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2020 ANNUAL GROUNDWATER MONITORING REPORT

KIMBROUGH SWEET 8"
LEA COUNTY, NEW MEXICO
SRS #2000—10757
NMOCD REF. # AP-0029, nAPP2109529734

Prepared For:
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APPROVED

By Nelson Velez at 11:04 am, Jan 11, 2022

Review of 2020 ANNUAL GROUNDWATER MONITORING REPORT:

Content satisfactory

Contractor recommendations approved by OCD and are as follows;

1. Complete monthly MDPE events
2. Perform quarterly groundwater monitoring events in accordance with NMOCD directives
3. OCD approves request to reduces the sampling frequency from MW-12, MW-13, MW-14, and MW-15 to a semi-annual basis
4. Submit annual report to OCD no later than March 31,2022.

January 13, 2021



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TALON/LPE PROJECT NO. 700376.050.11

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January 13, 2021

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

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1.0 INTRODUCTION AND OBJECTIVES

1.1 Objectives and Site Background

The Kimbrough Sweet 8" (site) is located approximately seven (7) miles northwest of Hobbs, New Mexico in Unit G, Section 3, Township 18 South, and Range 37 East. There are no residences, groundwater wells, or surface water bodies within a 1,000-foot radius of the site. The initial release occurred from the 8-inch steel pipeline on October 25, 2000. At the time of the release, the pipeline was owned by EOTT Energy Pipeline. Subsequently, EOTT changed its name to Link Energy in October 2003, and Plains Marketing, L.P. (Plains) purchased the assets of Link Energy on April 1, 2004. Initial reports estimated that 60 barrels (bbls) of crude oil were released and impacted approximately 15,613 feet of surface area. Approximately 22 bbls of crude oil was recovered during initial remediation activities.

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 playas accumulate sheet runoff from watershed areas ranging in size from less than one square mile to several square miles. Only a small portion of drainage from rainfall occurs by streams. Playa lakes that collect storm water runoff can act as a recharge mechanism for groundwater.

The average elevation of the site area is approximately 3,720-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.

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

1.2 Site Geology

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

Below the Blackwater Draw Formation is the Ogallala Formation of Miocene to Pliocene age. The Ogallala Formation was deposited from sediments eroded from the Southern

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

1.3 Previous Environmental Investigations

Currently, a total of 17 groundwater monitor wells have been installed in the vicinity of the release (see Figure 1). With New Mexico Oil Conservation Division (NMOCD) approval and landowner concurrence, groundwater monitor wells MW-1, MW-2, MW-3, and MW-4 were installed in January 2002. Groundwater monitor wells MW-5, MW-7, MW-8, and MW-9 were installed in July 2004, and monitor wells MW-6, MW-10, and MW-11 were installed in December 2004. Monitor wells MW-12 and MW-13 were installed on March 11, 2009 and monitor wells MW-14 and MW-15 were installed in January of 2011. Replacement monitor well MW-1A and monitor wells MW-16, MW-17, and MW-18 were installed in November of 2013. Monitor Well MW-1 was plugged and abandoned.

Phase-separated hydrocarbon (PSH) recovery operations have been performed at the site since January 2002, initially by hand bailing. In 2007, an automated skimmer recovery system was installed at the site. In March of 2011, solar panels were installed at the site and two (2) 12-volt (12V) total fluid pumps were installed in monitor wells MW-5 and MW-6. In November of 2011, additional 12V-powered total fluids pumps were installed in monitor wells MW-2 and MW-11. In October 2012, an internal combustion engine (ICE) system for running pumps and vapor extraction was installed on site. There were five (5) total fluids pumps, powered by an ICE unit, in monitor wells MW-5, MW-6, MW-7, MW-8, MW-11, and two (2) solar powered electric pumps in MW-2, and MW-9 at that time. The engine for the ICE unit failed in May 2016. Operation of the ICE unit was discontinued that time.

Beginning in June 2016, Mobile Dual-Phase Extraction (MDPE) events began and are currently conducted on a monthly basis. No other types of PSH recovery are being carried out at this site.

In August of 2018, six wells (MW-2, MW-4, MW-7, MW-8, MW-10, and MW-11) were plugged and abandoned due to decreasing groundwater levels. Five replacement wells were installed (MW-2A, MW-7A, MW-8A, MW-11A, and MW-19), and one well (MW-1A) was repaired due to vandalism.

Twelve (12) MDPE events were conducted on a monthly basis beginning in January 2020 and ending in December of 2020.

Approximately 569.91 bbls of PSH consisting of 259.16 bbls of vapor phase and 337.75 bbls of liquid phase PSH have been recovered from the site to date.

1.4 Regulatory Framework

Groundwater analytical data from this site was evaluated to the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards.

(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 following sections provide summaries of the groundwater monitoring activities conducted at the site as well as analytical results from each groundwater sampling event of 2020. Analytical results for the four (4) sampling events are summarized in Table 2 and Table 3 in Appendix B, and Figures 3a through 3d in Appendix A. Laboratory analytical data reports and chains 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 2020. 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 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 2020 on March 9-10, June 12, 15-16, September 21-23, and November 30-December 1. During all of the groundwater monitoring events, the depths to fluids were measured in all of the monitoring wells using an oil/water interface probe.

During the March 2020 groundwater monitoring event all monitor wells were gauged. Eleven (11) monitor wells (MW-1A, MW-7A, MW-8A, and MW-12 through MW-19) were purged and sampled. Five (5) monitor wells (MW-2A, MW-5, MW-6, MW-9, and MW-11A) were not sampled due to the presence of PSH. Monitor well MW-3 did not have enough water to purge or sample. Details of the gauging, purging, and sample collection activities are presented in Section 2.2 below.

During the June 2020 groundwater monitoring event all monitor wells were gauged. Eleven (11) monitor wells (MW-1A, MW-7A, MW-8A, and MW-12 through MW-19) were purged and sampled. Five (5) monitor wells (MW-2A, MW-5, MW-6, MW-9, and MW-11A) were not sampled due to the presence of PSH. One (1) monitor well MW-3 was purged dry with no recovery; therefore, was not sampled. Details of the gauging, purging, and sample collection activities are presented in Section 2.2 below.

During the September 2020 groundwater monitoring event all monitor wells were gauged. Ten (10) monitor wells (MW-7A, MW-8A, and MW-12 through MW-19) were purged and sampled. Five (5) monitor wells (MW-2A, MW-5, MW-6, MW-9, and MW-11A) were not sampled due to the presence of PSH. Monitor well MW-1A was gauged dry; therefore, was not sampled. Monitor well MW-3 was purged dry with no recovery; therefore, was not sampled.

During the November/December 2020 groundwater monitoring event all monitor wells were gauged. Thirteen (13) monitor wells (MW-1A, MW-6, MW-7A, MW-8A, MW-11A and MW-12 through MW-19) were purged and sampled. One (1) monitor well (MW-2A) was not sampled due to the presence of PSH. Monitor wells MW-3, MW-5, and MW-9 were gauged dry; therefore, were not sampled.

2.2 Groundwater Gauging, Purgging, 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 measurements was used to construct groundwater gradient maps and PSH thickness maps. The results of the measured depths to fluids collected during the four (4) events are incorporated in Table 1 – Summary of Historical Fluid Level Measurements.

Subsequent to gauging, all monitor wells not impacted with PSH were purged a minimum of three (3) casing volumes using a 12-volt, submersible pump equipped with vinyl tubing. The purge pump and tubing were decontaminated with Alconox® detergent and rinsed with distilled water after each use. Recovered purge water and water used in the decontamination process was contained in on-site 55-gallon drums. The purge water is then placed into the on site holding tank for subsequent disposal at Gandy Marley via vacuum truck.

Groundwater samples were collected from all monitor wells using 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 Midland, Texas for analyses. The groundwater samples collected during all four events were quantified for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method SW-846 8021B. Groundwater sampled collected from MW-2A, MW-7A, MW-8A, MW-11A, MW-12, MW-16 through MW-19 in March 2019 were also analyzed for polycyclic aromatic hydrocarbons (PAH) by EPA method 8270.

2.3 Phase Separated Hydrocarbon Recovery

PSH recovery has been conducted at the site since 2002, initially by hand bailing. In 2007, an automated skimmer recovery system was installed at the site. In March of 2011, solar panels were installed at the site and two (2) 12-volt (12V) total fluid pumps were installed in monitor wells MW-5 and MW-6. In November of 2011, additional 12V-powered total fluids pumps were installed in monitor wells MW-2 and MW-11. In October 2012, an ICE system for running pumps and vapor extraction was installed on site.

