.41
				03/08/2017	66.97	65.03	1.94	3850.24
				06/13/2017	66.65	65.14	1.51	3850.20
				09/12/2017	66.43	65.28	1.15	3850.12
				12/13/2017	66.07	65.40	0.67	3850.08
				03/23/2018	65.64	65.51	0.13	3850.06
				06/12/2018	66.50	65.44	1.06	3849.98
				09/10/2018	66.59	65.38	1.21	3850.01
				12/11/2018	67.24	65.40	1.84	3849.89
				03/13/2019	66.19	65.84	0.35	3849.69
				06/10/2019	67.21	65.50	1.71	3849.81
				09/25/2019	66.55	65.68	0.87	3849.77
				12/06/2019	65.87	65.70	0.17	3849.86
				03/11/2020	66.05	65.91	0.14	3849.66
				05/06/2020	66.25	65.85	0.4	3849.67
				06/09/2020	67.81	65.80	2.01	3849.46
				09/04/2020	66.70	65.85	0.85	3849.60
				12/11/2020	66.16	66.14	0.02	3849.45
				03/16/2021	68.20	65.79	2.41	3849.40
				06/11/2021	68.07	65.78	2.29	3849.43
				09/01/2021	67.94	65.82	2.12	3849.42
				11/29/2021	66.63	66.18	0.45	3849.34
MW-18 4"	3912.9	55	80	03/08/2016	64.19	-	-	3848.71
				05/24/2016	63.45	-	-	3849.45
				09/08/2016	64.50	-	-	3848.40
				12/05/2016	64.62	-	-	3848.28
				03/08/2017	64.50	-	-	3848.40
				06/13/2017	64.70	-	-	3848.20
				09/12/2017	63.83	-	-	3849.07
				12/13/2017	64.66	-	-	3848.24
				03/23/2018	64.69	-	-	3848.21
				06/12/2018	64.75	-	-	3848.15
				09/10/2018	65.85	-	-	3847.05
				12/11/2018	64.87	-	-	3848.03
				03/13/2019	64.90	-	-	3848.00
				06/10/2019	64.97	-	-	3847.93
				09/25/2019	65.01	-	-	3847.89
				12/06/2019	66.10	-	-	3846.80
				03/11/2020	65.18	-	-	3847.72
				05/06/2020	65.10	-	-	3847.80
				06/09/2020	66.10	-	-	3846.80
				09/04/2020	65.25	-	-	3847.65
				12/11/2020	66.24	-	-	3846.66
				03/16/2021	65.30	-	-	3847.60
				06/10/2021	65.48	-	-	3847.42
				09/01/2021	65.40	-	-	3847.50
				11/29/2021	65.50	-	-	3847.40

Table 1 - Gauging and NAPL Thickness - Historical
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-19 4"	3913.35	60	80	09/10/2018	65.41	-	-	3847.94
				12/11/2018	65.55	-	-	3847.80
				03/13/2019	65.58	-	-	3847.77
				06/10/2019	65.65	-	-	3847.70
				09/25/2019	65.68	-	-	3847.67
				12/06/2019	65.75	-	-	3847.60
				03/11/2020	65.80	-	-	3847.55
				05/06/2020	65.80	-	-	3847.55
				06/09/2020	65.82	-	-	3847.53
				09/04/2020	65.90	-	-	3847.45
				12/11/2020	65.92	-	-	3847.43
				03/16/2021	64.95	-	-	3848.40
				06/10/2021	66.05	-	-	3847.30
				09/01/2021	66.12	-	-	3847.23
				11/29/2021	66.10	-	-	3847.25
MW-20 4"	3912.13	60	80	09/10/2018	64.31	-	-	3847.82
				12/11/2018	65.45	-	-	3846.68
				03/13/2019	64.48	-	-	3847.65
				06/10/2019	65.57	-	-	3846.56
				09/25/2019	65.60	-	-	3846.53
				12/06/2019	64.66	-	-	3847.47
				03/11/2020	64.69	-	-	3847.44
				05/06/2020	64.68	-	-	3847.45
				06/09/2020	64.71	-	-	3847.42
				09/04/2020	64.76	-	-	3847.37
				12/11/2020	64.82	-	-	3847.31
				03/16/2021	64.85	-	-	3847.28
				06/10/2021	64.94	-	-	3847.19
				09/01/2021	65.00	-	-	3847.13
				11/29/2021	65.00	-	-	3847.13

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
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
NMOCD - Groundwater		0.01	0.75	0.75	0.62	-
MW-1	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	0.000700 J	<0.00100	<0.000657	<0.000642	0.000700 J
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/15/2019	0.00442	<0.000367	<0.000657	<0.00063	0.00442
	06/11/2019	<0.000371	<0.000333	<0.000597	<0.000572	<0.000333
	09/26/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/07/2019	0.00424	<0.000367	0.000660	<0.000630	0.00490
	03/12/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/11/2020	<0.000408 F	<0.000367 F	<0.000657 LF	<0.000630	<0.000367
	09/10/2020	0.00236	<0.000367	<0.000657	<0.000630	0.00236
	12/14/2020	0.000820 J	<0.002000	0.00270	0.00303	0.006550
	03/19/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	11/29/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
MW-3	03/08/2016	0.127	<0.000238	0.0904	0.0707	-
	05/24/2016	0.151	<0.000238	0.129	0.107	-
	09/08/2016	0.166	<0.000621	0.132	0.123	-
	12/05/2016	0.261	<0.00100	0.217	0.234	-
	03/08/2017	0.146	<0.000367	0.143	0.146	0.435
	06/13/2017	0.159	0.00296	0.238	0.156	0.556
	09/14/2017	0.101	<0.000367	0.178	0.129	0.408
	12/18/2017	0.0232	0.000750 J	0.0325	0.0228	0.0792
	03/26/2018	0.0119	0.00131 J	0.0241	0.0171	0.0544
	06/12/2018	0.0108	<0.000512	0.0266	0.0176	0.0550
	09/11/2018	0.0132	<0.000367	0.0317	0.0184	0.0633
	12/12/2018	0.0341	<0.000512	0.0725	0.123	0.230
	03/15/2019	0.0189	0.00157	0.0822	0.120	0.222
	06/10/2019	0.0101	<0.000342	0.0551	0.0419	0.107
	09/26/2019	0.00860	<0.000367	0.0480	0.0380	0.0946
	12/07/2019	0.00508	<0.000367	0.0360	0.0189	0.0600
	03/12/2020	<0.000408	<0.000367	0.0560	0.0454	0.101
	06/11/2020	0.00554 F	<0.000367 F	0.0774 LF	0.110	0.193
	09/08/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/14/2020	0.00300	<0.002000	0.0364	0.0597	0.09914
	03/19/2021	0.00291	0.000481 J	0.0226	0.00208 J	0.0281
	06/11/2021	0.00163 J	<0.00200	0.0838	0.107	0.193
	09/07/2021	<0.00200	<0.00200	0.0561	0.0718	0.128
	11/30/2021	0.000494 J	<0.00200	0.0339	0.0225	0.0569

Table 2 - Groundwater Analytical Data - Historical
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-4	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/12/2018	0.00140	<0.000512	<0.000616	<0.000270	0.00140
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/15/2019	<0.000408	<0.000367	0.000980	0.00107	0.00205
	06/10/2019	<0.000372	<0.000335	<0.0006	<0.000575	<0.000335
	09/26/2019	0.00619	<0.000367	<0.000657	<0.000630	0.00619
	12/07/2019	0.000710	<0.000367	<0.000657	<0.000630	0.000710
	03/11/2020	0.0123	<0.000367	<0.000657	<0.000630	0.0123
	06/11/2020	<0.000408 F	<0.000367 F	<0.000657 LF	<0.000630	<0.000367
	09/08/2020	0.0132	<0.000367	0.0497	0.0722	0.135
	12/14/2020	0.00110 J	<0.002000	0.00457	0.00659	0.01226
	03/18/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	0.00157 J	0.00179 J	0.00336 J
	11/30/2021	<0.0200	<0.0200	<0.0200	<0.0400	<0.0400
MW-5	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	0.000800 J	<0.00100	<0.000657	<0.000642	0.000800 J
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/15/2019	0.00692	<0.000367	<0.000657	<0.00063	0.00692
	06/11/2019	<0.000387	<0.000348	<0.000623	<0.000597	<0.000348
	09/26/2019	0.0132	<0.000367	<0.000657	<0.000630	0.0132
	12/07/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/12/2020	0.00405	<0.000367	<0.000657	<0.000630	0.00405
	06/11/2020	0.00131 JF	<0.000367 F	<0.000657 LF	<0.000630	0.00131 J
	09/10/2020	0.00138 J	<0.000367	<0.000657	<0.000630	0.00138 J
	12/15/2020	0.000650 J	<0.002000	0.00134 J	0.00131 J	0.003300
	03/18/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	11/30/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
MW-6	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	0.00344	<0.00100	<0.000657	<0.000642	0.00344
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	0.000720 J	<0.000657	<0.000630	0.000720 J
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/14/2019	0.00396	<0.000367	<0.000657	<0.00063	0.00396

Table 2 - Groundwater Analytical Data - Historical
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-7	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	0.00481	<0.00100	<0.000657	<0.000642	0.00481
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/12/2018	0.00150	<0.000512	0.00120	<0.000270	0.00270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/14/2019	0.000630	<0.000367	<0.000657	<0.00063	0.000630
	06/10/2019	0.0407	<0.000314	<0.000562	<0.000538	0.0407
	09/26/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/07/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
MW-8	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	0.00272	<0.00100	<0.000657	<0.000642	0.00272
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	0.000610 J	<0.000657	<0.000630	0.000610 J
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/15/2019	0.00530	<0.000367	<0.000657	<0.00063	0.00530
	06/11/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	09/26/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/07/2019	0.0586	<0.000367	0.00422	<0.000630	0.0628
	03/12/2020	0.00465	<0.000367	<0.000657	<0.000630	0.00465
	06/11/2020	0.000870 JF	<0.000367 F	<0.000657 LF	<0.000630	0.000870 J
	09/10/2020	0.00208	<0.000367	<0.000657	<0.000630	0.00208
	12/15/2020	0.000590 J	<0.002000	0.00116 J	0.00132 J	0.003070
	03/29/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	11/30/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
MW-9	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	0.00113 J	<0.00100	<0.000657	<0.000642	0.00113 J
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	0.000680 J	<0.000657	<0.000630	0.000680 J
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/14/2019	0.000930	<0.000367	<0.000657	<0.00063	0.000930
	06/11/2019	<0.000373	<0.000335	<0.0006	<0.000575	<0.000335
	09/26/2019	0.0105	<0.000367	<0.000657	<0.000630	0.0105
	12/07/2019	0.000410	<0.000367	<0.000657	<0.000630	0.000410
	03/12/2020	0.00583	<0.000367	<0.000657	<0.000630	0.00583
	09/10/2020	0.00496	<0.000367	<0.000657	<0.000630	0.00496
	12/15/2020	0.000750 J	<0.002000	0.00166 J	0.00163 J	0.004040
	03/18/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	11/30/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400

Table 2 - Groundwater Analytical Data - Historical
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-10	03/08/2016	2.62	<0.0119	0.222	<0.0122	-
	05/24/2016	2.38	<0.00238	0.127	0.0325	-
	09/08/2016	3.16	<0.0329	0.181	<0.0136	-
	12/05/2016	3.35	<0.0200	0.178	0.0420	-
	03/08/2017	2.69	0.0620 J	0.303	0.0790 J	3.13
	06/13/2017	0.00417	<0.00100	<0.000657	<0.000642	0.00417
	09/14/2017	11.5 D	<0.000367	0.901 D	0.0192	12.4
	12/18/2017	12.1 D	0.00857	0.953 D	0.0257	13.1
	03/26/2018	5.04	0.0270 J	0.518	<0.0315	5.59
	06/12/2018	3.94	<0.00512	0.422	<0.00270	4.36
	09/11/2018	6.30 D	0.000380 J	0.693 D	0.00625	7.00
	12/11/2018	3.65	<0.0256	0.420	<0.0135	4.07
	03/14/2019	4.29	<0.000367	0.142	<0.00063	4.43
	06/10/2019	32	<0.0367	2.89	2.56	38
	09/26/2019	4.43	<0.000367	0.307	<0.000630	4.74
	12/07/2019	1.12	<0.000367	0.0564	<0.000630	1.18
	03/11/2020	3.03 D	<0.000367	0.161	<0.000630	3.19
	06/11/2020	2.33 DF	0.00104 JF	0.0498 LF	0.00203	2.38
MW-11	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	0.000720 J	<0.000367	<0.000657	<0.000630	0.000720 J
	06/13/2017	0.00424	<0.00100	<0.000657	<0.000642	0.00424
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/12/2018	0.00270	<0.000512	<0.000616	<0.000270	0.00270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/14/2019	0.0101	<0.000367	0.00173	0.00146	0.0133
	06/10/2019	<0.000378	<0.00034	<0.000609	<0.000584	<0.00034
	09/26/2019	0.0429	<0.000367	0.00902	<0.000630	0.0519
	12/07/2019	0.000820	0.000440	<0.000657	<0.000630	0.00126
	03/12/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/11/2020	<0.000408 F	<0.000367 F	<0.000657 LF	<0.000630	<0.000367
	09/08/2020	0.00575	<0.000367	0.00384	0.00263	0.0122
	12/15/2020	0.00153 J	<0.002000	0.00251	0.00254	0.006580
	03/29/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	11/30/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
MW-12	03/08/2016	1.88	<0.0119	<0.0119	<0.0122	-
	05/24/2016	0.634	<0.0119	<0.0119	<0.0122	-
	09/08/2016	0.162	<0.0329	<0.0404	<0.0136	-
	12/05/2016	0.0577	<0.00100	<0.000657	<0.000642	-
	03/08/2017	0.117	<0.0184	<0.0329	<0.0315	0.117
	06/13/2017	0.00768	<0.00100	<0.000657	<0.000642	0.00768
	09/14/2017	0.00496	<0.000367	0.00168 J	<0.000630	0.00664
	12/18/2017	0.0304	<0.000367	0.00627	0.00146 J	0.0381
	03/26/2018	0.000570 J	0.00103 J	<0.000657	<0.000630	0.00160 J
	06/12/2018	0.00130	<0.000512	<0.000616	0.000700 J	0.00200
	09/11/2018	0.00136 J	<0.000367	<0.000657	<0.000630	0.00136 J
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/14/2019	0.000950	<0.000367	<0.000657	<0.00063	0.000950
	06/10/2019	<0.00037	<0.000333	<0.000596	<0.000571	<0.000333
	09/26/2019	0.00564	<0.000367	<0.000657	<0.000630	0.00564
	12/07/2019	0.000680	<0.000367	<0.000657	0.000640	0.00132
	03/12/2020	0.00719	0.000750 J	0.00121 J	<0.000630	0.00915
	06/11/2020	0.00101 JF	<0.000367 F	<0.000657 LF	<0.000630	0.00101 J
	09/10/2020	0.00874	0.000510 J	0.00161 J	0.00117 J	0.0120
	12/15/2020	0.00213	<0.002000	0.00236	0.00217	0.006660
	03/18/2021	0.000887 J	0.000745 J	0.00108 J	0.00273 J	0.00544
	06/11/2021	0.000750 J	0.000555 J	<0.00200	<0.00400	0.00131 J
	09/07/2021	0.000614 J	<0.00200	0.000673 J	<0.00400	0.00129 J
	11/30/2021	0.000479 J	<0.00200	<0.00200	<0.00400	<0.00400