The system utilized five (5) pneumatic total fluid pumps in monitor wells MW-5, MW-6, MW-7, MW-8, and MW-11 and two (2) 12V total fluids pumps in MW-2 and MW-9 to recover PSH and to inhibit migration of the PSH plume. The ICE assembly consists of pneumatic total fluid pumps combined with vapor suction. Since there is no electricity at the site; the ICE system was powered by propane and vapors from listed wells. The 12V total fluids pumps operate off 12V batteries, which are charged by solar panels.

Fluid recovered by the pumps was retained in two (2) polyethylene tanks, a 3,000-gallon and a 2,500-gallon that was added in 2011. The tanks are coupled together and are equipped with high-level shut-off switches to prevent overflow. In addition, the tanks are located within a secondary recovery compound that is equipped with a polyethylene liner. The ICE system discontinued operation in May 2016.

Currently there are no fluid pumps in use at this site. One 2,500-gallon polyethylene tank is currently in use. MDPE events are conducted monthly. This system utilizes vapor pulled by vacuum combined with propane to power an internal combustion engine, which also powers a compressor and the blower used to create 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 the onsite poly tank. Recovered groundwater and PSH is removed from the poly tanks and transported to an NMOCD approved disposal facility, Gandy Marley, via vacuum truck at the end of the MDPE events.

During 2020 the quarterly PSH and groundwater recovery totals are as follows:

- 1st Quarter – 8.12 bbls PSH and 78.65 bbls of groundwater
- 2nd Quarter – 13.04 bbls PSH and 20.97 bbls of groundwater
- 3rd Quarter – 5.27 bbls PSH and 89.50 bbls of groundwater
- 4th Quarter – 4.96 bbls PSH and 105.61 bbls groundwater

Twelve (12) mobile dual phase extraction (MDPE) events, in which liquid and vapor PSH were recovered, were conducted on site during 2020. The individual MDPE event recovery totals are as follows:

- January 7, 2020 – 0.005 bbls vapor, 0.38 bbls liquid
- February 6, 2020 – 3.71 bbls vapor, 1.24 bbls liquid
- March 3, 2020 – 2.16 bbls vapor, 0.62 bbls liquid
- April 29, 2020 – 1.04 bbls vapor, 4.14 bbls liquid
- May 21, 2020 – 4.48 bbls vapor, 0.62 bbls liquid
- June 28, 2020 – 2.21 bbls vapor, 0.55 bbls liquid
- July 22, 2020 – 0.18 bbls vapor, 0.62 bbls liquid
- August 19, 2020 – 0.91 bbls vapor, 1.07 bbls liquid
- September 23, 2020 – 1.94 bbls vapor, 0.55 bbls liquid
- October 15, 2019 – 0.60 bbls vapor, 1.07 bbls liquid
- November 15, 2019 – 1.59 bbls vapor, 0.79 bbls liquid
- December 19, 2019 – 0.62 bbls vapor, 0.29 bbls liquid

In 2020 an estimated total of 31.39 bbls of PSH were recovered during the MDPE events. Approximately 569.91 bbls of PSH consisting of 259.16 bbls of vapor phase and 337.75 bbls of liquid phase PSH have been recovered from the site to date.

3.0 GROUNDWATER ASSESSMENT AND MONITORING RESULTS

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

3.1 Groundwater Monitoring Results

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

3.2.1 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 zero 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 inches per day. The regional hydraulic conductivity averages 17 gallons per day per square-foot with a specific yield averaging 16%. The depth to groundwater at the site ranged from 60.59 feet below ground surface (bgs) to 66.05 feet bgs and the groundwater flow direction is to the east northeast. 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-HCO₃, 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.

3.2.2 Groundwater Gradient and Flow Direction

The depth to fluid measurements was collected during each of the four (4) groundwater monitoring events during the year 2020. 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 in 2020 indicate that the groundwater flow direction is to east northeast with average gradient of 0.0038 feet per foot or approximately 20.06 feet per mile. Groundwater levels at the subject site have exhibited a decrease of an average of 0.60 feet for the year 2020 that appears to be associated with a regional trend of fluctuating groundwater levels for the Ogallala Aquifer.

3.2.3 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 from quarter to quarter during the year 2020.

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

- In March of 2020, PSH was observed in monitor wells MW-2A, MW-5, MW-6, MW-9, and MW-11A. PSH thickness ranged from 0.04 feet to 0.40 feet.
- In June of 2020, PSH was observed in monitor wells MW-2A, MW-5, MW-6, MW-9, and MW-11A. PSH thickness ranged from 0.01 feet to 1.17 feet.
- In September 2020, PSH was observed in monitor wells MW-2A, MW-5, MW-6, MW-9, and MW-11A. PSH thickness ranged from 0.01 feet to 3.21 feet.
- In November of 2020, PSH was observed in monitor well MW-2A with PSH thickness of 0.01 feet.

PSH recovery operations have been performed at the site since 2002. A summary of the historical groundwater and PSH gauging is provided in Table 1 in Appendix B. Approximately 569.91 bbls of PSH consisting of 259.16 bbls of vapor phase and 337.75 bbls of liquid phase PSH have been recovered from the site to date.

3.4 Groundwater Sampling Results

During the first quarter, March 2020, the following monitor wells were sampled: MW-1A, MW-7A, MW-8A, and MW-12 through MW-19. Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from less than method detection limit (MDL) in MW-13, MW-14, MW-15, MW-17, and MW-18 to 0.000760 mg/L in MW-8A. Benzene concentrations did not exceed the NMWQCC groundwater standard of 0.010 mg/L in any of the monitor wells sampled this quarter.
- Toluene concentrations were less than the laboratory MDL in all monitor wells, except monitor well MW-8A with a concentration of 0.000380 mg/L. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in all of the monitor wells sampled this quarter.
- Ethylbenzene concentrations were less than the laboratory MDL in all monitor wells, except monitor well MW-8A with a concentration of <0.00150 mg/L. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in all of the monitor wells sampled this quarter.
- Xylene concentrations were less than the laboratory MDL in all monitor wells, except monitor well MW-8A with a concentration of <0.00102 mg/L. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in all of the monitor wells sampled this quarter.
- Polycyclic Aromatic Hydrocarbons (PAH by EPA 8270) were added to the first quarter sampling event for MW-7A, MW-8A, MW-12, MW-16, MW-17, and MW-19. Trace levels of naphthalene were not detected in any of the wells sampled. No concentrations were above the NMWQCC groundwater standard of 0.030 mg/L. No PAH concentrations above NMWQCC standards were detected in the past two years, therefore PAH sampling for these wells will be discontinued. PAH sampling will continue for monitor wells MW-1A, MW-2A and MW-11A.

During the June 2020 sampling event, the following wells were sampled: MW-1A, MW-7A, MW-8A, and MW-12 through MW-19. Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from less than the laboratory MDL in all wells except MW-7A which had concentrations of 0.000570 mg/L, MW-8A with concentrations of 0.00102 mg/L, and MW-18 with concentrations of 0.000530 mg/L. Benzene concentrations did not exceed the NMWQCC groundwater standard of 0.010 mg/L in any of the monitor wells sampled.
- Toluene concentrations were less than the laboratory MDL in monitor wells MW-1A, MW-12, MW-13, and MW-17 to 0.000670 mg/L in MW-14. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.075 mg/L in any monitor wells sampled.
- Ethylbenzene concentrations were below the laboratory MDL in all wells sampled.

Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the monitor wells sampled.

- Xylene concentrations were below the laboratory MDL in all wells sampled. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.62 mg/L in any of the monitor wells sampled.

During the September 2020 sampling event, the following wells were sampled: MW-7A, MW-8A, and MW-12 through MW-19. Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from less than the laboratory MDL in all wells except MW-8A which had a concentration of 0.00119 mg/L and MW-12A with a concentration of 0.00171 mg/L. Benzene concentrations did not exceed the NMWQCC groundwater standard of 0.0100 mg/L in any of the monitor wells sampled.
- Toluene concentrations were less than the laboratory MDL in all wells sampled. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the monitor wells sampled.
- Ethylbenzene concentrations were below the laboratory MDL in all wells sampled except for MW-8A which had a concentration of 0.000730 mg/L. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any of the monitor wells sampled.
- Xylene concentrations were below the laboratory MDL in all wells sampled except for MW-8A which had a concentration of 0.00126 mg/L. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.62 mg/L in any of the monitor wells sampled this quarter.