Table 2 - Groundwater Analytical Data - Historical
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-15	09/11/2018	0.00374	0.00324	0.0468	0.0637	0.117
	12/12/2018	0.00280	<0.000512	0.0474	0.0510	0.101
	03/15/2019	0.00886	<0.000367	0.0254	0.0257	0.0599
	06/10/2019	0.0122	<0.000336	0.0954	0.0691	0.177
	09/26/2019	<0.000408	<0.000367	0.0251	0.0161	0.0412
	12/07/2019	0.00162	<0.000367	0.0624	0.0369	0.101
	03/12/2020	<0.000408	<0.000367	0.0265	<0.000630	0.0265
	06/11/2020	0.00205 F	<0.000367 F	0.0235 LF	0.0140	0.0396
	09/11/2020	0.000940 J	<0.000367	0.00715	0.00268	0.0108
	12/15/2020	0.000810 J	<0.002000	0.00257	0.00121 J	0.004590
	03/19/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	0.00263	<0.00400	0.00263 J
	09/07/2021	<0.00200	<0.00200	0.00679	0.000719 J	0.00751
	11/29/2021	<0.00200	<0.00200	0.00373	<0.00400	0.00373 J
MW-16	09/11/2018	0.0101	0.00839	0.0242	0.0314	0.0741
	12/12/2018	0.00230	0.00120	0.00890	0.0150	0.0274
	03/15/2019	0.00408	0.00222	0.00551	0.0114	0.0232
	06/10/2019	<0.000377	<0.000339	<0.000607	<0.000582	<0.000339
	09/26/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/07/2019	0.000470	<0.000367	0.00598	0.00577	0.0122
	03/12/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/11/2020	<0.000408 F	<0.000367 F	<0.000657 LF	<0.000630	<0.000367
	09/11/2020	0.00140 J	0.000380 J	0.00354	0.00299	0.00831
	12/15/2020	0.000590 J	<0.002000	0.00185 J	0.00176 J	0.004200
	03/19/2021	<0.00200	<0.00200	0.00682	0.00928	0.0161
	06/11/2021	<0.00200	<0.00200	0.00192 J	0.00229 J	0.00421
	09/07/2021	<0.00200	<0.00200	0.00151 J	<0.00400	0.00151 J
	11/29/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
MW-18	03/08/2016	0.267	<0.000238	0.000900 J	0.000500 J	-
	05/24/2016	0.0108	<0.000238	0.000800 J	0.000800 J	-
	09/08/2016	0.0715	<0.000621	0.00530	0.00610	-
	12/05/2016	0.264	<0.00100	<0.000657	<0.000642	-
	03/08/2017	0.513	<0.0184	<0.0329	<0.0315	0.513
	06/13/2017	5.45	<0.0250	<0.0164	<0.0161	5.45
	09/14/2017	0.582 D	<0.000367	0.00167 J	0.00118 J	0.585
	12/18/2017	6.82 D	<0.000367	0.00507	0.0241	6.85
	03/26/2018	3.50	0.00760 J	<0.0131	0.0132 J	3.52
	06/12/2018	3.09	<0.0256	<0.0308	<0.0135	3.09
	09/11/2018	0.0801	<0.000367	<0.000657	0.00463	0.0847
	12/11/2018	0.0310	<0.000512	<0.000616	<0.000270	0.0310
	03/14/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	06/10/2019	<0.00038	<0.000342	<0.000612	<0.000586	<0.000342
	09/25/2019	0.395	0.0145	0.00727	<0.000630	0.417
	12/07/2019	0.122	0.00273	0.00199	0.0109	0.138
	03/11/2020	0.217	0.0239	0.0105	0.00489	0.256
	06/11/2020	0.241 F	0.0138 F	0.00619 LF	0.0366	0.298
	09/08/2020	0.135	0.0242	0.0119	0.0517	0.223
	12/14/2020	0.0479	0.0196	0.00646	0.00537	0.07933
	03/18/2021	0.00968 J	0.0236 J	<0.0400	<0.0800	0.0333 J
	06/11/2021	<0.00200	0.0175	0.00494	<0.00400	0.0224
	09/07/2021	0.000698 J	0.00218	0.00494	<0.00400	0.00782
	11/30/2021	0.000702 J	0.00527	0.00141 J	0.0448	0.0522

Table 2 - Groundwater Analytical Data - Historical
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-19	09/11/2018	2.41 D	<0.000367	<0.000657	<0.000630	2.41
	12/11/2018	6.07	<0.0102	<0.0123	<0.00540	6.07
	03/14/2019	2.11	<0.000367	<0.000657	<0.00063	2.11
	06/10/2019	0.302	<0.000367	<0.000657	<0.00063	0.302
	09/25/2019	3.99	<0.000367	0.00585	<0.000630	4.00
	12/07/2019	0.00180	0.000720	0.00206	0.00447	0.00905
	03/11/2020	3.96 D	0.00557	0.00777	0.00131 J	3.97
	06/11/2020	<0.000408 F	<0.000367 F	<0.000657 LF	<0.000630	<0.000367
	09/08/2020	1.21	<0.00184	<0.00329	<0.00315	1.21
	12/14/2020	0.336 X	0.00208	0.00131 J	0.00116 J	0.3406
	03/18/2021	0.0235	<0.00200	<0.00200	<0.00400	0.0235
	06/11/2021	0.0958	<0.00200	<0.00200	0.00114 J	0.0969
	09/07/2021	0.110	0.00112 J	<0.00200	<0.00400	0.111
MW-20	11/30/2021	0.00575	0.00039 J	<0.00200	<0.00400	0.00614
	09/11/2018	0.00373	<0.000367	<0.000657	<0.000630	0.00373
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/14/2019	0.00741	<0.000367	<0.000657	<0.00063	0.00741
	06/10/2019	0.0373	<0.000367	<0.000657	<0.00063	0.0373
	09/25/2019	0.0606	<0.000367	<0.000657	<0.000630	0.0606
	12/07/2019	2.24	0.00218	0.00376	0.00340	2.25
	03/11/2020	0.0227	<0.000367	<0.000657	<0.000630	0.0227
	06/11/2020	<0.000408 F	<0.000367 F	<0.000657 LF	<0.000630	<0.000367
	09/08/2020	<0.000408 XF	<0.000367 XF	<0.000657 XF	<0.000630	<0.000367
	12/14/2020	0.00320	<0.002000	<0.002000	<0.002000	0.003200
	03/18/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	0.000427 J	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	11/30/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400

Notes:

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

Analyte concentration exceeds the standard for:

NMOC - Groundwater

Table 3 - Groundwater Analytical Data - Historical - PAH supplement
 Lovington Deep 6 inch
 Hobbs, NM
 SRS#: 2002-10312

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-4	03/26/2018	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	0.000136 J	<0.000109	<0.000109
	03/15/2019	<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	0.000122	<0.0000055	<0.0000092
	03/11/2020	<0.000103	<0.0000871	<0.0000896	<0.000139	<0.0000590	<0.0000735	<0.000117	<0.000120	<0.000161	<0.0000786	-	<0.000163	<0.000104	<0.0000945	<0.000101	<0.0000880	<0.000135
MW-10	12/05/2016	0.000155	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	0.000214	<0.0000250	0.000465	<0.0000250	<0.0000250	0.000296	<0.0000250
	03/26/2018	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	0.000985	<0.000110	0.00167	<0.000110	0.000329 J	0.00129	<0.000110
	03/14/2019	<0.0000040	<0.0000072	<0.0000075	<0.0000063	<0.0000095	<0.0000090	<0.0000079	<0.0000077	<0.0000087	<0.0000049	0.000142	<0.0000089	0.000255	<0.0000049	0.0000739	0.0000810	<0.0000091
MW-12	03/11/2020	0.000555	<0.000104	<0.000107	<0.000166	<0.0000706	<0.0000879	<0.000140	<0.000144	<0.000193	<0.000094	-	<0.000194	0.00216	<0.000113	0.000301 J	0.00210	<0.000161
	12/05/2016	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	0.000110	<0.0000250	0.000505	<0.0000250	<0.0000250	0.000122	0.0000626
	03/26/2018	<0.000108	<0.000108	<0.000108	<0.000108	<0.000108	<0.000108	<0.000108	<0.000108	<0.000108	<0.000108	0.000241	<0.000108	0.000473	<0.000108	0.000247 J	<0.000108	<0.000108
MW-18	03/14/2019	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	0.000157	<0.0000090	0.000322	<0.0000049	<0.0000045	<0.0000055	<0.0000092
	03/12/2020	<0.000111	<0.0000931	<0.0000958	<0.000149	<0.0000631	<0.0000786	<0.000125	<0.000128	<0.000173	<0.0000840	-	<0.000174	0.000400	<0.000101	<0.000108	<0.0000940	<0.000144
	03/08/2016	<0.0000329	<0.0000575	<0.0000318	<0.0000714	<0.0000414	<0.0000703	<0.0000514	<0.0000555	<0.0000803	<0.0000556	<0.0000601	<0.0000632	<0.0000780	<0.0000532	<0.0000649	<0.0000511	<0.0000411
MW-19	03/26/2018	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	0.000829	<0.000110	<0.000110	<0.000110	0.000447	0.000388	<0.000110
	03/14/2019	<0.0000041	<0.0000073	<0.0000076	<0.0000063	<0.0000095	<0.0000091	<0.0000080	<0.0000078	<0.0000088	<0.0000049	0.0000305	<0.0000090	0.0000255	<0.0000049	0.0000325	<0.0000055	<0.0000092
	03/11/2020	<0.000109	<0.0000916	<0.0000943	<0.000146	<0.0000621	<0.0000774	<0.000123	<0.000126	<0.000170	<0.0000827	-	<0.000171	0.000167 J	<0.0000994	<0.000106	0.000183 J	<0.000142
MW-20	03/14/2019	<0.0000042	<0.0000075	<0.0000077	<0.0000065	<0.0000097	<0.0000093	<0.0000081	<0.0000079	<0.0000090	<0.0000050	<0.0000054	<0.0000091	<0.0000056	<0.0000050	<0.0000046	<0.0000056	<0.0000094
	03/11/2020	0.000168 J	<0.0000855	<0.0000880	<0.000137	<0.0000580	<0.0000722	<0.000115	<0.000118	<0.000159	<0.0000772	-	<0.000160	0.000900	<0.0000928	0.000213 J	0.00112	<0.000132
	03/14/2019	<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	0.0000398	<0.0000056	<0.0000093
MW-20	03/11/2020	<0.000107	<0.0000899	<0.0000925	<0.000144	<0.0000609	<0.0000759	<0.000121	<0.000124	<0.000167	<0.0000811	-	<0.000168	<0.000108	<0.0000975	<0.000104	<0.0000908	<0.000139

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



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-403-1

Laboratory Sample Delivery Group: Lovington
Client Project/Site: Lovington Deep
Revision: 2

For:

Talon/LPE
408 W. Texas St.
Artesia, New Mexico 88210

Attn: David Adkins

Authorized for release by:
5/4/2021 3:15:26 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Talon/LPE
Project/Site: Lovington Deep

Laboratory Job ID: 890-403-1
SDG: Lovington

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Definitions/Glossary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Job ID: 890-403-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-403-1

Comments

No additional comments.

Revision

The report being provided is a revision of the original report sent on 3/29/2021. The report (revision 2) is being revised due to: Per Client email, Corrected less than values.

Report revision history

Revision 1 - 3/31/2021 - Reason - Per Client email, Corrected less than values.

Receipt

The samples were received on 3/22/2021 9:53 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.4° C.

Receipt Exceptions

Incorrect NCM for BTEX bulk jar, reportable samples are water

Per Client email, Corrected less than values

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Client Sample ID: MW-20

Lab Sample ID: 890-403-1

Date Collected: 03/18/21 08:30

Matrix: Water

Date Received: 03/22/21 09:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/28/21 10:43	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/28/21 10:43	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/28/21 10:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/28/21 10:43	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/28/21 10:43	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/28/21 10:43	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			03/28/21 10:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	X	70 - 130		03/28/21 10:43	1
1,4-Difluorobenzene (Surr)	97		70 - 130		03/28/21 10:43	1

Client Sample ID: MW-19

Lab Sample ID: 890-403-2

Date Collected: 03/18/21 09:00

Matrix: Water

Date Received: 03/22/21 09:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0235		0.00200	0.000408	mg/L			03/28/21 11:08	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/28/21 11:08	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/28/21 11:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/28/21 11:08	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/28/21 11:08	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/28/21 11:08	1
Total BTEX	0.0235		0.00400	0.000657	mg/L			03/28/21 11:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	138	X	70 - 130		03/28/21 11:08	1
1,4-Difluorobenzene (Surr)	107		70 - 130		03/28/21 11:08	1

Client Sample ID: MW-18

Lab Sample ID: 890-403-3

Date Collected: 03/18/21 10:40

Matrix: Water

Date Received: 03/22/21 09:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0400	U	0.0400	0.00816	mg/L			03/28/21 11:33	20
Toluene	<0.0400	U	0.0400	0.00734	mg/L			03/28/21 11:33	20
Ethylbenzene	<0.0400	U	0.0400	0.0131	mg/L			03/28/21 11:33	20
m-Xylene & p-Xylene	<0.0800	U	0.0800	0.0126	mg/L			03/28/21 11:33	20
o-Xylene	<0.0400	U	0.0400	0.0128	mg/L			03/28/21 11:33	20
Xylenes, Total	<0.0800	U	0.0800	0.0128	mg/L			03/28/21 11:33	20
Total BTEX	<0.0800	U	0.0800	0.0131	mg/L			03/28/21 11:33	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	X	70 - 130		03/28/21 11:33	20
1,4-Difluorobenzene (Surr)	95		70 - 130		03/28/21 11:33	20

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Client Sample ID: MW-12

Lab Sample ID: 890-403-4

Date Collected: 03/18/21 11:00

Matrix: Water

Date Received: 03/22/21 09:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/28/21 11:58	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/28/21 11:58	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/28/21 11:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/28/21 11:58	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/28/21 11:58	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/28/21 11:58	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			03/28/21 11:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	136	X	70 - 130		03/28/21 11:58	1
1,4-Difluorobenzene (Surr)	100		70 - 130		03/28/21 11:58	1

Client Sample ID: MW-9

Lab Sample ID: 890-403-5

Date Collected: 03/18/21 11:30

Matrix: Water

Date Received: 03/22/21 09:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/28/21 12:24	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/28/21 12:24	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/28/21 12:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/28/21 12:24	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/28/21 12:24	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/28/21 12:24	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			03/28/21 12:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130		03/28/21 12:24	1
1,4-Difluorobenzene (Surr)	104		70 - 130		03/28/21 12:24	1

Client Sample ID: MW-4

Lab Sample ID: 890-403-6

Date Collected: 03/18/21 12:30

Matrix: Water

Date Received: 03/22/21 09:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/28/21 14:07	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/28/21 14:07	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/28/21 14:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/28/21 14:07	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/28/21 14:07	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/28/21 14:07	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			03/28/21 14:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	X	70 - 130		03/28/21 14:07	1
1,4-Difluorobenzene (Surr)	91		70 - 130		03/28/21 14:07	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Client Sample ID: MW-5