During the November/December 2020 sampling event, the following wells were sampled: MW-1A, MW-6, MW-7A, MW-8A, MW-11A, and MW-12 through MW-19. Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from less than laboratory MDL in MW-1A, and MW-12 through MW-18 to 7.89 mg/L in MW-6. Benzene concentrations exceeded the NMWQCC benzene standard of 0.0100 mg/L in monitoring wells MW-6, MW-11A, and MW-19 this quarter.
- Toluene concentrations were less than laboratory MDL in all wells sampled except for MW-6, MW-8A, and MW-11A with concentrations of 0.773 mg/L, 0.000740 mg/L, and 0.000690 mg/L, respectively. Toluene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in MW-6 this quarter.
- Ethylbenzene concentrations were less than laboratory MDL in all wells sampled except for MW-6, MW-11A, and MW-19 with concentrations of 0.350 mg/L, 0.878 mg/L, and 0.00315 mg/L. Ethylbenzene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in MW-11A this quarter.
- Xylene concentrations were less than laboratory MDL in all wells sampled except for

MW-6, MW-11A, and MW-19 with concentration of 0.6770 mg/L, 0.5008 mg/L, and 0.002650 mg/L, respectively. Xylene concentrations exceeded the NMWQCC groundwater standard of 0.620 mg/L in monitoring well MW-6 this quarter.

The laboratory analytical results for BTEX are summarized in Table 2 – Summary of Historical Groundwater Analytical Results in Appendix B. The PAH laboratory analytical results are summarized in Table 3 – Summary of Historical Groundwater Analytical Results - PAH Supplement 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 groundwater monitoring events conducted at the Kimbrough Sweet 8" site and Section 4.2 provides recommendations for future corrective action.

4.1 Summary of Findings

- The groundwater flow direction is to east northeast with an average gradient of 0.0038 ft/ft based on the water level measurement data collected in 2020.
- Groundwater levels at the subject site have decreased at an average of 0.60 feet for the year 2020.
- PSH has impacted monitor wells MW-2A, MW-5, MW-6, MW-9, and MW-11A in 2020. PSH levels and extent have been reduced in 2020.
- Approximately 31.39 bbls of PSH was recovered during the year 2020.
- Dissolved-phase concentrations were stable over the year 2020. The benzene concentration in MW-6, MW-11, and MW-19 (formally PSH wells) exceeded the NMWQCC groundwater standard of 0.0100 mg/L during the fourth quarter sampling event. The toluene and xylene concentrations in MW-6 exceeded the respective NMWQCC groundwater standards during the fourth quarter sampling event. The Ethylbenzene concentration in MW-11A exceeded the NMWQCC groundwater standard of 0.75 mg/L during the fourth quarter sampling event.
- PAH sampling requirements of no detected concentrations for two consecutive years above NMWQCC standards have been met for the following wells: MW-7A, MW-8A, MW-12, MW-16, MW-17 and MW-19. Therefore, PAH sampling will be discontinued for these wells. PAH sampling will continue for monitor wells MW-1A, MW-2A and MW-11A.

4.2 Recommendations

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

- Conduct monthly MDPE events.
- Perform quarterly groundwater monitoring events in accordance with NMOCD directives.
- Request NMOCD allow a modification (reduction) in the sampling frequency from monitoring wells that have exhibited no evidence of contamination above NMWQCC standards for eight (8) consecutive quarters. Specifically, we are requesting that wells MW-12, MW-13, MW-14, and MW-15 be sampled only on a semi-annual basis.

APPENDIX A

Figures

Figure 1 - Site Plan

Figure 2a - Groundwater Gradient Map - 03/09/2020

Figure 2b - Groundwater Gradient Map - 06/12/2020

Figure 2c - Groundwater Gradient Map - 09/21/2020

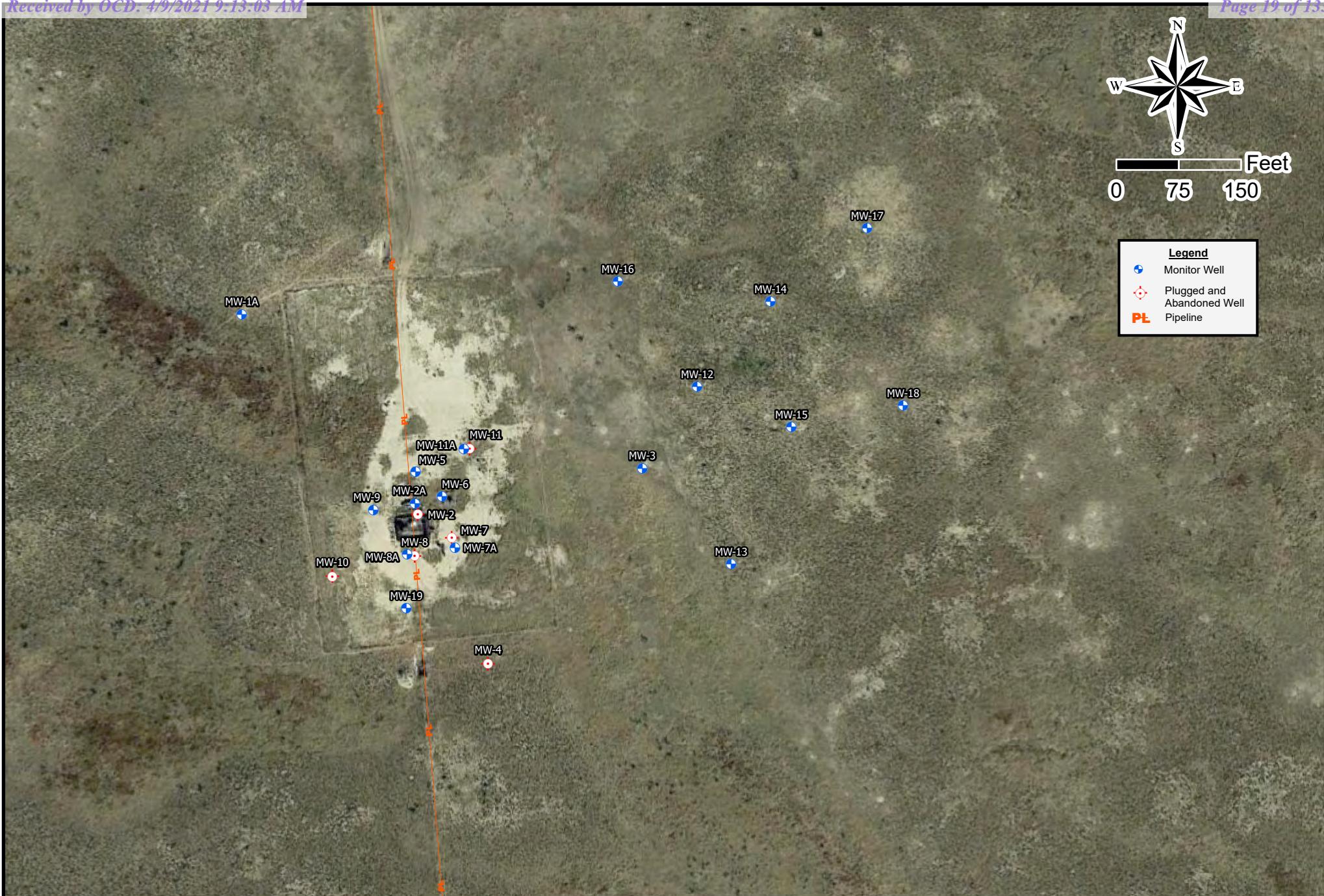
Figure 2d - Groundwater Gradient Map - 11/30/2020

Figure 3a - PSH Thickness & Groundwater Concentration Map - 03/09-10/2020

Figure 3b - PSH Thickness & Groundwater Concentration Map - 06/15-16/2020

Figure 3c - PSH Thickness & Groundwater Concentration Map - 09/22-23/2020

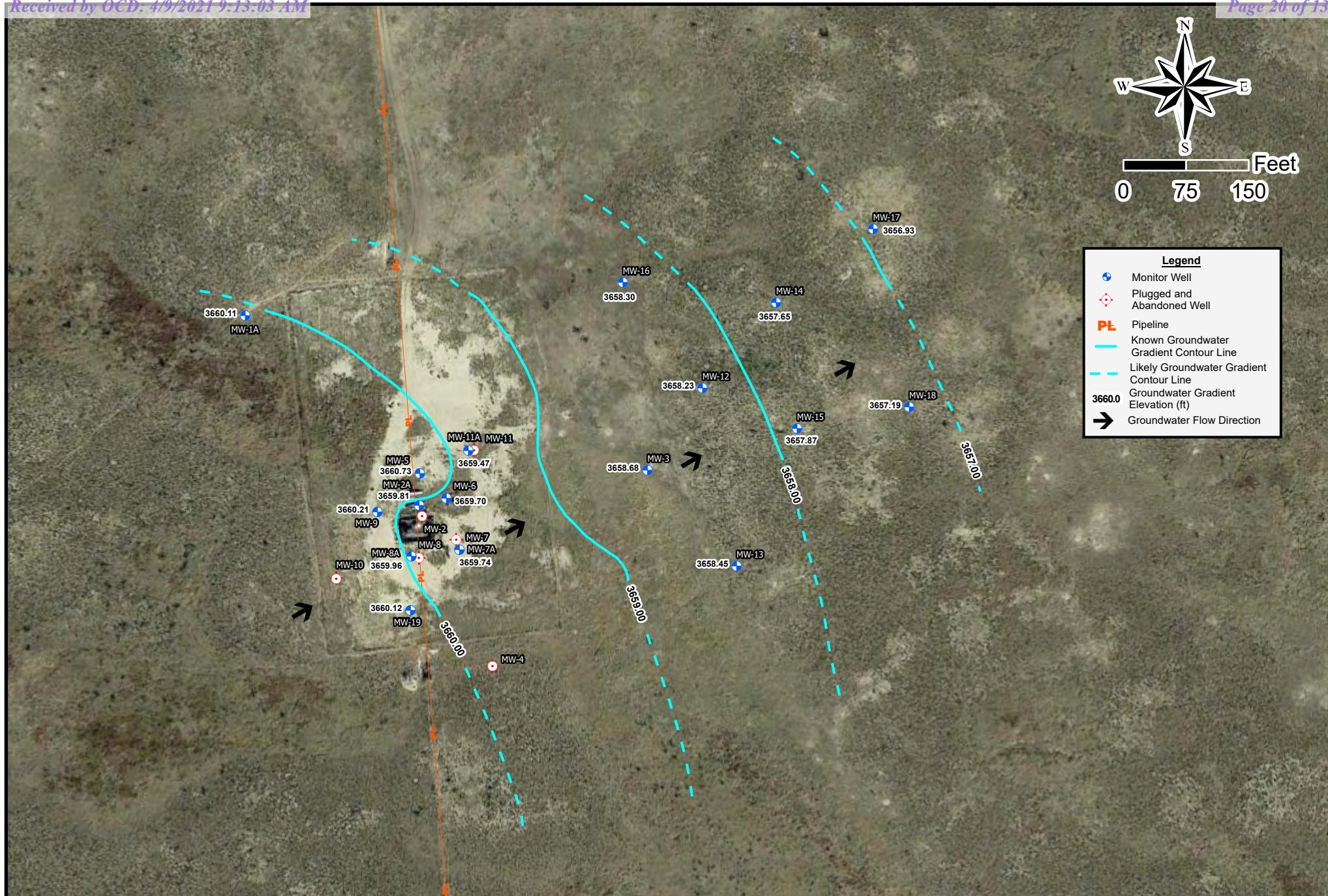
Figure 3d - PSH Thickness & Groundwater Concentration Map - 11/30-12/01/2020



Released to Imaging: 1/11/2022 11:06:52 AM

Drafted: 4/7/2021
1 in = 150 ft
Drafted By: NRC

Kimbrough Sweet 8"
SRS # 2000-10757, NMOCD REF. #nAPP2109529734
SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico
32.779804, -103.239008
Figure 1 - Site Map



Legend

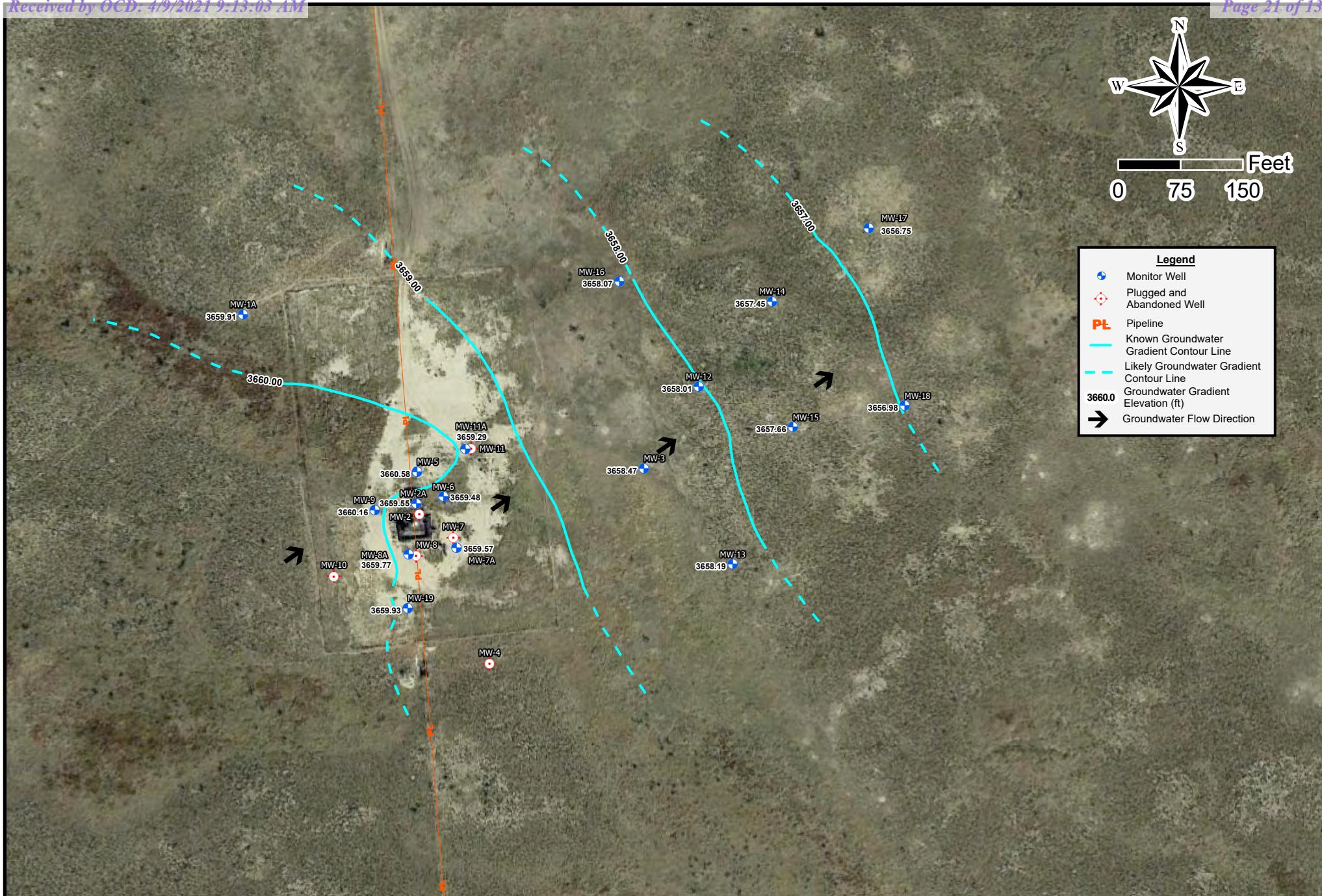
- Monitor Well
- Plugged and Abandoned Well
- Pipeline
- Known Groundwater Gradient Contour Line
- Likely Groundwater Gradient Contour Line
- Groundwater Gradient Elevation (ft)
- Groundwater Flow Direction