Lab Sample ID: 890-403-7

Date Collected: 03/18/21 13:20

Matrix: Water

Date Received: 03/22/21 09:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/28/21 14:32	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/28/21 14:32	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/28/21 14:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/28/21 14:32	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/28/21 14:32	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/28/21 14:32	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			03/28/21 14:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130		03/28/21 14:32	1
1,4-Difluorobenzene (Surr)	94		70 - 130		03/28/21 14:32	1

Client Sample ID: MW-1

Lab Sample ID: 890-403-8

Date Collected: 03/19/21 09:00

Matrix: Water

Date Received: 03/22/21 09:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/28/21 14:56	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/28/21 14:56	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/28/21 14:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/28/21 14:56	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/28/21 14:56	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/28/21 14:56	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			03/28/21 14:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	X	70 - 130		03/28/21 14:56	1
1,4-Difluorobenzene (Surr)	107		70 - 130		03/28/21 14:56	1

Client Sample ID: MW-3

Lab Sample ID: 890-403-9

Date Collected: 03/19/21 09:30

Matrix: Water

Date Received: 03/22/21 09:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00291		0.00200	0.000408	mg/L			03/28/21 15:22	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/28/21 15:22	1
Ethylbenzene	0.0226		0.00200	0.000657	mg/L			03/28/21 15:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/28/21 15:22	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/28/21 15:22	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/28/21 15:22	1
Total BTEX	0.0255		0.00400	0.000657	mg/L			03/28/21 15:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	161	X	70 - 130		03/28/21 15:22	1
1,4-Difluorobenzene (Surr)	100		70 - 130		03/28/21 15:22	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Client Sample ID: MW-16

Lab Sample ID: 890-403-10

Date Collected: 03/19/21 11:30

Matrix: Water

Date Received: 03/22/21 09:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/28/21 15:48	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/28/21 15:48	1
Ethylbenzene	0.00682		0.00200	0.000657	mg/L			03/28/21 15:48	1
m-Xylene & p-Xylene	0.00805		0.00400	0.000629	mg/L			03/28/21 15:48	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/28/21 15:48	1
Xylenes, Total	0.00805		0.00400	0.000642	mg/L			03/28/21 15:48	1
Total BTEX	0.0149		0.00400	0.000657	mg/L			03/28/21 15:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	X	70 - 130		03/28/21 15:48	1
1,4-Difluorobenzene (Surr)	97		70 - 130		03/28/21 15:48	1

Client Sample ID: MW-15

Lab Sample ID: 890-403-11

Date Collected: 03/19/21 10:30

Matrix: Water

Date Received: 03/22/21 09:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/28/21 16:13	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/28/21 16:13	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/28/21 16:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/28/21 16:13	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/28/21 16:13	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/28/21 16:13	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			03/28/21 16:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	141	X	70 - 130		03/28/21 16:13	1
1,4-Difluorobenzene (Surr)	107		70 - 130		03/28/21 16:13	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-403-1	MW-20	131 X	97
890-403-2	MW-19	138 X	107
890-403-3	MW-18	135 X	95
890-403-4	MW-12	136 X	100
890-403-5	MW-9	127	104
890-403-6	MW-4	131 X	91
890-403-7	MW-5	115	94
890-403-8	MW-1	132 X	107
890-403-9	MW-3	161 X	100
890-403-10	MW-16	131 X	97
890-403-11	MW-15	141 X	107
LCS 880-960/34	Lab Control Sample	116	88
LCSD 880-960/35	Lab Control Sample Dup	118	90
MB 880-952/5-A	Method Blank	78	84
MB 880-960/39	Method Blank	82	84

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

QC Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-952/5-A

Matrix: Water

Analysis Batch: 960

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L		03/27/21 11:43	03/27/21 19:00	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L		03/27/21 11:43	03/27/21 19:00	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L		03/27/21 11:43	03/27/21 19:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L		03/27/21 11:43	03/27/21 19:00	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L		03/27/21 11:43	03/27/21 19:00	1
Xylenes, Total	<0.00400	U	0.00400	0.00100	mg/L		03/27/21 11:43	03/27/21 19:00	1
Total BTEX	<0.00200	U	0.00200	0.00100	mg/L		03/27/21 11:43	03/27/21 19:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	03/27/21 11:43	03/27/21 19:00	1
1,4-Difluorobenzene (Surr)	84		70 - 130	03/27/21 11:43	03/27/21 19:00	1

Lab Sample ID: MB 880-960/39

Matrix: Water

Analysis Batch: 960

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/28/21 08:07	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/28/21 08:07	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/28/21 08:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/28/21 08:07	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/28/21 08:07	1
Xylenes, Total	<0.00400	U	0.00400	0.00100	mg/L			03/28/21 08:07	1
Total BTEX	<0.00200	U	0.00200	0.00100	mg/L			03/28/21 08:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130		03/28/21 08:07	1
1,4-Difluorobenzene (Surr)	84		70 - 130		03/28/21 08:07	1

Lab Sample ID: LCS 880-960/34

Matrix: Water

Analysis Batch: 960

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09733		mg/L		97	70 - 130
Toluene	0.100	0.1038		mg/L		104	70 - 130
Ethylbenzene	0.100	0.09886		mg/L		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1973		mg/L		99	70 - 130
o-Xylene	0.100	0.1148		mg/L		115	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-960/35

Matrix: Water

Analysis Batch: 960

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09268		mg/L		93	70 - 130	5	20
Toluene	0.100	0.1022		mg/L		102	70 - 130	2	20
Ethylbenzene	0.100	0.09084		mg/L		91	70 - 130	8	20
m-Xylene & p-Xylene	0.200	0.1840		mg/L		92	70 - 130	7	20
o-Xylene	0.100	0.09895		mg/L		99	70 - 130	15	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Eurofins Xenco, Carlsbad

QC Association Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

GC VOA

Prep Batch: 952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-952/5-A	Method Blank	Total/NA	Water	5035	

Analysis Batch: 960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-403-1	MW-20	Total/NA	Water	8021B	
890-403-2	MW-19	Total/NA	Water	8021B	
890-403-3	MW-18	Total/NA	Water	8021B	
890-403-4	MW-12	Total/NA	Water	8021B	
890-403-5	MW-9	Total/NA	Water	8021B	
890-403-6	MW-4	Total/NA	Water	8021B	
890-403-7	MW-5	Total/NA	Water	8021B	
890-403-8	MW-1	Total/NA	Water	8021B	
890-403-9	MW-3	Total/NA	Water	8021B	
890-403-10	MW-16	Total/NA	Water	8021B	
890-403-11	MW-15	Total/NA	Water	8021B	
MB 880-952/5-A	Method Blank	Total/NA	Water	8021B	952
MB 880-960/39	Method Blank	Total/NA	Water	8021B	
LCS 880-960/34	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-960/35	Lab Control Sample Dup	Total/NA	Water	8021B	

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Client Sample ID: MW-20

Lab Sample ID: 890-403-1

Date Collected: 03/18/21 08:30

Matrix: Water

Date Received: 03/22/21 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	960	03/28/21 10:43	MR	XM

Client Sample ID: MW-19

Lab Sample ID: 890-403-2

Date Collected: 03/18/21 09:00

Matrix: Water

Date Received: 03/22/21 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	960	03/28/21 11:08	MR	XM

Client Sample ID: MW-18

Lab Sample ID: 890-403-3

Date Collected: 03/18/21 10:40

Matrix: Water

Date Received: 03/22/21 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		20	960	03/28/21 11:33	MR	XM

Client Sample ID: MW-12

Lab Sample ID: 890-403-4

Date Collected: 03/18/21 11:00

Matrix: Water

Date Received: 03/22/21 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	960	03/28/21 11:58	MR	XM

Client Sample ID: MW-9

Lab Sample ID: 890-403-5

Date Collected: 03/18/21 11:30

Matrix: Water

Date Received: 03/22/21 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	960	03/28/21 12:24	MR	XM

Client Sample ID: MW-4

Lab Sample ID: 890-403-6

Date Collected: 03/18/21 12:30

Matrix: Water

Date Received: 03/22/21 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	960	03/28/21 14:07	MR	XM

Client Sample ID: MW-5

Lab Sample ID: 890-403-7

Date Collected: 03/18/21 13:20

Matrix: Water

Date Received: 03/22/21 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	960	03/28/21 14:32	MR	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Client Sample ID: MW-1

Lab Sample ID: 890-403-8

Date Collected: 03/19/21 09:00

Matrix: Water

Date Received: 03/22/21 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	960	03/28/21 14:56	MR	XM

Client Sample ID: MW-3

Lab Sample ID: 890-403-9

Date Collected: 03/19/21 09:30

Matrix: Water

Date Received: 03/22/21 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	960	03/28/21 15:22	MR	XM

Client Sample ID: MW-16

Lab Sample ID: 890-403-10

Date Collected: 03/19/21 11:30

Matrix: Water

Date Received: 03/22/21 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	960	03/28/21 15:48	MR	XM

Client Sample ID: MW-15

Lab Sample ID: 890-403-11

Date Collected: 03/19/21 10:30

Matrix: Water

Date Received: 03/22/21 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	960	03/28/21 16:13	MR	XM

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8021B		Water	Total BTEX

Method Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XM
5030B	Purge and Trap	SW846	XM

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Carlsbad

Sample Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-403-1
SDG: Lovington

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-403-1	MW-20	Water	03/18/21 08:30	03/22/21 09:53	
890-403-2	MW-19	Water	03/18/21 09:00	03/22/21 09:53	
890-403-3	MW-18	Water	03/18/21 10:40	03/22/21 09:53	
890-403-4	MW-12	Water	03/18/21 11:00	03/22/21 09:53	
890-403-5	MW-9	Water	03/18/21 11:30	03/22/21 09:53	
890-403-6	MW-4	Water	03/18/21 12:30	03/22/21 09:53	
890-403-7	MW-5	Water	03/18/21 13:20	03/22/21 09:53	
890-403-8	MW-1	Water	03/19/21 09:00	03/22/21 09:53	
890-403-9	MW-3	Water	03/19/21 09:30	03/22/21 09:53	
890-403-10	MW-16	Water	03/19/21 11:30	03/22/21 09:53	
890-403-11	MW-15	Water	03/19/21 10:30	03/22/21 09:53	

Eurofins Xenco, Carlsbad



Environment Testing

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199


Chain of Custody

Work Order No: 403 Done

www.xenco.com Page 1 of 1

Project Manager:	David Adkins		Bill to: (if different)	Plains All American
Company Name:	Talon LPE		Company Name:	Pipeline
Address:	408 Texas St		Address:	Ath. Camille Bryant
City, State ZIP:	Artesia, NM 88210		City, State ZIP:	SR5# 2002-10312
Phone:	575-441-8935	Email:	dadkins@talonlpe.com	

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADAP <input type="checkbox"/> Other: _____

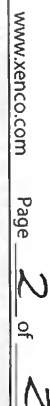
Project Name:		Livingston Deep		Turn Around	
Project Number:		700276, 051.54		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	
Project Location:		Livingston		Due Date:	
Sampler's Name:		Roy Bell		TAT starts the day received by the lab, if received by 4:30pm	
PO #:		SR5# 2002-10312		We Recd: Yes No	
SAMPLE RECEIPT		Temp Blank: Yes No		Thermometer ID: 7MM-003	
Samples Received In tact:		Yes No		Correction Factor: -0.2	
Cooler Custody Seals:		Yes No N/A		Temperature Reading: 5.6	
Sample Custody Seals:		Yes No N/A		Corrected Temperature: 5.4	
Total Containers:					
Parameters				Pres. Code	
ANALYSIS REQUEST					
EX 8021					
890-403 Chain of Custody					
					
Preservative Codes					
None: NO		DI Water: H ₂ O			
Cool: Cool		MeOH: Me			
HCL: HC		HNO ₃ : HN			
H ₂ SO ₄ : H ₂		NaOH: Na			
H ₃ PO ₄ : HP					
NaHSO ₄ : MABIS					
Na ₂ S ₂ O ₃ : NaSO ₃					
Zn Acetate+NaOH: Zn					
NaOH+Ascorbic Acid: SAPC					

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	BT	Sample Comments
MW-20	GW	3/18/21	8:30	N/A		3	X	Envi. Analytics to: Camille Bryant
MW-19			9:00					
MW-18			10:40					
MW-12			11:00					
MW-9			11:30					
MW-4			12:30					
MW-5		3/19/21	1:20					
MW-1			4:00					
MW-3			9:30					
MW-16			10:00 11:30					

Circle Method(s) and Metal(s) to be analyzed	200.8/60.20:	
Total 200.7/60.10	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn	
	TC1P/SP1P 60.10 : 8RCRA 5b As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 163.1/245.1/747.0/747.1

Notice: Signature of this document, a relinquishment of sample constitutes a valid purchase order from client company to Eurofins Xeno. Its affiliates and subcontractors. It signifies standard terms and conditions of service. Eurofins Xeno will be liable only for the cost of sample and shall not assume any responsibility for any losses or expenses incurred by the client's such losses are due to circumstances beyond the Eurofins Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, 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
<i>[Signature]</i>	<i>[Signature]</i>	3/12/25	<i>[Signature]</i>		3:22:20 PM



Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PBP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADAP <input type="checkbox"/> Other:

Total 2007 / 6010	2008 / 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 SiO ₂ Na Sr Ti Sn U V Zn
TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	<i>[Signature]</i>	<i>[Signature]</i>	3-22-21 0953			
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3						
4						
5						

Printed Date: 08/25/2020 Rev: 2007.2

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-403-1

SDG Number: Lovington

Login Number: 403**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Carlsbad**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-403-1

SDG Number: Lovington

Login Number: 403**List Number: 2****Creator: Mireles, David****List Source: Eurofins Midland****List Creation: 03/24/21 11:37 AM**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-449-1

Laboratory Sample Delivery Group: Lovington NM
Client Project/Site: Lovington Deep

For:

Talon/LPE
408 W. Texas St.
Artesia, New Mexico 88210

Attn: David Adkins

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
4/6/2021 5:19:47 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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results through

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Talon/LPE
Project/Site: Lovington Deep

Laboratory Job ID: 890-449-1
SDG: Lovington NM

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Definitions/Glossary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-449-1
SDG: Lovington NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-449-1
SDG: Lovington NM

Job ID: 890-449-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative	
Job Narrative 890-449-1	

Receipt

The samples were received on 3/29/2021 3:31 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 17.4°C

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-449-1
SDG: Lovington NM

Client Sample ID: MW-8

Lab Sample ID: 890-449-1

Date Collected: 03/29/21 10:40

Matrix: Water

Date Received: 03/29/21 15:31

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			04/02/21 03:15	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			04/02/21 03:15	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			04/02/21 03:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			04/02/21 03:15	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			04/02/21 03:15	1
Xylenes, Total	<0.00400	U	0.00400	0.00100	mg/L			04/02/21 03:15	1
Total BTEX	<0.00200	U	0.00200	0.00100	mg/L			04/02/21 03:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130		04/02/21 03:15	1
1,4-Difluorobenzene (Surr)	101		70 - 130		04/02/21 03:15	1

Client Sample ID: mw-11

Lab Sample ID: 890-449-2

Date Collected: 03/29/21 09:55

Matrix: Water

Date Received: 03/29/21 15:31

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			04/05/21 13:49	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			04/05/21 13:49	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			04/05/21 13:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			04/05/21 13:49	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			04/05/21 13:49	1
Xylenes, Total	<0.00400	U	0.00400	0.00100	mg/L			04/05/21 13:49	1
Total BTEX	<0.00200	U	0.00200	0.00100	mg/L			04/05/21 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130		04/05/21 13:49	1
1,4-Difluorobenzene (Surr)	102		70 - 130		04/05/21 13:49	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-449-1
SDG: Lovington NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-449-1	MW-8	101	101
890-449-2	mw-11	107	102
LCS 880-1096/64	Lab Control Sample	88	104
LCS 880-1302/3	Lab Control Sample	90	105
LCSD 880-1096/65	Lab Control Sample Dup	103	108
LCSD 880-1302/4	Lab Control Sample Dup	99	109
MB 880-1070/5-A	Method Blank	66 X	85
MB 880-1096/69	Method Blank	67 X	86
MB 880-1302/9	Method Blank	73	83
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

QC Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-449-1
SDG: Lovington NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1070/5-A

Matrix: Water

Analysis Batch: 1096

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1070

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L		03/30/21 13:10	04/01/21 07:34	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L		03/30/21 13:10	04/01/21 07:34	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L		03/30/21 13:10	04/01/21 07:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L		03/30/21 13:10	04/01/21 07:34	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L		03/30/21 13:10	04/01/21 07:34	1
Xylenes, Total	<0.00400	U	0.00400	0.00100	mg/L		03/30/21 13:10	04/01/21 07:34	1
Total BTEX	<0.00200	U	0.00200	0.00100	mg/L		03/30/21 13:10	04/01/21 07:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	66	X	70 - 130	03/30/21 13:10	04/01/21 07:34	1
1,4-Difluorobenzene (Surr)	85		70 - 130	03/30/21 13:10	04/01/21 07:34	1

Lab Sample ID: MB 880-1096/69

Matrix: Water

Analysis Batch: 1096

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			04/01/21 20:08	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			04/01/21 20:08	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			04/01/21 20:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			04/01/21 20:08	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			04/01/21 20:08	1
Xylenes, Total	<0.00400	U	0.00400	0.00100	mg/L			04/01/21 20:08	1
Total BTEX	<0.00200	U	0.00200	0.00100	mg/L			04/01/21 20:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	67	X	70 - 130		04/01/21 20:08	1
1,4-Difluorobenzene (Surr)	86		70 - 130		04/01/21 20:08	1

Lab Sample ID: LCS 880-1096/64

Matrix: Water

Analysis Batch: 1096

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09503		mg/L		95	70 - 130
Toluene	0.100	0.09979		mg/L		100	70 - 130
Ethylbenzene	0.100	0.09228		mg/L		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1856		mg/L		93	70 - 130
o-Xylene	0.100	0.1014		mg/L		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-449-1
SDG: Lovington NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-1096/65

Matrix: Water

Analysis Batch: 1096

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09041		mg/L		90	70 - 130	5	20
Toluene	0.100	0.09880		mg/L		99	70 - 130	1	20
Ethylbenzene	0.100	0.09219		mg/L		92	70 - 130	0	20
m-Xylene & p-Xylene	0.200	0.1878		mg/L		94	70 - 130	1	20
o-Xylene	0.100	0.1063		mg/L		106	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: MB 880-1302/9

Matrix: Water

Analysis Batch: 1302

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			04/05/21 12:07	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			04/05/21 12:07	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			04/05/21 12:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			04/05/21 12:07	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			04/05/21 12:07	1
Xylenes, Total	<0.00400	U	0.00400	0.00100	mg/L			04/05/21 12:07	1
Total BTEX	<0.00200	U	0.00200	0.00100	mg/L			04/05/21 12:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130		04/05/21 12:07	1
1,4-Difluorobenzene (Surr)	83		70 - 130		04/05/21 12:07	1

Lab Sample ID: LCS 880-1302/3

Matrix: Water

Analysis Batch: 1302

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08980		mg/L		90	70 - 130
Toluene	0.100	0.09818		mg/L		98	70 - 130
Ethylbenzene	0.100	0.09316		mg/L		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1878		mg/L		94	70 - 130
o-Xylene	0.100	0.1008		mg/L		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-1302/4

Matrix: Water

Analysis Batch: 1302

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09485		mg/L		95	70 - 130	5	20

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QC Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-449-1
SDG: Lovington NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-1302/4

Matrix: Water

Analysis Batch: 1302

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.1023		mg/L		102	70 - 130	4	20
Ethylbenzene	0.100	0.09811		mg/L		98	70 - 130	5	20
m-Xylene & p-Xylene	0.200	0.1993		mg/L		100	70 - 130	6	20
o-Xylene	0.100	0.1089		mg/L		109	70 - 130	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

QC Association Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-449-1
SDG: Lovington NM

GC VOA

Prep Batch: 1070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1070/5-A	Method Blank	Total/NA	Water	5035	

Analysis Batch: 1096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-449-1	MW-8	Total/NA	Water	8021B	
MB 880-1070/5-A	Method Blank	Total/NA	Water	8021B	1070
MB 880-1096/69	Method Blank	Total/NA	Water	8021B	
LCS 880-1096/64	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-1096/65	Lab Control Sample Dup	Total/NA	Water	8021B	

Analysis Batch: 1302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-449-2	mw-11	Total/NA	Water	8021B	
MB 880-1302/9	Method Blank	Total/NA	Water	8021B	
LCS 880-1302/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-1302/4	Lab Control Sample Dup	Total/NA	Water	8021B	

Lab Chronicle

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-449-1
SDG: Lovington NM

Client Sample ID: MW-8
Date Collected: 03/29/21 10:40
Date Received: 03/29/21 15:31

Lab Sample ID: 890-449-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	1096	04/02/21 03:15	MR	XM

Client Sample ID: mw-11
Date Collected: 03/29/21 09:55
Date Received: 03/29/21 15:31

Lab Sample ID: 890-449-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	1302	04/05/21 13:49	MR	XM

Laboratory References:
XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-449-1
SDG: Lovington NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8021B		Water	Total BTEX

Method Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-449-1
SDG: Lovington NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XM
5030B	Purge and Trap	SW846	XM

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-449-1
SDG: Lovington NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-449-1	MW-8	Water	03/29/21 10:40	03/29/21 15:31	
890-449-2	mw-11	Water	03/29/21 09:55	03/29/21 15:31	

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Environment Testing

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3333
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199


Chain of Custody

Work Order No: _____

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Project Manager:	D. Adkins	Bill to: (if different)	Plains All American
Company Name:	Talon LPE	Company Name:	Pipeline
Address:	408 Texas Street	Address:	4th. Camille Bryant
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	SRS# 2002-10312
Phone:	575-444-4835	Email:	dadkins@talonlpe.com

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____

Project Name:		Levington Deep		Turn Around			
Project Number:		700376.051.54		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		Pres. Code	
Project Location:		Levington, NY		Due Date:			
Sampler's Name:		Roy Bell		TAT starts the day received by the lab, if received by 4:30pm			
P.O.#:		SKS# 2002-10312					
SAMPLE RECEIPT							
Samples Received Intact:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Thermometer ID:		2NM-0007	
Cooler Custody Seals:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Correction Factor:		-0.2	
Sample Custody Seals:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Temperature Reading:		13.6	
Total Containers:				Corrected Temperature:		13.4	
Parameters							
<div> <div>ANALYSIS REQUEST</div> <div> <div>EX</div> <div>890-449 Chain of Custody</div> <div>  </div> </div> </div>							
Preservative Codes							
None: NO		DI Water: H ₂ O		Cool: Cool		MeOH: Me	
HCL: HC		HNO ₃ : HN		H ₂ SO ₄ : H ₂		NaOH: Na	
H ₃ PO ₄ : HP		NaHSO ₄ : NABIS		Na ₂ S ₂ O ₃ : NaSO ₃		Zn Acetate+NaOH: Zn	
NaOH+Ascorbic Acid: SAPC							

[illegible]

Total 2007 / 6010	2008 / 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 SiO ₂ Na Sr Ti Sn U V Zr
TCPL / SPLP 6010 :	8RCRA 5b	As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
		Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signatures of this document are a relinquishment of samples, construction, or other claims (compensation) to the sample donor. The sample donor is not responsible 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 Eurofins Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously negotiated.

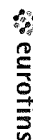
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	3:29:21 (5:31)			

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Xenco, Carlsbad

1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-449-1

SDG Number: Lovington NM

Login Number: 449

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-449-1

SDG Number: Lovington NM

Login Number: 449

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Midland

List Creation: 03/30/21 02:42 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-803-1

Laboratory Sample Delivery Group: Lea County NM
Client Project/Site: Lovington Deep

For:

Talon/LPE
408 W. Texas St.
Artesia, New Mexico 88210

Attn: David Adkins

A handwritten signature in black ink, appearing to read "Jessica Kramer".

Authorized for release by:
6/16/2021 3:37:08 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Talon/LPE
Project/Site: Lovington Deep

Laboratory Job ID: 890-803-1
SDG: Lea County NM

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Definitions/Glossary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Job ID: 890-803-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-803-1

Receipt

The samples were received on 6/14/2021 9:47 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Client Sample ID: MW-1

Lab Sample ID: 890-803-1

Date Collected: 06/11/21 13:00

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			06/15/21 16:16	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			06/15/21 16:16	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			06/15/21 16:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			06/15/21 16:16	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 16:16	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			06/15/21 16:16	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 16:16	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			06/15/21 16:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130		06/15/21 16:16	1
4-Bromofluorobenzene (Surr)	110		70 - 130		06/15/21 16:16	1

Client Sample ID: MW-3

Lab Sample ID: 890-803-2

Date Collected: 06/11/21 16:00

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00163	J	0.00200	0.000408	mg/L			06/15/21 16:41	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			06/15/21 16:41	1
Ethylbenzene	0.0838		0.00200	0.000657	mg/L			06/15/21 16:41	1
m-Xylene & p-Xylene	0.0921		0.00400	0.000629	mg/L			06/15/21 16:41	1
o-Xylene	0.0150		0.00200	0.000642	mg/L			06/15/21 16:41	1
Xylenes, Total	0.107		0.00400	0.000642	mg/L			06/15/21 16:41	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 16:41	1
Total BTEX	0.193		0.00400	0.000657	mg/L			06/15/21 16:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	104		70 - 130		06/15/21 16:41	1
4-Bromofluorobenzene (Surr)	121		70 - 130		06/15/21 16:41	1

Client Sample ID: MW-4

Lab Sample ID: 890-803-3

Date Collected: 06/11/21 10:45

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			06/15/21 17:05	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			06/15/21 17:05	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			06/15/21 17:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			06/15/21 17:05	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 17:05	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			06/15/21 17:05	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 17:05	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			06/15/21 17:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	111		70 - 130		06/15/21 17:05	1
4-Bromofluorobenzene (Surr)	116		70 - 130		06/15/21 17:05	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Client Sample ID: MW-5

Lab Sample ID: 890-803-4

Date Collected: 06/11/21 11:30

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			06/15/21 17:31	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			06/15/21 17:31	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			06/15/21 17:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			06/15/21 17:31	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 17:31	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			06/15/21 17:31	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 17:31	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			06/15/21 17:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	97		70 - 130		06/15/21 17:31	1
4-Bromofluorobenzene (Surr)	100		70 - 130		06/15/21 17:31	1

Client Sample ID: MW-8

Lab Sample ID: 890-803-5

Date Collected: 06/11/21 11:45

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			06/15/21 19:12	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			06/15/21 19:12	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			06/15/21 19:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			06/15/21 19:12	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 19:12	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			06/15/21 19:12	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 19:12	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			06/15/21 19:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	88		70 - 130		06/15/21 19:12	1
4-Bromofluorobenzene (Surr)	126		70 - 130		06/15/21 19:12	1

Client Sample ID: MW-9

Lab Sample ID: 890-803-6

Date Collected: 06/11/21 10:10

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			06/15/21 19:38	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			06/15/21 19:38	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			06/15/21 19:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			06/15/21 19:38	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 19:38	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			06/15/21 19:38	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 19:38	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			06/15/21 19:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	102		70 - 130		06/15/21 19:38	1
4-Bromofluorobenzene (Surr)	115		70 - 130		06/15/21 19:38	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Client Sample ID: MW-11

Lab Sample ID: 890-803-7

Date Collected: 06/11/21 10:20

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			06/15/21 20:03	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			06/15/21 20:03	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			06/15/21 20:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			06/15/21 20:03	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 20:03	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			06/15/21 20:03	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 20:03	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			06/15/21 20:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103		70 - 130		06/15/21 20:03	1
4-Bromofluorobenzene (Surr)	113		70 - 130		06/15/21 20:03	1

Client Sample ID: MW-12

Lab Sample ID: 890-803-8

Date Collected: 06/11/21 09:45

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000750	J	0.00200	0.000408	mg/L			06/15/21 20:28	1
Toluene	0.000555	J	0.00200	0.000367	mg/L			06/15/21 20:28	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			06/15/21 20:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			06/15/21 20:28	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 20:28	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			06/15/21 20:28	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 20:28	1
Total BTEX	0.00131	J	0.00400	0.000657	mg/L			06/15/21 20:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103		70 - 130		06/15/21 20:28	1
4-Bromofluorobenzene (Surr)	119		70 - 130		06/15/21 20:28	1

Client Sample ID: MW-15

Lab Sample ID: 890-803-9

Date Collected: 06/11/21 15:30

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			06/15/21 20:53	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			06/15/21 20:53	1
Ethylbenzene	0.00263		0.00200	0.000657	mg/L			06/15/21 20:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			06/15/21 20:53	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 20:53	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			06/15/21 20:53	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 20:53	1
Total BTEX	0.00263	J	0.00400	0.000657	mg/L			06/15/21 20:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	101		70 - 130		06/15/21 20:53	1
4-Bromofluorobenzene (Surr)	112		70 - 130		06/15/21 20:53	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Client Sample ID: MW-16

Lab Sample ID: 890-803-10

Date Collected: 06/11/21 14:15

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			06/15/21 21:18	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			06/15/21 21:18	1
Ethylbenzene	0.00192	J	0.00200	0.000657	mg/L			06/15/21 21:18	1
m-Xylene & p-Xylene	0.00229	J	0.00400	0.000629	mg/L			06/15/21 21:18	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 21:18	1
Xylenes, Total	0.00229	J	0.00400	0.000642	mg/L			06/15/21 21:18	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 21:18	1
Total BTEX	0.00421		0.00400	0.000657	mg/L			06/15/21 21:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130		06/15/21 21:18	1
4-Bromofluorobenzene (Surr)	114		70 - 130		06/15/21 21:18	1

Client Sample ID: MW-18

Lab Sample ID: 890-803-11

Date Collected: 06/11/21 09:15

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			06/15/21 21:44	1
Toluene	0.0175		0.00200	0.000367	mg/L			06/15/21 21:44	1
Ethylbenzene	0.00494		0.00200	0.000657	mg/L			06/15/21 21:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			06/15/21 21:44	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 21:44	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			06/15/21 21:44	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 21:44	1
Total BTEX	0.0224		0.00400	0.000657	mg/L			06/15/21 21:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	91		70 - 130		06/15/21 21:44	1
4-Bromofluorobenzene (Surr)	101		70 - 130		06/15/21 21:44	1

Client Sample ID: MW-19

Lab Sample ID: 890-803-12

Date Collected: 06/11/21 08:15

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0958		0.00200	0.000408	mg/L			06/15/21 22:09	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			06/15/21 22:09	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			06/15/21 22:09	1
m-Xylene & p-Xylene	0.00114	J	0.00400	0.000629	mg/L			06/15/21 22:09	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 22:09	1
Xylenes, Total	0.00114	J	0.00400	0.000642	mg/L			06/15/21 22:09	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 22:09	1
Total BTEX	0.0969		0.00400	0.000657	mg/L			06/15/21 22:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92		70 - 130		06/15/21 22:09	1
4-Bromofluorobenzene (Surr)	108		70 - 130		06/15/21 22:09	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Client Sample ID: MW-20