TALON
LPE

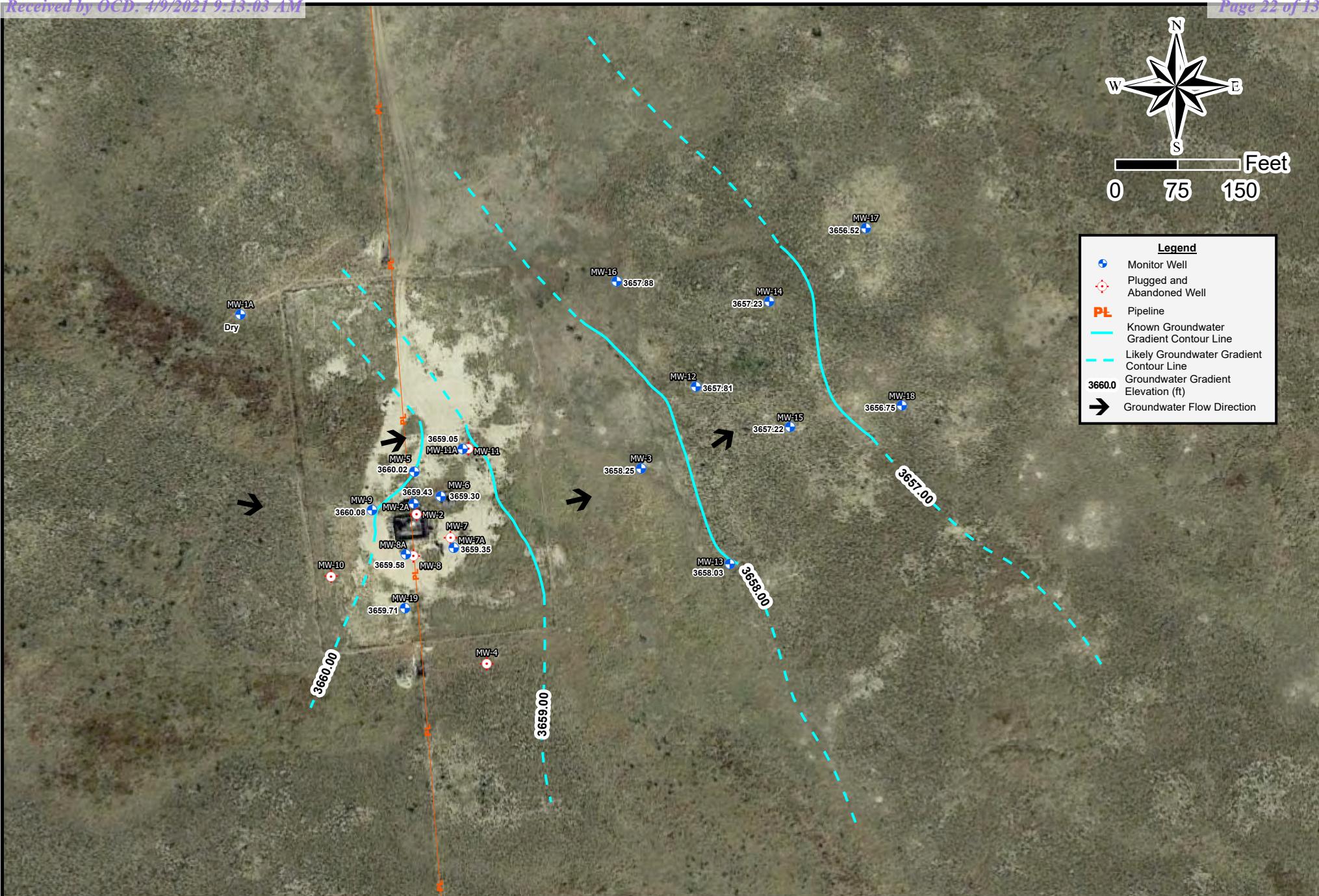
Released to Imaging: 1/11/2022 11:06:52 AM

Drafted: 4/6/2021
1 in = 150 ft
Drafted By: NRC

Kimbrough Sweet 8"
SRS # 2000-10757, NMOCD REF. #nAPP2109529734
SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico
32.779804, -103.239008
Figure 2a - Groundwater Gradient Map (03/09/2020)



Legend	
●	Monitor Well
○	Plugged and Abandoned Well
PL	Pipeline
—	Known Groundwater Contour Line
- - -	Likely Groundwater Gradient Contour Line
3660.0	Groundwater Gradient Elevation (ft)
→	Groundwater Flow Direction



Legend

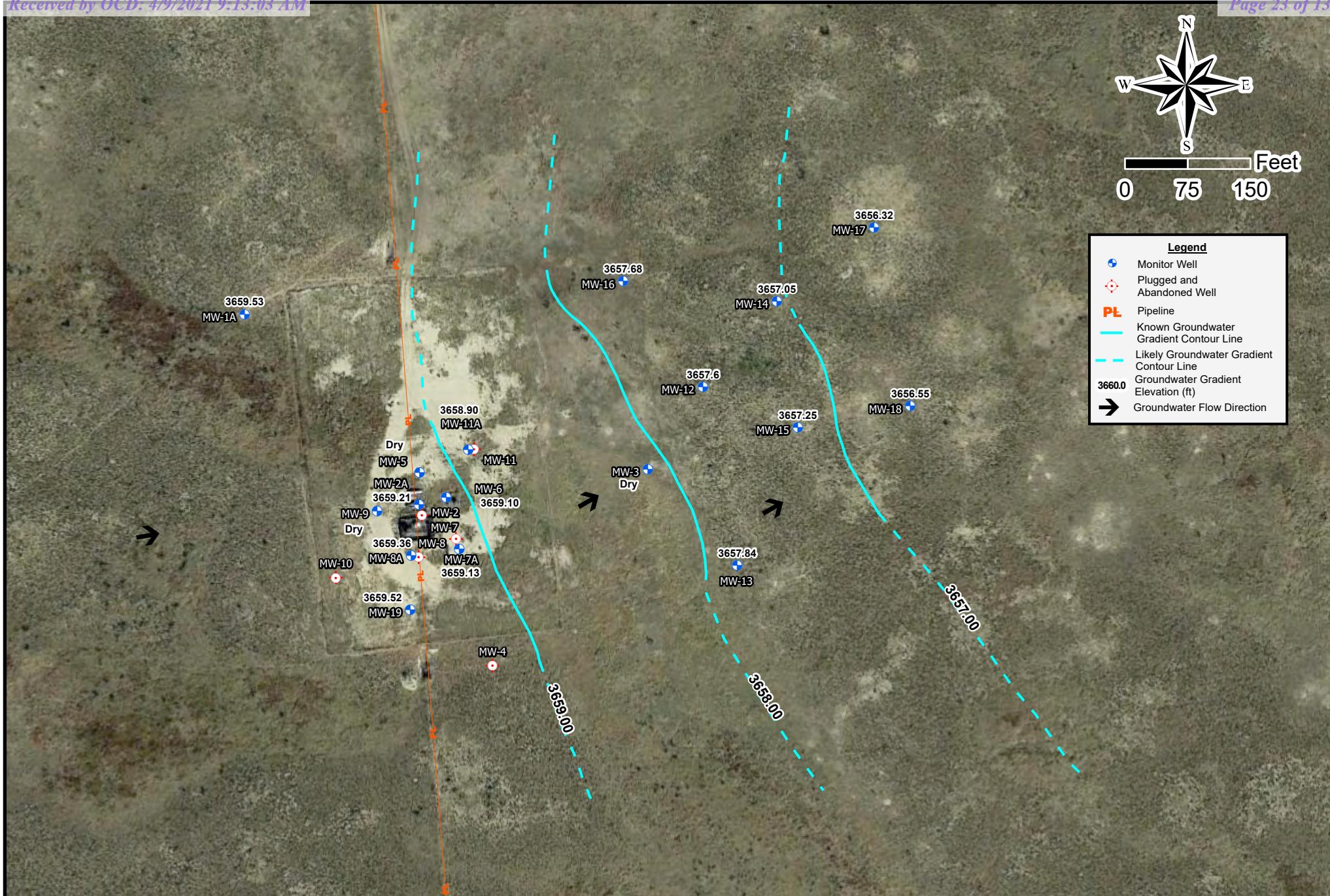
- Monitor Well
- ◆ Plugged and Abandoned Well
- PL Pipeline
- Known Groundwater Gradient Contour Line
- - Likely Groundwater Gradient Contour Line
- 3660.0 Groundwater Gradient Elevation (ft)
- Groundwater Flow Direction