Lab Sample ID: 890-803-13

Date Collected: 06/11/21 14:30

Matrix: Water

Date Received: 06/14/21 09:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000427	J	0.00200	0.000408	mg/L			06/15/21 22:34	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			06/15/21 22:34	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			06/15/21 22:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			06/15/21 22:34	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 22:34	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			06/15/21 22:34	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 22:34	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			06/15/21 22:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103		70 - 130					06/15/21 22:34	1
4-Bromofluorobenzene (Surr)	110		70 - 130					06/15/21 22:34	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DFBZ1	BFB1
		(70-130)	(70-130)
890-803-1	MW-1	105	110
890-803-2	MW-3	104	121
890-803-3	MW-4	111	116
890-803-4	MW-5	97	100
890-803-5	MW-8	88	126
890-803-6	MW-9	102	115
890-803-7	MW-11	103	113
890-803-8	MW-12	103	119
890-803-9	MW-15	101	112
890-803-10	MW-16	105	114
890-803-11	MW-18	91	101
890-803-12	MW-19	92	108
890-803-13	MW-20	103	110
LCS 880-4105/3	Lab Control Sample	98	115
LCSD 880-4105/4	Lab Control Sample Dup	110	107
MB 880-4105/8	Method Blank	86	73

Surrogate Legend

DFBZ = 1,4-Difluorobenzene (Surr)

BFB = 4-Bromofluorobenzene (Surr)

QC Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4105/8

Matrix: Water

Analysis Batch: 4105

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			06/15/21 13:19	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			06/15/21 13:19	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			06/15/21 13:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			06/15/21 13:19	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			06/15/21 13:19	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			06/15/21 13:19	1
Methyl tert-butyl ether	<0.0100	U	0.0100	0.00258	mg/L			06/15/21 13:19	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			06/15/21 13:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	86		70 - 130		06/15/21 13:19	1
4-Bromofluorobenzene (Surr)	73		70 - 130		06/15/21 13:19	1

Lab Sample ID: LCS 880-4105/3

Matrix: Water

Analysis Batch: 4105

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09731		mg/L		97	70 - 130
Toluene	0.100	0.1083		mg/L		108	70 - 130
Ethylbenzene	0.100	0.1111		mg/L		111	70 - 130
m-Xylene & p-Xylene	0.200	0.1945		mg/L		97	70 - 130
o-Xylene	0.100	0.09867		mg/L		99	70 - 130
Methyl tert-butyl ether	0.500	0.5164		mg/L		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Difluorobenzene (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	115		70 - 130

Lab Sample ID: LCSD 880-4105/4

Matrix: Water

Analysis Batch: 4105

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09988		mg/L		100	70 - 130	3	20
Toluene	0.100	0.09359		mg/L		94	70 - 130	15	20
Ethylbenzene	0.100	0.1096		mg/L		110	70 - 130	1	20
m-Xylene & p-Xylene	0.200	0.1957		mg/L		98	70 - 130	1	20
o-Xylene	0.100	0.09940		mg/L		99	70 - 130	1	20
Methyl tert-butyl ether	0.500	0.5955		mg/L		119	70 - 130	14	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,4-Difluorobenzene (Surr)	110		70 - 130
4-Bromofluorobenzene (Surr)	107		70 - 130

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QC Association Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

GC VOA

Analysis Batch: 4105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-803-1	MW-1	Total/NA	Water	8021B	
890-803-2	MW-3	Total/NA	Water	8021B	
890-803-3	MW-4	Total/NA	Water	8021B	
890-803-4	MW-5	Total/NA	Water	8021B	
890-803-5	MW-8	Total/NA	Water	8021B	
890-803-6	MW-9	Total/NA	Water	8021B	
890-803-7	MW-11	Total/NA	Water	8021B	
890-803-8	MW-12	Total/NA	Water	8021B	
890-803-9	MW-15	Total/NA	Water	8021B	
890-803-10	MW-16	Total/NA	Water	8021B	
890-803-11	MW-18	Total/NA	Water	8021B	
890-803-12	MW-19	Total/NA	Water	8021B	
890-803-13	MW-20	Total/NA	Water	8021B	
MB 880-4105/8	Method Blank	Total/NA	Water	8021B	
LCS 880-4105/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-4105/4	Lab Control Sample Dup	Total/NA	Water	8021B	

Lab Chronicle

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Client Sample ID: MW-1**Date Collected: 06/11/21 13:00****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-1****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 16:16	MR	XEN MID

Client Sample ID: MW-3**Date Collected: 06/11/21 16:00****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-2****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 16:41	MR	XEN MID

Client Sample ID: MW-4**Date Collected: 06/11/21 10:45****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-3****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 17:05	MR	XEN MID

Client Sample ID: MW-5**Date Collected: 06/11/21 11:30****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-4****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 17:31	MR	XEN MID

Client Sample ID: MW-8**Date Collected: 06/11/21 11:45****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-5****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 19:12	MR	XEN MID

Client Sample ID: MW-9**Date Collected: 06/11/21 10:10****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-6****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 19:38	MR	XEN MID

Client Sample ID: MW-11**Date Collected: 06/11/21 10:20****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-7****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 20:03	MR	XEN MID

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Lab Chronicle

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Client Sample ID: MW-12**Date Collected: 06/11/21 09:45****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-8****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 20:28	MR	XEN MID

Client Sample ID: MW-15**Date Collected: 06/11/21 15:30****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-9****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 20:53	MR	XEN MID

Client Sample ID: MW-16**Date Collected: 06/11/21 14:15****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-10****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 21:18	MR	XEN MID

Client Sample ID: MW-18**Date Collected: 06/11/21 09:15****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-11****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 21:44	MR	XEN MID

Client Sample ID: MW-19**Date Collected: 06/11/21 08:15****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-12****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 22:09	MR	XEN MID

Client Sample ID: MW-20**Date Collected: 06/11/21 14:30****Date Received: 06/14/21 09:47****Lab Sample ID: 890-803-13****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 22:34	MR	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8021B		Water	Total BTEX

Method Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
5030B	Purge and Trap	SW846	XEN MID

Protocol References:
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:
XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-803-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-803-1	MW-1	Water	06/11/21 13:00	06/14/21 09:47	
890-803-2	MW-3	Water	06/11/21 16:00	06/14/21 09:47	
890-803-3	MW-4	Water	06/11/21 10:45	06/14/21 09:47	
890-803-4	MW-5	Water	06/11/21 11:30	06/14/21 09:47	
890-803-5	MW-8	Water	06/11/21 11:45	06/14/21 09:47	
890-803-6	MW-9	Water	06/11/21 10:10	06/14/21 09:47	
890-803-7	MW-11	Water	06/11/21 10:20	06/14/21 09:47	
890-803-8	MW-12	Water	06/11/21 09:45	06/14/21 09:47	
890-803-9	MW-15	Water	06/11/21 15:30	06/14/21 09:47	
890-803-10	MW-16	Water	06/11/21 14:15	06/14/21 09:47	
890-803-11	MW-18	Water	06/11/21 09:15	06/14/21 09:47	
890-803-12	MW-19	Water	06/11/21 08:15	06/14/21 09:47	
890-803-13	MW-20	Water	06/11/21 14:30	06/14/21 09:47	

Eurofins Xenco, Carlsbad



Environment Testing Xenco

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440 San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199

Chain of Custody

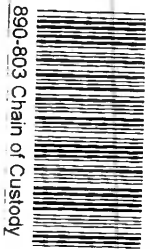
Work Order No: _____

www.xenco.com page 1 of 2

Project Manager:	D. Adkins	Bill to: (if different)	Plains All American Pipeline
Company Name:	Talon LPE	Company Name:	Attn: Carillie Bryant
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City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575.746.8768	Email:	dadkins@talonlpe.com

Work Order Comments Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/> State of Project: _____ Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____	
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Project Name:	Lovington Deep	Turn Around	Pres. Code	ANALYSIS REQUEST																Preservative Codes				
Project Number:	SRS# 2002-10312	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush																		None: NO	DI Water: H ₂ O			
Project Location:	Lea County, NM	Due Date:																		Cool: Cool	MeOH: Me			
Sampler's Name:	R. Bell	TAT starts the day received by the lab. If received by 4:30pm																		HCL: HC	HNO ₃ : HN			
PO #:	SRS# 2002-10312																			H ₂ SO ₄ : H ₂	NaOH: Na			
SAMPLE RECEIPT		Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																	H ₃ PO ₄ : HP		
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:	TMM-507																		NaHSO ₄ : NABIS			
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor:	-0.2																		Na ₂ S ₂ O ₃ : NaSO ₃			
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading:	4.8																		Zn Acetate+NaOH: Zn			
Total Containers:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Corrected Temperature:	4.6																		NaOH+Ascorbic Acid: SAPC			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters																Sample Comments	
MMW-1	GW	6/11/2021	1:00	N/A		3	X																	Email Analytical
MMW-3			4:00																					To:
MMW-4			10:45																					CJBryant@paalp.com
MMW-5			11:30																					AL Groves@paalp.com
MMW-8			11:45																					MaOchoa@paalp.com
MMW-9			10:10																					
MMW-11			10:20																					
MMW-12			9:45																					
MMW-15			3:30																					
MMW-16			2:15																					



890-803 Chain of Custody

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 Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCIP / SPLP 6010:	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631 / 245.1 / 7470 / 7471	

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins 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
<i>Ray Seidl</i>	<i>James C...</i>	6-14 8:55AM	<i>James C...</i>	<i>One Cup</i>	6-14-21 0944
5			6		



Environment Testing
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No:

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Project Manager:	D. Adkins	Bill to: (if different)	Plains All American Pipeline
Company Name:	Talon LPE	Company Name:	Attn: Camille Bryant
Address:	408 W. Texas Ave.	Address:	SRS # 2002-10312
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575.746.8768	Email:	dadkins@talonlpe.com

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting: Level II	<input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables: EDD	<input type="checkbox"/> ADAPT <input type="checkbox"/> Other: <input type="checkbox"/>

Project Name:		Livingston Deep		Turn Around		ANALYSIS REQUEST										Preservative Codes				
Project Number:		SRS # 2002-10312		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		Pres. Code											None: NO	DI Water: H ₂ O		
Project Location:		Lea County, NM		Due Date:													Cool: Cool	MeOH: Me		
Sampler's Name:		R. Bell		TAT starts the day received by the lab, if received by 4:30pm													HCL: HC	HNO ₃ : HN		
PO #:		SRS# 2002-10312															H ₂ SO ₄ : H ₂	NaOH: Na		
SAMPLE RECEIPT		Temp Blank:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Wet Ice:		<input type="checkbox"/> Yes <input type="checkbox"/> No										H ₃ PO ₄ : HP		
Samples Received Intact:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Thermometer ID:														NaHSO ₄ : NABIS		
Cooler Custody Seals:		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> NO		Correction Factor:														Na ₂ S ₂ O ₃ : NaSO ₃		
Sample Custody Seals:		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> NO		N/A		Temperature Reading:		<input checked="" type="checkbox"/> 105										Zn Acetate+NaOH: Zn		
Total Containers:				Corrected Temperature:														NaOH+Ascorbic Acid: SAFC		

[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	SiO ₂	Na	Sr	Tl	Sn	U	Zn			
Circle Method(s) and Metal(s) to be analyzed	TCEP7 SPUP 6010:		8RCRA	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Tl	U	Hg: 1631 / 245.1 / 7470 / 7471																

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Eurofins Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, 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>[Signature]</i>	<i>[Signature]</i>	6-14 8:55 AM	2 <i>[Signature]</i>	<i>[Signature]</i>	6-14 2:59 PM
3			4		
5			6		

Eurofins Xenco, Carlsbad

1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	COC No:				
Client Contact:	Phone	Kramer Jessica	State of Origin:	890-261 1	Page: 1 of 2				
Shipping/Receiving	E-Mail	jessica.kramer@eurofins.com	New Mexico	Page 1 of 2	Job #:				
Company:	Accreditations Required (See note)	NEIAP - Texas		890-803-1					
Address:	Due Date Requested	6/18/2021	Analysis Requested						
City:	TAT Requested (days)	6/18/2021							
Midland									
State, Zip:									
TX, 79701									
Phone:	PO #								
432-704-5440(Tel)	WO #								
Email:	Project #	89000047							
	SSOW#								
Project Name:									
Lovington Deep									
Site:									
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=Water, S=Solid, O=Oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note
MMW-1 (890-803-1)	6/1/1/21	13 00	Mountain	Water	X			3	
MMW-3 (890-803-2)	6/1/1/21	16 00	Mountain	Water	X			3	
MMW-4 (890-803-3)	6/1/1/21	10 45	Mountain	Water	X			3	
MMW-5 (890-803-4)	6/1/1/21	11 30	Mountain	Water	X			3	
MMW-8 (890-803-5)	6/1/1/21	11 45	Mountain	Water	X			3	
MMW-9 (890-803-6)	6/1/1/21	10 10	Mountain	Water	X			3	
MMW-11 (890-803-7)	6/1/1/21	10 20	Mountain	Water	X			3	
MMW-12 (890-803-8)	6/1/1/21	09 45	Mountain	Water	X			3	
MMW-15 (890-803-9)	6/1/1/21	15 30	Mountain	Water	X			3	
<p>Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.</p>									
<p>Possible Hazard Identification</p> <p>Unconfirmed</p> <p>Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2</p> <p>Empty Kit Relinquished by Date Time</p> <p>Relinquished by Date Time Company</p> <p>Relinquished by Date Time Company</p> <p>Relinquished by Date Time Company</p> <p>Custody Seals Intact Custody Seal No</p> <p>Δ Yes Δ No</p> <p>Coder Temperature(s) °C and Other Remarks</p>									
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <p>Return To Client Disposal By Lab Archive For Months</p> <p>Special Instructions/LOC Requirements</p>									

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-803-1

SDG Number: Lea County NM

Login Number: 803**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Xenco, Carlsbad**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-803-1

SDG Number: Lea County NM

Login Number: 803**List Number: 2****Creator: Copeland, Tatiana****List Source: Eurofins Xenco, Midland****List Creation: 06/15/21 11:40 AM**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-1224-1

Laboratory Sample Delivery Group: Lea County NM
Client Project/Site: Lovington Deep

For:

Talon/LPE
408 W. Texas St.
Artesia, New Mexico 88210

Attn: David Adkins

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
9/14/2021 1:58:48 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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results through
TotalAccess

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Talon/LPE
Project/Site: Lovington Deep

Laboratory Job ID: 890-1224-1
SDG: Lea County NM

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Definitions/Glossary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Job ID: 890-1224-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1224-1

Receipt

The samples were received on 9/7/2021 3:22 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 8.2°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: MW-18 (890-1224-11), MW-19 (890-1224-12), MW-20 (890-1224-13) and (LCSD 880-7813/4). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Client Sample ID: MW-1

Lab Sample ID: 890-1224-1

Date Collected: 09/07/21 12:00

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			09/12/21 18:58	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/12/21 18:58	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			09/12/21 18:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			09/12/21 18:58	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/12/21 18:58	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			09/12/21 18:58	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			09/12/21 18:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130		09/12/21 18:58	1
1,4-Difluorobenzene (Surr)	95		70 - 130		09/12/21 18:58	1

Client Sample ID: MW-3

Lab Sample ID: 890-1224-2

Date Collected: 09/07/21 09:05

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			09/12/21 19:26	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/12/21 19:26	1
Ethylbenzene	0.0561		0.00200	0.000657	mg/L			09/12/21 19:26	1
m-Xylene & p-Xylene	0.0623		0.00400	0.000629	mg/L			09/12/21 19:26	1
o-Xylene	0.00949		0.00200	0.000642	mg/L			09/12/21 19:26	1
Xylenes, Total	0.0718		0.00400	0.000642	mg/L			09/12/21 19:26	1
Total BTEX	0.128		0.00400	0.000657	mg/L			09/12/21 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130		09/12/21 19:26	1
1,4-Difluorobenzene (Surr)	106		70 - 130		09/12/21 19:26	1

Client Sample ID: MW-4

Lab Sample ID: 890-1224-3

Date Collected: 09/07/21 13:20

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			09/12/21 19:54	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/12/21 19:54	1
Ethylbenzene	0.00157	J	0.00200	0.000657	mg/L			09/12/21 19:54	1
m-Xylene & p-Xylene	0.00179	J	0.00400	0.000629	mg/L			09/12/21 19:54	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/12/21 19:54	1
Xylenes, Total	0.00179	J	0.00400	0.000642	mg/L			09/12/21 19:54	1
Total BTEX	0.00336	J	0.00400	0.000657	mg/L			09/12/21 19:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130		09/12/21 19:54	1
1,4-Difluorobenzene (Surr)	107		70 - 130		09/12/21 19:54	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Client Sample ID: MW-5

Lab Sample ID: 890-1224-4

Date Collected: 09/07/21 13:15

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			09/12/21 20:21	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/12/21 20:21	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			09/12/21 20:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			09/12/21 20:21	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/12/21 20:21	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			09/12/21 20:21	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			09/12/21 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130		09/12/21 20:21	1
1,4-Difluorobenzene (Surr)	109		70 - 130		09/12/21 20:21	1

Client Sample ID: MW-8

Lab Sample ID: 890-1224-5

Date Collected: 09/07/21 09:45

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			09/12/21 20:49	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/12/21 20:49	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			09/12/21 20:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			09/12/21 20:49	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/12/21 20:49	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			09/12/21 20:49	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			09/12/21 20:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130		09/12/21 20:49	1
1,4-Difluorobenzene (Surr)	111		70 - 130		09/12/21 20:49	1

Client Sample ID: MW-9

Lab Sample ID: 890-1224-6

Date Collected: 09/07/21 09:30

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			09/12/21 21:16	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/12/21 21:16	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			09/12/21 21:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			09/12/21 21:16	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/12/21 21:16	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			09/12/21 21:16	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			09/12/21 21:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130		09/12/21 21:16	1
1,4-Difluorobenzene (Surr)	112		70 - 130		09/12/21 21:16	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Client Sample ID: MW-11

Lab Sample ID: 890-1224-7

Date Collected: 09/07/21 08:45

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			09/12/21 21:44	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/12/21 21:44	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			09/12/21 21:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			09/12/21 21:44	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/12/21 21:44	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			09/12/21 21:44	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			09/12/21 21:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130		09/12/21 21:44	1
1,4-Difluorobenzene (Surr)	108		70 - 130		09/12/21 21:44	1

Client Sample ID: MW-12

Lab Sample ID: 890-1224-8

Date Collected: 09/07/21 09:00

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000614	J	0.00200	0.000408	mg/L			09/12/21 22:11	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/12/21 22:11	1
Ethylbenzene	0.000673	J	0.00200	0.000657	mg/L			09/12/21 22:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			09/12/21 22:11	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/12/21 22:11	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			09/12/21 22:11	1
Total BTEX	0.00129	J	0.00400	0.000657	mg/L			09/12/21 22:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130		09/12/21 22:11	1
1,4-Difluorobenzene (Surr)	105		70 - 130		09/12/21 22:11	1

Client Sample ID: MW-15

Lab Sample ID: 890-1224-9

Date Collected: 09/07/21 10:10

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			09/12/21 22:39	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/12/21 22:39	1
Ethylbenzene	0.00679		0.00200	0.000657	mg/L			09/12/21 22:39	1
m-Xylene & p-Xylene	0.000719	J	0.00400	0.000629	mg/L			09/12/21 22:39	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/12/21 22:39	1
Xylenes, Total	0.000719	J	0.00400	0.000642	mg/L			09/12/21 22:39	1
Total BTEX	0.00751		0.00400	0.000657	mg/L			09/12/21 22:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130		09/12/21 22:39	1
1,4-Difluorobenzene (Surr)	112		70 - 130		09/12/21 22:39	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Client Sample ID: MW-16

Lab Sample ID: 890-1224-10

Date Collected: 09/07/21 11:10

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			09/12/21 23:05	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/12/21 23:05	1
Ethylbenzene	0.00151	J	0.00200	0.000657	mg/L			09/12/21 23:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			09/12/21 23:05	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/12/21 23:05	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			09/12/21 23:05	1
Total BTEX	0.00151	J	0.00400	0.000657	mg/L			09/12/21 23:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130		09/12/21 23:05	1
1,4-Difluorobenzene (Surr)	112		70 - 130		09/12/21 23:05	1

Client Sample ID: MW-18

Lab Sample ID: 890-1224-11

Date Collected: 09/07/21 11:30

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000698	J	0.00200	0.000408	mg/L			09/13/21 18:09	1
Toluene	0.00218		0.00200	0.000367	mg/L			09/13/21 18:09	1
Ethylbenzene	0.00494		0.00200	0.000657	mg/L			09/13/21 18:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			09/13/21 18:09	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/13/21 18:09	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			09/13/21 18:09	1
Total BTEX	0.00782		0.00400	0.000657	mg/L			09/13/21 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130		09/13/21 18:09	1
1,4-Difluorobenzene (Surr)	99		70 - 130		09/13/21 18:09	1

Client Sample ID: MW-19

Lab Sample ID: 890-1224-12

Date Collected: 09/07/21 11:45

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.110		0.00200	0.000408	mg/L			09/13/21 18:35	1
Toluene	0.00112	J	0.00200	0.000367	mg/L			09/13/21 18:35	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			09/13/21 18:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			09/13/21 18:35	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/13/21 18:35	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			09/13/21 18:35	1
Total BTEX	0.111		0.00400	0.000657	mg/L			09/13/21 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130		09/13/21 18:35	1
1,4-Difluorobenzene (Surr)	103		70 - 130		09/13/21 18:35	1

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Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Client Sample ID: MW-20

Lab Sample ID: 890-1224-13

Date Collected: 09/07/21 12:00

Matrix: Water

Date Received: 09/07/21 15:22

Sample Depth: N/A

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			09/13/21 14:40	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/13/21 14:40	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			09/13/21 14:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			09/13/21 14:40	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/13/21 14:40	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			09/13/21 14:40	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			09/13/21 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130		09/13/21 14:40	1
1,4-Difluorobenzene (Surr)	95		70 - 130		09/13/21 14:40	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1224-1	MW-1	110	95
890-1224-1 MS	MW-1	110	122
890-1224-1 MSD	MW-1	101	112
890-1224-2	MW-3	106	106
890-1224-3	MW-4	102	107
890-1224-4	MW-5	103	109
890-1224-5	MW-8	107	111
890-1224-6	MW-9	99	112
890-1224-7	MW-11	102	108
890-1224-8	MW-12	108	105
890-1224-9	MW-15	106	112
890-1224-10	MW-16	121	112
890-1224-11	MW-18	133 S1+	99
890-1224-12	MW-19	140 S1+	103
890-1224-13	MW-20	141 S1+	95
890-1224-13 MS	MW-20	118	110
890-1224-13 MSD	MW-20	114	93
LCS 880-7784/3	Lab Control Sample	96	110
LCS 880-7813/3	Lab Control Sample	125	107
LCSD 880-7784/4	Lab Control Sample Dup	101	108
LCSD 880-7813/4	Lab Control Sample Dup	138 S1+	107
MB 880-7784/8	Method Blank	73	96
MB 880-7813/8	Method Blank	76	100
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7784/8

Matrix: Water

Analysis Batch: 7784

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			09/12/21 18:31	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/12/21 18:31	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			09/12/21 18:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			09/12/21 18:31	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/12/21 18:31	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			09/12/21 18:31	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			09/12/21 18:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130		09/12/21 18:31	1
1,4-Difluorobenzene (Surr)	96		70 - 130		09/12/21 18:31	1

Lab Sample ID: LCS 880-7784/3

Matrix: Water

Analysis Batch: 7784

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1006		mg/L		101	70 - 130
Toluene	0.100	0.09465		mg/L		95	70 - 130
Ethylbenzene	0.100	0.09143		mg/L		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1859		mg/L		93	70 - 130
o-Xylene	0.100	0.09588		mg/L		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: LCSD 880-7784/4

Matrix: Water

Analysis Batch: 7784

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.1038		mg/L		104	70 - 130	3	20
Toluene	0.100	0.09755		mg/L		98	70 - 130	3	20
Ethylbenzene	0.100	0.09418		mg/L		94	70 - 130	3	20
m-Xylene & p-Xylene	0.200	0.1918		mg/L		96	70 - 130	3	20
o-Xylene	0.100	0.09858		mg/L		99	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-1224-1 MS

Matrix: Water

Analysis Batch: 7784

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.100	0.1118		mg/L		112	70 - 130

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QC Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-1224-1 MS

Matrix: Water

Analysis Batch: 7784

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00200	U	0.100	0.1057		mg/L		106	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.1028		mg/L		103	70 - 130
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2096		mg/L		105	70 - 130
o-Xylene	<0.00200	U	0.100	0.1083		mg/L		108	70 - 130
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	110		70 - 130						
1,4-Difluorobenzene (Surr)	122		70 - 130						

Lab Sample ID: 890-1224-1 MSD

Matrix: Water

Analysis Batch: 7784

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.1024		mg/L		102	70 - 130	9	25
Toluene	<0.00200	U	0.100	0.09652		mg/L		97	70 - 130	9	25
Ethylbenzene	<0.00200	U	0.100	0.09378		mg/L		94	70 - 130	9	25
m-Xylene & p-Xylene	<0.00400	U	0.200	0.1911		mg/L		96	70 - 130	9	25
o-Xylene	<0.00200	U	0.100	0.09934		mg/L		99	70 - 130	9	25
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	101		70 - 130								
1,4-Difluorobenzene (Surr)	112		70 - 130								

Lab Sample ID: MB 880-7813/8

Matrix: Water

Analysis Batch: 7813

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			09/13/21 14:13	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			09/13/21 14:13	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			09/13/21 14:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			09/13/21 14:13	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			09/13/21 14:13	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			09/13/21 14:13	1
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			09/13/21 14:13	1
MB MB									
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	76		70 - 130				09/13/21 14:13	1	
1,4-Difluorobenzene (Surr)	100		70 - 130				09/13/21 14:13	1	

Lab Sample ID: LCS 880-7813/3

Matrix: Water

Analysis Batch: 7813

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1075		mg/L		108	70 - 130
Toluene	0.100	0.1176		mg/L		118	70 - 130

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QC Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-7813/3

Matrix: Water

Analysis Batch: 7813

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.100	0.1153		mg/L		115	70 - 130
m-Xylene & p-Xylene	0.200	0.2345		mg/L		117	70 - 130
o-Xylene	0.100	0.1211		mg/L		121	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	125		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-7813/4

Matrix: Water

Analysis Batch: 7813

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1082		mg/L		108	70 - 130	1	20
Toluene	0.100	0.1207		mg/L		121	70 - 130	3	20
Ethylbenzene	0.100	0.1190		mg/L		119	70 - 130	3	20
m-Xylene & p-Xylene	0.200	0.2426		mg/L		121	70 - 130	3	20
o-Xylene	0.100	0.1255		mg/L		126	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-1224-13 MS

Matrix: Water

Analysis Batch: 7813

Client Sample ID: MW-20

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.100	0.1066		mg/L		107	70 - 130
Toluene	<0.00200	U	0.100	0.1150		mg/L		115	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.1107		mg/L		111	70 - 130
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2249		mg/L		112	70 - 130
o-Xylene	<0.00200	U	0.100	0.1156		mg/L		116	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 890-1224-13 MSD

Matrix: Water

Analysis Batch: 7813

Client Sample ID: MW-20

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.09016		mg/L		90	70 - 130	17	25
Toluene	<0.00200	U	0.100	0.1004		mg/L		100	70 - 130	14	25
Ethylbenzene	<0.00200	U	0.100	0.09732		mg/L		97	70 - 130	13	25
m-Xylene & p-Xylene	<0.00400	U	0.200	0.1981		mg/L		99	70 - 130	13	25
o-Xylene	<0.00200	U	0.100	0.1024		mg/L		102	70 - 130	12	25

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

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QC Association Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

GC VOA

Analysis Batch: 7784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1224-1	MW-1	Total/NA	Water	8021B	
890-1224-2	MW-3	Total/NA	Water	8021B	
890-1224-3	MW-4	Total/NA	Water	8021B	
890-1224-4	MW-5	Total/NA	Water	8021B	
890-1224-5	MW-8	Total/NA	Water	8021B	
890-1224-6	MW-9	Total/NA	Water	8021B	
890-1224-7	MW-11	Total/NA	Water	8021B	
890-1224-8	MW-12	Total/NA	Water	8021B	
890-1224-9	MW-15	Total/NA	Water	8021B	
890-1224-10	MW-16	Total/NA	Water	8021B	
MB 880-7784/8	Method Blank	Total/NA	Water	8021B	
LCS 880-7784/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-7784/4	Lab Control Sample Dup	Total/NA	Water	8021B	
890-1224-1 MS	MW-1	Total/NA	Water	8021B	
890-1224-1 MSD	MW-1	Total/NA	Water	8021B	

Analysis Batch: 7813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1224-11	MW-18	Total/NA	Water	8021B	
890-1224-12	MW-19	Total/NA	Water	8021B	
890-1224-13	MW-20	Total/NA	Water	8021B	
MB 880-7813/8	Method Blank	Total/NA	Water	8021B	
LCS 880-7813/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-7813/4	Lab Control Sample Dup	Total/NA	Water	8021B	
890-1224-13 MS	MW-20	Total/NA	Water	8021B	
890-1224-13 MSD	MW-20	Total/NA	Water	8021B	

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Client Sample ID: MW-1

Lab Sample ID: 890-1224-1

Date Collected: 09/07/21 12:00

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7784	09/12/21 18:58	MR	XEN MID

Client Sample ID: MW-3

Lab Sample ID: 890-1224-2

Date Collected: 09/07/21 09:05

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7784	09/12/21 19:26	MR	XEN MID

Client Sample ID: MW-4

Lab Sample ID: 890-1224-3

Date Collected: 09/07/21 13:20

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7784	09/12/21 19:54	MR	XEN MID

Client Sample ID: MW-5

Lab Sample ID: 890-1224-4

Date Collected: 09/07/21 13:15

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7784	09/12/21 20:21	MR	XEN MID

Client Sample ID: MW-8

Lab Sample ID: 890-1224-5

Date Collected: 09/07/21 09:45

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7784	09/12/21 20:49	MR	XEN MID