TALON
LPE

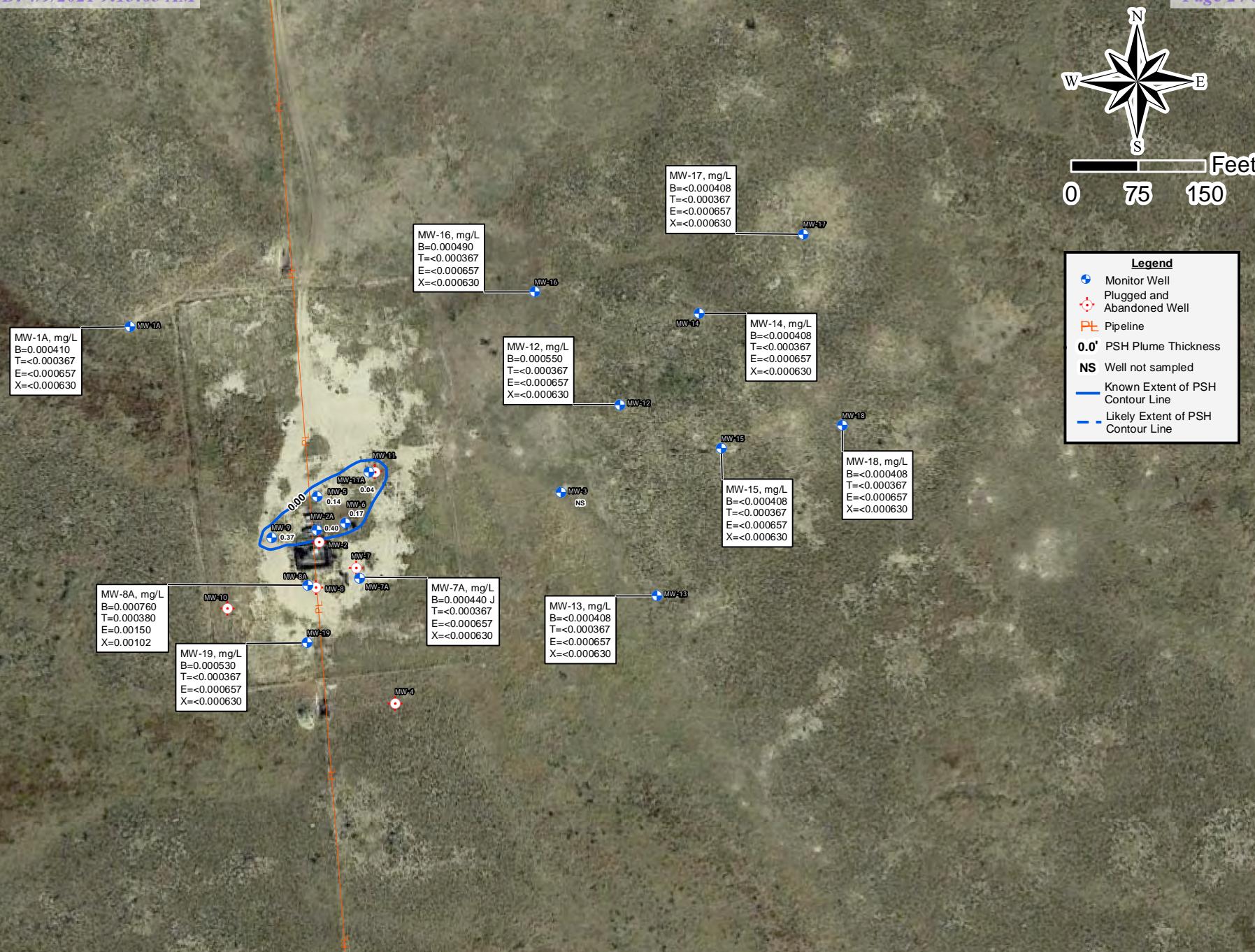
Released to Imaging: 1/11/2022 11:06:52 AM

Drafted: 4/6/2021
1 in = 150 ft
Drafted By: NRC

Kimbrough Sweet 8"
SRS # 2000-10757, NMOC REF. #nAPP2109529734
SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico
32.779804, -103.239008
Figure 2c - Groundwater Gradient Map (09/21/2020)



<u>Legend</u>	
●	Monitor Well
◆	Plugged and Abandoned Well
PL	Pipeline
—	Known Groundwater Gradient Contour Line
- - -	Likely Groundwater Gradient Contour Line
3660.0	Groundwater Gradient Elevation (ft)
→	Groundwater Flow Direction