Client Sample ID: MW-9

Lab Sample ID: 890-1224-6

Date Collected: 09/07/21 09:30

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7784	09/12/21 21:16	MR	XEN MID

Client Sample ID: MW-11

Lab Sample ID: 890-1224-7

Date Collected: 09/07/21 08:45

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7784	09/12/21 21:44	MR	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Client Sample ID: MW-12

Lab Sample ID: 890-1224-8

Date Collected: 09/07/21 09:00

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7784	09/12/21 22:11	MR	XEN MID

Client Sample ID: MW-15

Lab Sample ID: 890-1224-9

Date Collected: 09/07/21 10:10

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7784	09/12/21 22:39	MR	XEN MID

Client Sample ID: MW-16

Lab Sample ID: 890-1224-10

Date Collected: 09/07/21 11:10

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7784	09/12/21 23:05	MR	XEN MID

Client Sample ID: MW-18

Lab Sample ID: 890-1224-11

Date Collected: 09/07/21 11:30

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7813	09/13/21 18:09	KL	XEN MID

Client Sample ID: MW-19

Lab Sample ID: 890-1224-12

Date Collected: 09/07/21 11:45

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7813	09/13/21 18:35	KL	XEN MID

Client Sample ID: MW-20

Lab Sample ID: 890-1224-13

Date Collected: 09/07/21 12:00

Matrix: Water

Date Received: 09/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7813	09/13/21 14:40	KL	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8021B		Water	Total BTEX

Method Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
5030B	Purge and Trap	SW846	XEN MID

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Sample Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1224-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1224-1	MW-1	Water	09/07/21 12:00	09/07/21 15:22	N/A
890-1224-2	MW-3	Water	09/07/21 09:05	09/07/21 15:22	N/A
890-1224-3	MW-4	Water	09/07/21 13:20	09/07/21 15:22	N/A
890-1224-4	MW-5	Water	09/07/21 13:15	09/07/21 15:22	N/A
890-1224-5	MW-8	Water	09/07/21 09:45	09/07/21 15:22	N/A
890-1224-6	MW-9	Water	09/07/21 09:30	09/07/21 15:22	N/A
890-1224-7	MW-11	Water	09/07/21 08:45	09/07/21 15:22	N/A
890-1224-8	MW-12	Water	09/07/21 09:00	09/07/21 15:22	N/A
890-1224-9	MW-15	Water	09/07/21 10:10	09/07/21 15:22	N/A
890-1224-10	MW-16	Water	09/07/21 11:10	09/07/21 15:22	N/A
890-1224-11	MW-18	Water	09/07/21 11:30	09/07/21 15:22	N/A
890-1224-12	MW-19	Water	09/07/21 11:45	09/07/21 15:22	N/A
890-1224-13	MW-20	Water	09/07/21 12:00	09/07/21 15:22	N/A



Environment Testing
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	D. ADKINS	Bill to: (if different)	PLAINS ALL AMERICAN
Company Name:	TALON UBE	Company Name:	PIPE LINE
Address:	408 W. TEXAS AVE	Address:	ATTN: CAMIL & BRIAN
City, State ZIP:	ARTESIA NM 88210	City, State ZIP:	SR5 # 2002-10312
Phone:	575-746-8768	Email:	dadkins@talonube.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	LOUNTON DEEP	Turn Around	Pres. Code	ANALYSIS REQUEST	Preservative Codes
Project Number:	3002-10312 ME	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush			None: NO DI Water: H ₂ O
Project Location:	LEA COUNTY NM	Due Date:			Cool: Cool MeOH: Me
Sampler's Name:	M. COOPER R. BELL	TAT starts the day received by the lab. If received by 4:30pm			HCL: HC HNO ₃ : HN
PO #:	SR5 # 2002-10312	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		H ₂ SO ₄ : H ₂ NaOH: Na
SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID:	10000000		H ₃ PO ₄ : HP
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:	-0.2		NaHSO ₄ : NABIS
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Temperature Reading:	8.4		Na ₂ S ₂ O ₃ : NaSO ₃
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Corrected Temperature:	8.2 C/P		Zn Acetate+NaOH: Zn
Total Containers:					NaOH+Ascorbic Acid: SAFC



890-1224 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	ANALYSIS REQUEST	Preservative Codes	Sample Comments
MW-1	625	9-7-21	12:00pm	N/A	5	3	✓			MAIL ANALYTICALS
MW-3			9:05pm							TO:
MW-4			1:20pm							ST. BRYAN @ paulp.com
MW-5			1:15pm							Reviews @ paulp.com
MW-8			9:45am							MACHO @ paulp.com
MW-9			9:30am							
MW-11			8:45am							
MW-12			9:00am							
MW-15			10:10am							
MW-16			11:10am							

Total 200.7 / 6070 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: TCLEP / SPLP 6070: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$65.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins 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 M. Bell	2 [Signature]	9/7/21	3 [Signature]	4 [Signature]	9.7.21 1522
5			6		



Environment Testing
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No.:

www.xenco.com Page 2 of 2

Project Manager:	D. ADKINS	Bill to: (if different)	PLAINS ALL AMERICAN
Company Name:	TRADN CPE	Company Name:	PIPELINE
Address:	408 W. TEXAS AVE	Address:	ATTN: CAMILLE BRYANT
City, State ZIP:	ARLESIA NM 88210	City, State ZIP:	SRS # 2002-10312
Phone:	575-746-9768	Email:	dadkins@tucsoncpe.com

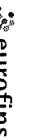
Work Order Comments			
Program:	UST/PST <input type="checkbox"/>	PRP <input type="checkbox"/>	Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:			
Reporting:	Level II <input type="checkbox"/>	Level III <input type="checkbox"/>	PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/>	Adapt <input type="checkbox"/>	Other: <input type="text"/>

[illegible]

Eurofins Xenco, Carlsbad

1089 N Canal St
Carlsbad NM 86220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)				Sampler	Lab PM	Carrier Tracking No(s)	COC No					
Client Contact				Phone	Kramer Jessica		890-398-1					
Shipping/Receiving				E-Mail	Jessica.kramer@eurofins.com	State of Origin New Mexico	Page 1 of 2					
Company				Accreditations Required (See note): NELAP - Texas								
Address				Due Date Requested 9/13/2021	Job # 890-1224-1							
City				TAT Requested (days)	Analysis Requested							
Midland												
State Zip TX 79701												
Phone 432-704-5440(Tel)				PO #								
Email				WO #								
Project Name Lovington Deep				Project # 89000047								
Site				SSOW#								
Sample Identification - Client ID (Lab ID)				Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8021B/6030B BTEX	Total Number of containers	Special Instructions/Note
MW-1 (890-1224-1)				9/7/21	12 00		Water	X			3	
MW-3 (890-1224-2)				9/7/21	09 05		Water	X			3	
MW-4 (890-1224-3)				9/7/21	13 20		Water	X			3	
MW-5 (890-1224-4)				9/7/21	13 15		Water	X			3	
MW-8 (890-1224-5)				9/7/21	09 45		Water	X			3	
MW-9 (890-1224-6)				9/7/21	09 30		Water	X			3	
MW-11 (890-1224-7)				9/7/21	08 45		Water	X			3	
MW-12 (890-1224-8)				9/7/21	09 00		Water	X			3	
MW-15 (890-1224-9)				9/7/21	10 10		Water	X			3	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other institutions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification

Unconfirmed

Deliverable Requested I II III IV Other (specify) _____ Primary Deliverable Rank 2 _____

Special Instructions/QC Requirements

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Empty Kit Relinquished by _____ Date _____ Time _____ Method of Shipment _____

Relinquished by *Cue Cuf 9.8.21* Date/Time _____ Company _____

Relinquished by _____ Date/Time _____ Company _____

Relinquished by _____ Date/Time _____ Company _____

Custody Seals Intact ☐ Yes ☐ No Custody Seal No _____ Cooler Temperature(s) °C and Other Remarks: *22.1, 2.7*

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Chain of Custody Record

1089 N Canal St.
Carlsbad NM 88220
Phone: 575 688 2400 Fax: 575 688 2400

 eurofins
Environment™ testing
America

[illegible]

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-1224-1

SDG Number: Lea County NM

Login Number: 1224

List Source: Eurofins Xenco, Carlsbad

List Number: 1

Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	N/A	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-1224-1

SDG Number: Lea County NM

Login Number: 1224

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 09/09/21 11:48 AM

Creator: Copeland, Tatiana

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2 / 2.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-1657-1

Laboratory Sample Delivery Group: Lovington Lea
Client Project/Site: Lovington Deep

For:

Talon/LPE
408 W. Texas St.
Artesia, New Mexico 88210

Attn: David Adkins

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
12/7/2021 5:05:40 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

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results through

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Talon/LPE
Project/Site: Lovington Deep

Laboratory Job ID: 890-1657-1
SDG: Lovington Lea

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Definitions/Glossary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Job ID: 890-1657-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1657-1

Receipt

The samples were received on 11/30/2021 3:28 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C

GC VOA

Method 8021B: The following sample was diluted due to the nature of the sample matrix: MW 4 (890-1657-10) at 10.0. Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Client Sample ID: MW 16

Lab Sample ID: 890-1657-1

Date Collected: 11/29/21 03:00

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			12/04/21 15:46	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			12/04/21 15:46	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			12/04/21 15:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			12/04/21 15:46	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			12/04/21 15:46	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			12/04/21 15:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130		12/04/21 15:46	1
1,4-Difluorobenzene (Surr)	85		70 - 130		12/04/21 15:46	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			12/07/21 16:34	1

Client Sample ID: MW 15

Lab Sample ID: 890-1657-2

Date Collected: 11/29/21 02:00

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			12/04/21 16:12	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			12/04/21 16:12	1
Ethylbenzene	0.00373		0.00200	0.000657	mg/L			12/04/21 16:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			12/04/21 16:12	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			12/04/21 16:12	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			12/04/21 16:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130		12/04/21 16:12	1
1,4-Difluorobenzene (Surr)	100		70 - 130		12/04/21 16:12	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00373	J	0.00400	0.000657	mg/L			12/07/21 16:34	1

Client Sample ID: MW 1

Lab Sample ID: 890-1657-3

Date Collected: 11/29/21 01:00

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			12/04/21 16:39	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			12/04/21 16:39	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			12/04/21 16:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			12/04/21 16:39	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			12/04/21 16:39	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			12/04/21 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130		12/04/21 16:39	1
1,4-Difluorobenzene (Surr)	106		70 - 130		12/04/21 16:39	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Client Sample ID: MW 1

Lab Sample ID: 890-1657-3

Date Collected: 11/29/21 01:00

Matrix: Water

Date Received: 11/30/21 15:28

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			12/07/21 16:34	1

Client Sample ID: MW 20

Lab Sample ID: 890-1657-4

Date Collected: 11/30/21 09:30

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			12/04/21 17:05	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			12/04/21 17:05	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			12/04/21 17:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			12/04/21 17:05	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			12/04/21 17:05	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			12/04/21 17:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130		12/04/21 17:05	1
1,4-Difluorobenzene (Surr)	102		70 - 130		12/04/21 17:05	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			12/07/21 16:34	1

Client Sample ID: MW 19

Lab Sample ID: 890-1657-5

Date Collected: 11/30/21 09:00

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00575		0.00200	0.000408	mg/L			12/04/21 17:31	1
Toluene	0.000387	J	0.00200	0.000367	mg/L			12/04/21 17:31	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			12/04/21 17:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			12/04/21 17:31	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			12/04/21 17:31	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			12/04/21 17:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130		12/04/21 17:31	1
1,4-Difluorobenzene (Surr)	106		70 - 130		12/04/21 17:31	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00614		0.00400	0.000657	mg/L			12/07/21 16:34	1

Client Sample ID: MW 18

Lab Sample ID: 890-1657-6

Date Collected: 11/30/21 08:30

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000702	J	0.00200	0.000408	mg/L			12/04/21 17:58	1
Toluene	0.00527		0.00200	0.000367	mg/L			12/04/21 17:58	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Client Sample ID: MW 18

Lab Sample ID: 890-1657-6

Date Collected: 11/30/21 08:30

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.00141	J	0.00200	0.000657	mg/L			12/04/21 17:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			12/04/21 17:58	1
o-Xylene	0.0448		0.00200	0.000642	mg/L			12/04/21 17:58	1
Xylenes, Total	0.0448		0.00400	0.000642	mg/L			12/04/21 17:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130					12/04/21 17:58	1
1,4-Difluorobenzene (Surr)	94		70 - 130					12/04/21 17:58	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0522		0.00400	0.000657	mg/L			12/07/21 16:34	1

Client Sample ID: MW 12

Lab Sample ID: 890-1657-7

Date Collected: 11/30/21 09:45

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000479	J	0.00200	0.000408	mg/L			12/04/21 18:24	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			12/04/21 18:24	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			12/04/21 18:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			12/04/21 18:24	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			12/04/21 18:24	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			12/04/21 18:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130					12/04/21 18:24	1
1,4-Difluorobenzene (Surr)	89		70 - 130					12/04/21 18:24	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			12/07/21 16:34	1

Client Sample ID: MW 9

Lab Sample ID: 890-1657-8

Date Collected: 11/30/21 08:50

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			12/04/21 18:50	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			12/04/21 18:50	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			12/04/21 18:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			12/04/21 18:50	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			12/04/21 18:50	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			12/04/21 18:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130					12/04/21 18:50	1
1,4-Difluorobenzene (Surr)	100		70 - 130					12/04/21 18:50	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Client Sample ID: MW 9

Lab Sample ID: 890-1657-8

Date Collected: 11/30/21 08:50

Matrix: Water

Date Received: 11/30/21 15:28

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			12/07/21 16:34	1

Client Sample ID: MW 11

Lab Sample ID: 890-1657-9

Date Collected: 11/30/21 08:30

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			12/04/21 19:16	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			12/04/21 19:16	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			12/04/21 19:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			12/04/21 19:16	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			12/04/21 19:16	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			12/04/21 19:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130		12/04/21 19:16	1
1,4-Difluorobenzene (Surr)	111		70 - 130		12/04/21 19:16	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			12/07/21 16:34	1

Client Sample ID: MW 4

Lab Sample ID: 890-1657-10

Date Collected: 11/30/21 11:00

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200	0.00408	mg/L			12/04/21 19:42	10
Toluene	<0.0200	U	0.0200	0.00367	mg/L			12/04/21 19:42	10
Ethylbenzene	<0.0200	U	0.0200	0.00657	mg/L			12/04/21 19:42	10
m-Xylene & p-Xylene	<0.0400	U	0.0400	0.00629	mg/L			12/04/21 19:42	10
o-Xylene	<0.0200	U	0.0200	0.00642	mg/L			12/04/21 19:42	10
Xylenes, Total	<0.0400	U	0.0400	0.00642	mg/L			12/04/21 19:42	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130		12/04/21 19:42	10
1,4-Difluorobenzene (Surr)	103		70 - 130		12/04/21 19:42	10

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0400	U	0.0400	0.00657	mg/L			12/07/21 16:34	1

Client Sample ID: MW 5

Lab Sample ID: 890-1657-11

Date Collected: 11/30/21 11:30

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			12/04/21 21:29	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			12/04/21 21:29	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Client Sample ID: MW 5

Lab Sample ID: 890-1657-11

Date Collected: 11/30/21 11:30

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			12/04/21 21:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			12/04/21 21:29	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			12/04/21 21:29	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			12/04/21 21:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130		12/04/21 21:29	1
1,4-Difluorobenzene (Surr)	88		70 - 130		12/04/21 21:29	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			12/07/21 16:34	1