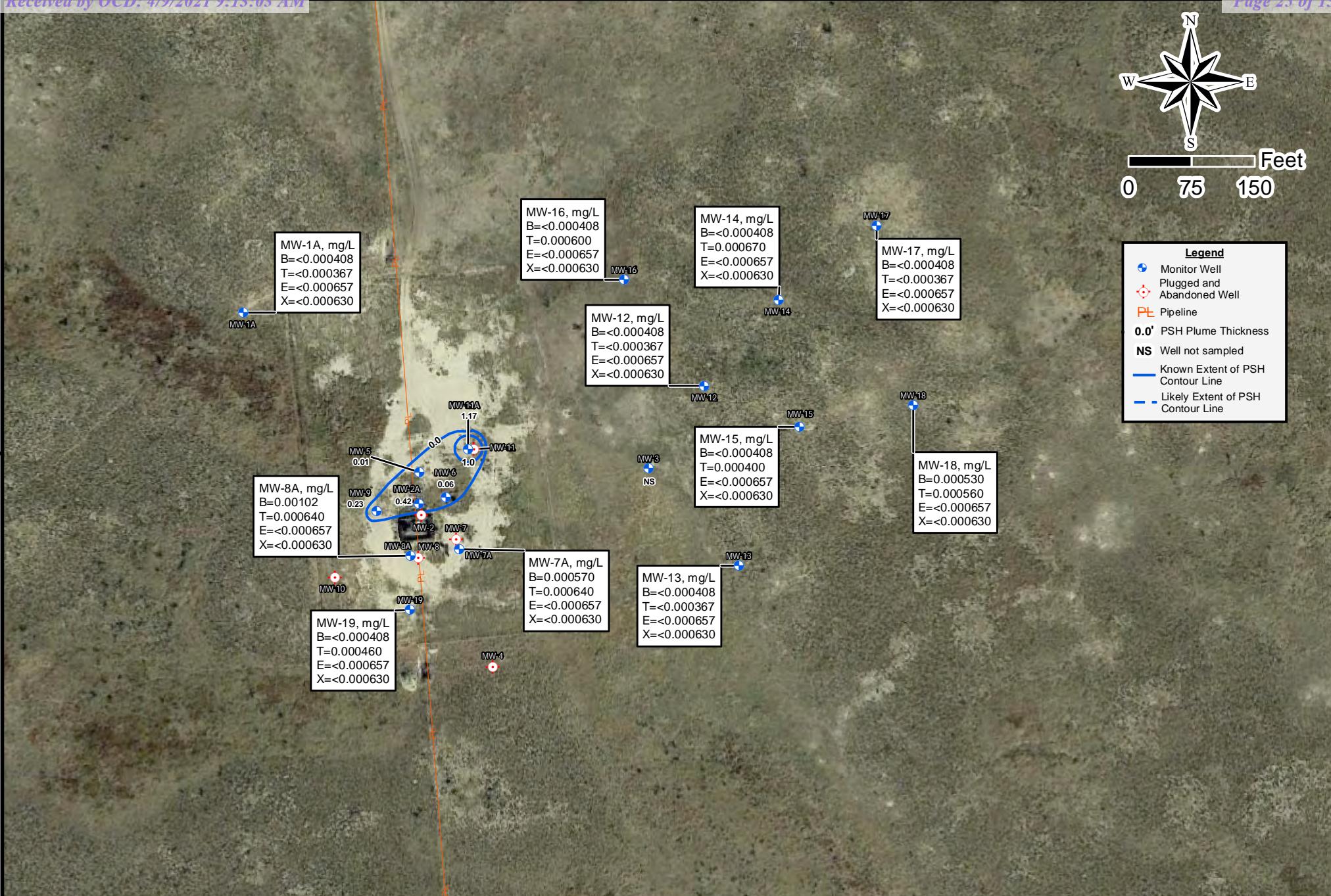
TALON LPE

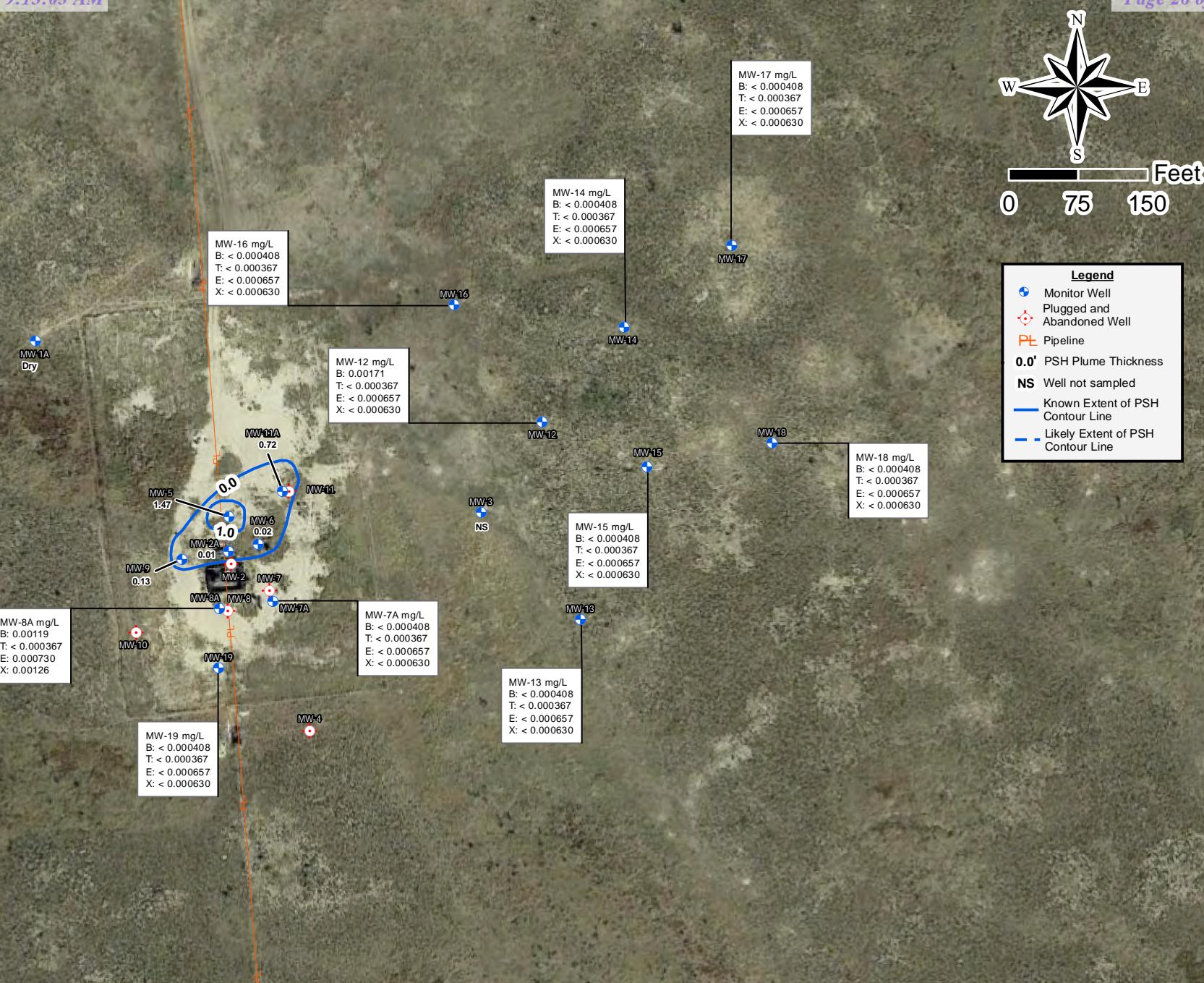
Scanned to Imaging: 1/11/2022 11:06:52 AM

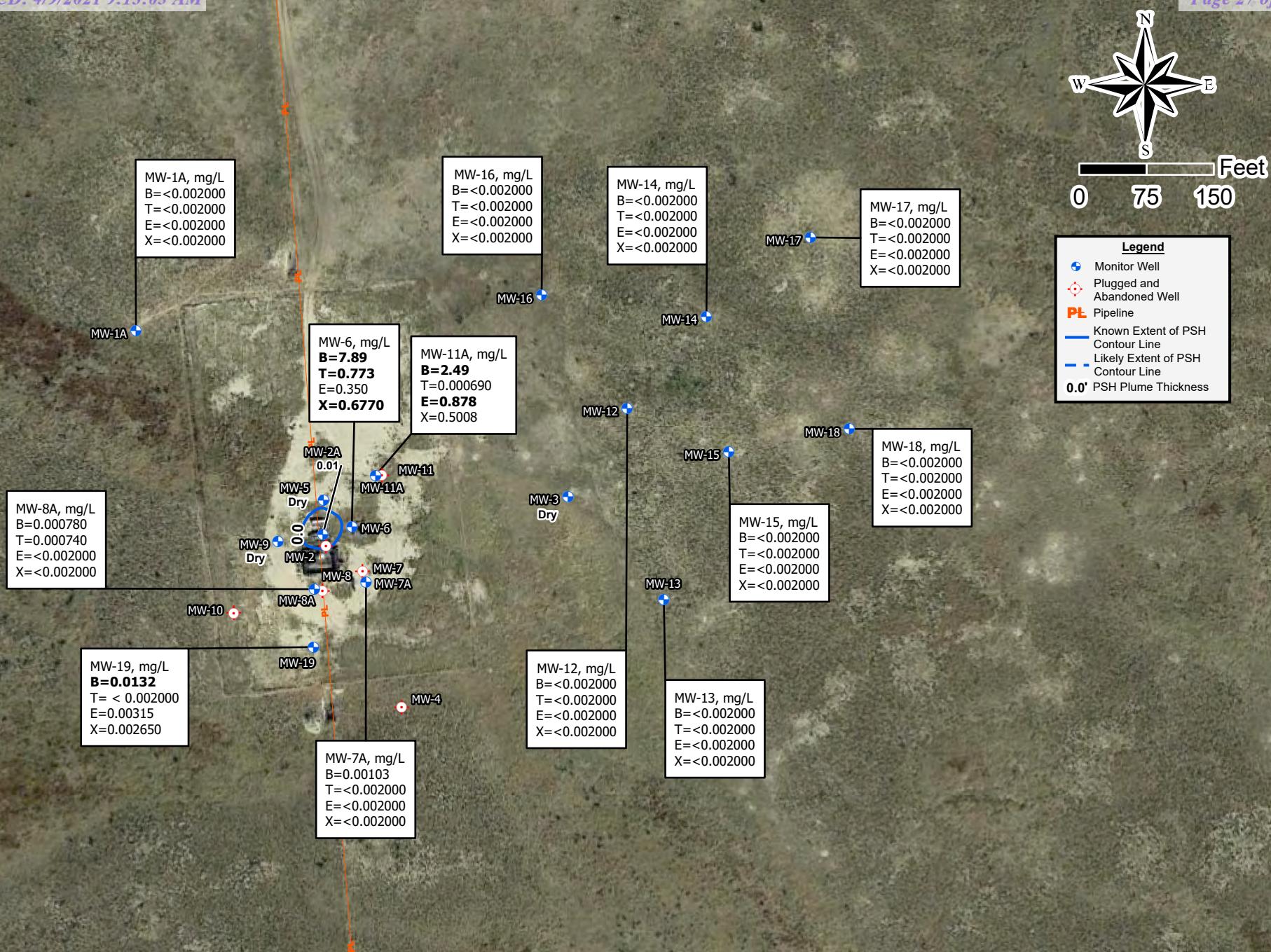
Drafted: 4/7/2021
1 in = 150 ft
Drafted By:NRC

Kimbrough Sweet 8"
SRS # 2000-10757, NMOCD REF. #nAPP2109529734
SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico
32.779804, -103.239008

Figure 3a - PSH Thickness and Groundwater Concentration Map (03/09-10/2020)







APPENDIX B

Tables

Table 1 - Summary of Historical Fluid Level Measurements

Table 2 - Summary of Historical Groundwater Analytical Results – BTEX

Table 3 - Summary of Groundwater Analytical Results – PAH

Table 1 - Gauging and NAPL Thickness - Historical
 Kimbrough Sweet 8 inch
 Hobbs, NM
 SRS#: 2000-10757