Client Sample ID: MW 8

Lab Sample ID: 890-1657-12

Date Collected: 11/30/21 09:00

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			12/04/21 21:56	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			12/04/21 21:56	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			12/04/21 21:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			12/04/21 21:56	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			12/04/21 21:56	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			12/04/21 21:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130		12/04/21 21:56	1
1,4-Difluorobenzene (Surr)	102		70 - 130		12/04/21 21:56	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			12/07/21 16:34	1

Client Sample ID: MW 3

Lab Sample ID: 890-1657-13

Date Collected: 11/30/21 11:15

Matrix: Water

Date Received: 11/30/21 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000494	J	0.00200	0.000408	mg/L			12/04/21 22:23	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			12/04/21 22:23	1
Ethylbenzene	0.0339		0.00200	0.000657	mg/L			12/04/21 22:23	1
m-Xylene & p-Xylene	0.0225		0.00400	0.000629	mg/L			12/04/21 22:23	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			12/04/21 22:23	1
Xylenes, Total	0.0225		0.00400	0.000642	mg/L			12/04/21 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130		12/04/21 22:23	1
1,4-Difluorobenzene (Surr)	96		70 - 130		12/04/21 22:23	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Client Sample ID: MW 3
Date Collected: 11/30/21 11:15
Date Received: 11/30/21 15:28

Lab Sample ID: 890-1657-13
Matrix: Water

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0569		0.00400	0.000657	mg/L			12/07/21 16:34	1

- 1
- 2
- 3
- 4
- 5
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Surrogate Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-1657-1	MW 16	113	85
890-1657-1 MS	MW 16	94	102
890-1657-1 MSD	MW 16	101	9 S1-
890-1657-2	MW 15	100	100
890-1657-3	MW 1	105	106
890-1657-4	MW 20	102	102
890-1657-5	MW 19	105	106
890-1657-6	MW 18	94	94
890-1657-7	MW 12	88	89
890-1657-8	MW 9	95	100
890-1657-9	MW 11	105	111
890-1657-10	MW 4	101	103
890-1657-11	MW 5	116	88
890-1657-12	MW 8	104	102
890-1657-13	MW 3	102	96
LCS 880-13920/3	Lab Control Sample	93	95
LCSD 880-13920/4	Lab Control Sample Dup	102	105
MB 880-13920/8	Method Blank	55 S1-	91

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

QC Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-13920/8

Matrix: Water

Analysis Batch: 13920

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			12/04/21 15:20	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			12/04/21 15:20	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			12/04/21 15:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			12/04/21 15:20	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			12/04/21 15:20	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			12/04/21 15:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	55	S1-	70 - 130		12/04/21 15:20	1
1,4-Difluorobenzene (Surr)	91		70 - 130		12/04/21 15:20	1

Lab Sample ID: LCS 880-13920/3

Matrix: Water

Analysis Batch: 13920

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08558		mg/L		86	70 - 130
Toluene	0.100	0.07806		mg/L		78	70 - 130
Ethylbenzene	0.100	0.08366		mg/L		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1821		mg/L		91	70 - 130
o-Xylene	0.100	0.08762		mg/L		88	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-13920/4

Matrix: Water

Analysis Batch: 13920

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08954		mg/L		90	70 - 130	5	20
Toluene	0.100	0.08154		mg/L		82	70 - 130	4	20
Ethylbenzene	0.100	0.08819		mg/L		88	70 - 130	5	20
m-Xylene & p-Xylene	0.200	0.1928		mg/L		96	70 - 130	6	20
o-Xylene	0.100	0.09296		mg/L		93	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-1657-1 MS

Matrix: Water

Analysis Batch: 13920

Client Sample ID: MW 16

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.100	0.08442		mg/L		84	70 - 130
Toluene	<0.00200	U	0.100	0.07629		mg/L		76	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-1657-1 MS

Client Sample ID: MW 16

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 13920

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U	0.100	0.08301		mg/L		83	70 - 130
m-Xylene & p-Xylene	<0.00400	U	0.200	0.1808		mg/L		90	70 - 130
o-Xylene	<0.00200	U	0.100	0.08756		mg/L		88	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 890-1657-1 MSD

Client Sample ID: MW 16

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 13920

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.08353		mg/L		84	70 - 130	1	25
Toluene	<0.00200	U	0.100	0.08479		mg/L		85	70 - 130	11	25
Ethylbenzene	<0.00200	U	0.100	0.08589		mg/L		86	70 - 130	3	25
m-Xylene & p-Xylene	<0.00400	U	0.200	0.1879		mg/L		94	70 - 130	4	25
o-Xylene	<0.00200	U	0.100	0.09147		mg/L		91	70 - 130	4	25

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	9	S1-	70 - 130

Eurofins Xenco, Carlsbad

QC Association Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

GC VOA

Analysis Batch: 13920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1657-1	MW 16	Total/NA	Water	8021B	
890-1657-2	MW 15	Total/NA	Water	8021B	
890-1657-3	MW 1	Total/NA	Water	8021B	
890-1657-4	MW 20	Total/NA	Water	8021B	
890-1657-5	MW 19	Total/NA	Water	8021B	
890-1657-6	MW 18	Total/NA	Water	8021B	
890-1657-7	MW 12	Total/NA	Water	8021B	
890-1657-8	MW 9	Total/NA	Water	8021B	
890-1657-9	MW 11	Total/NA	Water	8021B	
890-1657-10	MW 4	Total/NA	Water	8021B	
890-1657-11	MW 5	Total/NA	Water	8021B	
890-1657-12	MW 8	Total/NA	Water	8021B	
890-1657-13	MW 3	Total/NA	Water	8021B	
MB 880-13920/8	Method Blank	Total/NA	Water	8021B	
LCS 880-13920/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-13920/4	Lab Control Sample Dup	Total/NA	Water	8021B	
890-1657-1 MS	MW 16	Total/NA	Water	8021B	
890-1657-1 MSD	MW 16	Total/NA	Water	8021B	

Analysis Batch: 14228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1657-1	MW 16	Total/NA	Water	Total BTEX	
890-1657-2	MW 15	Total/NA	Water	Total BTEX	
890-1657-3	MW 1	Total/NA	Water	Total BTEX	
890-1657-4	MW 20	Total/NA	Water	Total BTEX	
890-1657-5	MW 19	Total/NA	Water	Total BTEX	
890-1657-6	MW 18	Total/NA	Water	Total BTEX	
890-1657-7	MW 12	Total/NA	Water	Total BTEX	
890-1657-8	MW 9	Total/NA	Water	Total BTEX	
890-1657-9	MW 11	Total/NA	Water	Total BTEX	
890-1657-10	MW 4	Total/NA	Water	Total BTEX	
890-1657-11	MW 5	Total/NA	Water	Total BTEX	
890-1657-12	MW 8	Total/NA	Water	Total BTEX	
890-1657-13	MW 3	Total/NA	Water	Total BTEX	

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Client Sample ID: MW 16

Lab Sample ID: 890-1657-1

Date Collected: 11/29/21 03:00

Matrix: Water

Date Received: 11/30/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	13920	12/04/21 15:46	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Client Sample ID: MW 15

Lab Sample ID: 890-1657-2

Date Collected: 11/29/21 02:00

Matrix: Water

Date Received: 11/30/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	13920	12/04/21 16:12	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Client Sample ID: MW 1

Lab Sample ID: 890-1657-3

Date Collected: 11/29/21 01:00

Matrix: Water

Date Received: 11/30/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	13920	12/04/21 16:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Client Sample ID: MW 20

Lab Sample ID: 890-1657-4

Date Collected: 11/30/21 09:30

Matrix: Water

Date Received: 11/30/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	13920	12/04/21 17:05	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Client Sample ID: MW 19

Lab Sample ID: 890-1657-5

Date Collected: 11/30/21 09:00

Matrix: Water

Date Received: 11/30/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	13920	12/04/21 17:31	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Client Sample ID: MW 18

Lab Sample ID: 890-1657-6

Date Collected: 11/30/21 08:30

Matrix: Water

Date Received: 11/30/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	13920	12/04/21 17:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Client Sample ID: MW 12

Lab Sample ID: 890-1657-7

Date Collected: 11/30/21 09:45

Matrix: Water

Date Received: 11/30/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	13920	12/04/21 18:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Client Sample ID: MW 9

Lab Sample ID: 890-1657-8

Date Collected: 11/30/21 08:50

Matrix: Water

Date Received: 11/30/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	13920	12/04/21 18:50	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Client Sample ID: MW 11

Lab Sample ID: 890-1657-9

Date Collected: 11/30/21 08:30

Matrix: Water

Date Received: 11/30/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	13920	12/04/21 19:16	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Client Sample ID: MW 4

Lab Sample ID: 890-1657-10

Date Collected: 11/30/21 11:00

Matrix: Water

Date Received: 11/30/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	5 mL	5 mL	13920	12/04/21 19:42	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Client Sample ID: MW 5

Lab Sample ID: 890-1657-11

Date Collected: 11/30/21 11:30

Matrix: Water

Date Received: 11/30/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	13920	12/04/21 21:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Client Sample ID: MW 8

Lab Sample ID: 890-1657-12

Date Collected: 11/30/21 09:00

Matrix: Water

Date Received: 11/30/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	13920	12/04/21 21:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Client Sample ID: MW 3
Date Collected: 11/30/21 11:15
Date Received: 11/30/21 15:28

Lab Sample ID: 890-1657-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	13920	12/04/21 22:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14228	12/07/21 16:34	AJ	XEN MID

Laboratory References:
XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Accreditation/Certification Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Total BTEX		Water	Total BTEX

Method Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
5030B	Purge and Trap	SW846	XEN MID

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Talon/LPE
Project/Site: Lovington Deep

Job ID: 890-1657-1
SDG: Lovington Lea

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-1657-1	MW 16	Water	11/29/21 03:00	11/30/21 15:28
890-1657-2	MW 15	Water	11/29/21 02:00	11/30/21 15:28
890-1657-3	MW 1	Water	11/29/21 01:00	11/30/21 15:28
890-1657-4	MW 20	Water	11/30/21 09:30	11/30/21 15:28
890-1657-5	MW 19	Water	11/30/21 09:00	11/30/21 15:28
890-1657-6	MW 18	Water	11/30/21 08:30	11/30/21 15:28
890-1657-7	MW 12	Water	11/30/21 09:45	11/30/21 15:28
890-1657-8	MW 9	Water	11/30/21 08:50	11/30/21 15:28
890-1657-9	MW 11	Water	11/30/21 08:30	11/30/21 15:28
890-1657-10	MW 4	Water	11/30/21 11:00	11/30/21 15:28
890-1657-11	MW 5	Water	11/30/21 11:30	11/30/21 15:28
890-1657-12	MW 8	Water	11/30/21 09:00	11/30/21 15:28
890-1657-13	MW 3	Water	11/30/21 11:15	11/30/21 15:28


Environment Testing
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
 El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: _____

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Project Manager:	Dawn Adams	Bill to: (if different)	Doris All Alvarez
Company Name:	VALUPE	Company Name:	Robins
Address:	408 Texas Ave	Address:	1411 Caville Bayport
City, State ZIP:	Porter, TX 77361	City, State ZIP:	555 2002. 10312
Phone:	(575) 744-8768	Email:	dadams@valupe.com

Work Order Comments			
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> ARC <input type="checkbox"/> Superfund <input type="checkbox"/>		
State of Project:			
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>		
Deliverables:	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:		

Project Name:	Low Temp.	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST		Preservative Codes	
Project Number:		Due Date:						None: NO DI Water: H ₂ O	
Project Location:	Levington Area	TAT starts the day received by the lab, if received by 4:30pm						Cool: Cool MeOH: Me	
Sampler's Name:	Ray B. Adams							HCL: HCl HNO: H ₂ NO ₃	
P.O. #:	545-2002-10312							H ₂ SO ₄ : H ₂ SO ₄	
SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No						H ₃ PO ₄ : HP	
Samples Received Inact:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Thermometer ID:	TM-001					NaHSO ₄ : NABIS	
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Correction Factor:	-0.2					Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Temperature Reading:	1.6					Zn Acetate+NaOH: Zn	
Total Containers:		Corrected Temperature:	1.6					NaOH+Ascorbic Acid: SANC	



890-1657 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont														
MU-14		11/29	3:00			3	BTEX 8021B													
MU-15		11/29	2:00																	
MU-1		11/29	1:00																	
MU-20		11/30	9:30																	
MU-19		11/30	9:00																	
MU-18			8:30																	
MU-12			9:45																	
MU-9			8:50																	
MU-11			8:30																	
MU-4			11:00																	

Total 2007 / 6010 2008 / 6020: 8RCRA 13PPM Texas T1 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 Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of sample containers is valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins 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
<i>[Signature]</i>	<i>[Signature]</i>	11/29/21 2:00	<i>[Signature]</i>	<i>[Signature]</i>	3:28



Environment Testing

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: _____

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Project Manager:	D. Adams	Bill to: (if different)	D. Adams
Company Name:	TALON PC	Company Name:	P. Adams
Address:	408 1st St. Ave	Address:	Att: Cami L. Bryant
City/State ZIP:	Perkins, NM 88200	City/State ZIP:	575-2002-10312
Phone:	(575) 746-8168	Email:	dadams@talonpc.com

Work Order Comments			
Program:	UST/PST <input type="checkbox"/> PPP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>		
State of Project:			
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>		
Deliverables:	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:		

Project Name:	Leaving Tow Deep	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST																Preservative Codes	
Project Number:																						None: NO	
Project Location:	Leaving Tow Deep	Due Date:																				DI Water: H ₂ O	
Sampler's Name:	Raymond Met Park	TAT starts the day received by the lab. If received by 4:30pm																				Cool: Cool	
PO #:	575-2002-10312																					HCL: HC	
SAMPLE RECEIPT		Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																	H ₂ SO ₄ : H ₂	
Samples Received Intact:		Thermometer ID:	T-m-001																			H ₃ PO ₄ : HP	
Cooler Custody Seals:		Correction Factor:	-0.2																			NaHSO ₄ : NABIS	
Sample Custody Seals:		Temperature Reading:	1.0																			Na ₂ S ₂ O ₅ : NaSO ₃	
Total Containers:		Corrected Temperature:	1.6																			Zn Acetate+NaOH: Zn	
																						NaOH+Ascorbic Acid: SAPC	
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont																	Sample Comments
Mud 5		11/30/21	11:30			3																	BT-4 B021B
Mud 6			9:00																				
Mud 3			11:15																				

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 Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$35.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins 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
<i>[Signature]</i>	<i>[Signature]</i>	11/30/21 00	<i>[Signature]</i>	<i>[Signature]</i>	3:28

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-1657-1

SDG Number: Lovington Lea

Login Number: 1657

List Source: Eurofins Xenco, Carlsbad

List Number: 1

Creator: Olivas, Nathaniel

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-1657-1

SDG Number: Lovington Lea

Login Number: 1657

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 12/02/21 11:49 AM

Creator: Lowe, Katie

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 92061

CONDITIONS

Operator: PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	OGRID: 34053
	Action Number: 92061
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of 2021 ANNUAL GROUNDWATER MONITORING REPORT: Content satisfactory Contractor recommendations approved by OCD and are as follows; 1. Continue monthly MDPE events 2. Perform quarterly groundwater monitoring events in accordance with NMOCDD directives 3. Submit annual report to OCD no later than March 31,2023.	8/2/2022