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-1A 2"	3723.46	55.7	85.7	03/10/2016	60.52	-	-	3662.94
				05/27/2016	61.66	-	-	3661.80
				09/09/2016	60.89	-	-	3662.57
				12/06/2016	61.05	-	-	3662.41
				03/06/2017	61.23	-	-	3662.23
				06/08/2017	61.41	-	-	3662.05
				09/12/2017	61.56	-	-	3661.90
				12/13/2017	DS	-	-	-
				03/22/2018	DS	-	-	-
				09/12/2018	62.15	-	-	3661.31
				12/10/2018	62.38	-	-	3661.08
				03/14/2019	62.65	-	-	3660.81
				06/11/2019	62.80	-	-	3660.66
				09/23/2019	63.00	-	-	3660.46
				12/09/2019	63.17	-	-	3660.29
				03/09/2020	63.35	-	-	3660.11
				06/12/2020	63.55	-	-	3659.91
				09/21/2020	DR	-	-	-
				11/30/2020	63.93	-	-	3659.53
MW-2 4"	3723.32	41	61	03/10/2016	DR	-	-	-
				05/27/2016	59.94	-	-	3663.38
				09/09/2016	61.42	60.19	1.23	3662.93
				12/01/2016	DR	-	-	-
				03/06/2017	61.05	60.57	0.48	3662.67
				06/08/2017	DR	-	-	-
				09/12/2017	DR	-	-	-
				12/13/2017	DR	-	-	-
				03/22/2018	DR	-	-	-
				06/12/2018	DR	-	-	-
				08/29/2018	PA	-	-	-
MW-2A 4"	3722.25	60	80	09/12/2018	61.32	-	-	3660.93
				12/10/2018	61.50	-	-	3660.75
				03/14/2019	61.75	-	-	3660.50
				06/11/2019	61.93	-	-	3660.32
				09/23/2019	62.87	61.90	0.97	3660.19
				12/09/2019	62.30	62.25	0.05	3659.99
				03/09/2020	62.77	62.37	0.40	3659.81
				06/12/2020	63.05	62.63	0.42	3659.55
				09/21/2020	62.83	62.82	0.01	3659.43
				11/30/2020	63.05	63.04	0.01	3659.21
MW-3 2"	3721.52	43.4	63.4	03/10/2016	60.06	-	-	3661.46
				05/27/2016	60.21	-	-	3661.31
				09/09/2016	60.42	-	-	3661.10
				12/06/2016	60.59	-	-	3660.93
				03/06/2017	60.79	-	-	3660.73
				06/08/2017	60.96	-	-	3660.56
				09/12/2017	61.12	-	-	3660.40
				12/13/2017	63.29	-	-	3658.23
				03/22/2018	61.47	-	-	3660.05
				06/12/2018	61.65	-	-	3659.87
				09/12/2018	61.71	-	-	3659.81
				12/10/2018	61.96	-	-	3659.56
				03/14/2019	62.15	-	-	3659.37
				06/11/2019	62.31	-	-	3659.21
				09/23/2019	62.47	-	-	3659.05
				12/09/2019	62.65	-	-	3658.87
				03/09/2020	62.84	-	-	3658.68
				06/12/2020	63.05	-	-	3658.47
				09/21/2020	63.27	-	-	3658.25
				11/30/2020	DR	-	-	-

Table 1 - Gauging and NAPL Thickness - Historical
 Kimbrough Sweet 8 inch
 Hobbs, NM
 SRS#: 2000-10757

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-4 2"	3721.94	39.7	59.7	03/10/2016	DR	-	-	-
				05/27/2016	DR	-	-	-
				09/09/2016	DR	-	-	-
				12/06/2016	DR	-	-	-
				03/06/2017	DR	-	-	-
				06/08/2017	DR	-	-	-
				09/12/2017	DR	-	-	-
				12/13/2017	DR	-	-	-
				03/22/2018	DR	-	-	-
				06/12/2018	DR	-	-	-
MW-5 4"	3724.08	45	65	03/10/2016	63.87	60.65	3.22	3662.90
				05/27/2016	63.78	60.80	2.98	3662.79
				09/09/2016	63.15	61.45	1.70	3662.35
				12/01/2016	62.42	61.62	0.80	3662.33
				03/06/2017	62.59	62.10	0.49	3661.90
				06/08/2017	62.69	62.25	0.44	3661.76
				09/12/2017	63.19	62.40	0.79	3661.55
				12/13/2017	63.10	62.58	0.52	3661.41
				03/22/2018	63.82	62.55	1.27	3661.32
				06/12/2018	63.26	63.10	0.16	3660.95
				09/12/2018	63.14	63.13	0.01	3660.95
				12/10/2018	62.76	62.74	0.02	3661.34
				03/14/2019	63.03	63.00	0.03	3661.08
				06/11/2019	63.16	-	-	3660.92
				09/23/2019	63.33	63.26	0.07	3660.81
				12/09/2019	63.54	63.18	0.36	3660.84
				03/09/2020	63.47	63.33	0.14	3660.73
				06/12/2020	63.51	63.50	0.01	3660.58
				09/21/2020	65.00	63.53	1.47	3660.31
				11/30/2020	DR	-	-	-
MW-6 4"	3722.16	44	64	03/10/2016	63.65	58.85	4.80	3662.52
				05/27/2016	61.43	59.53	1.90	3662.32
				09/09/2016	62.35	60.31	2.04	3661.51
				12/01/2016	60.76	60.14	0.62	3661.92
				03/06/2017	60.73	60.38	0.35	3661.72
				06/08/2017	60.85	60.59	0.26	3661.53
				09/12/2017	61.48	60.60	0.88	3661.41
				12/13/2017	61.58	60.78	0.80	3661.25
				03/22/2018	61.43	61.04	0.39	3661.06
				06/12/2018	61.45	61.30	0.15	3660.84
				09/12/2018	61.38	61.32	0.06	3660.83
				12/10/2018	61.53	61.52	0.01	3660.64
				03/14/2019	61.77	61.75	0.02	3660.41
				06/11/2019	61.94	61.92	0.02	3660.24
				09/23/2019	62.20	62.08	0.12	3660.06
				12/09/2019	62.79	62.20	0.59	3659.86
				03/09/2020	62.60	62.43	0.17	3659.70
				06/12/2020	62.73	62.67	0.06	3659.48
				09/21/2020	62.88	62.86	0.02	3659.30
				11/30/2020	63.06	-	-	3659.10
MW-7 4"	3723.23	44	64	03/10/2016	61.50	60.53	0.97	3662.54
				05/27/2016	60.93	60.83	0.10	3662.38
				09/09/2016	61.69	61.01	0.68	3662.11
				12/01/2016	62.19	61.09	1.10	3661.96
				03/06/2017	62.30	61.32	0.98	3661.75
				06/08/2017	62.75	61.35	1.40	3661.65
				09/12/2017	62.37	61.65	0.72	3661.46
				12/13/2017	62.73	61.73	1.00	3661.33
				03/22/2018	62.25	62.08	0.17	3661.12
				06/12/2018	62.66	62.24	0.42	3660.92

Table 1 - Gauging and NAPL Thickness - Historical
Kimbrough Sweet 8 inch
Hobbs, NM
SRS#: 2000-10757

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
				08/29/2018	PA	-	-	-

Table 1 - Gauging and NAPL Thickness - Historical
 Kimbrough Sweet 8 inch
 Hobbs, NM
 SRS#: 2000-10757

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-7A 2"	3722.42	60	80	09/12/2018	61.56	-	-	3660.86
				12/10/2018	61.72	-	-	3660.70
				03/14/2019	61.98	-	-	3660.44
				06/11/2019	62.15	-	-	3660.27
				09/23/2019	62.31	-	-	3660.11
				12/09/2019	62.50	-	-	3659.92
				03/09/2020	62.68	-	-	3659.74
				06/12/2020	62.85	-	-	3659.57
				09/21/2020	63.07	-	-	3659.35
				11/30/2020	63.29	-	-	3659.13
MW-8 4"	3723.41	41	61	03/10/2016	63.20	60.11	3.09	3662.79
				05/27/2016	63.43	60.26	3.17	3662.63
				09/09/2016	61.81	60.47	1.34	3662.72
				12/01/2016	61.63	60.61	1.02	3662.63
				03/06/2017	DR	-	-	-
				06/08/2017	DR	-	-	-
				09/12/2017	DR	-	-	-
				12/13/2017	DR	-	-	-
				03/22/2018	DR	-	-	-
				06/12/2018	DR	-	-	-
				08/29/2018	PA	-	-	-
MW-8A 2"	3723.41	60	80	09/12/2018	62.33	-	-	3661.08
				12/10/2018	62.49	-	-	3660.92
				03/14/2019	62.76	-	-	3660.65
				06/11/2019	62.93	-	-	3660.48
				09/23/2019	63.08	-	-	3660.33
				12/09/2019	63.27	-	-	3660.14
				03/09/2020	63.45	-	-	3659.96
				06/12/2020	63.64	-	-	3659.77
				09/21/2020	63.83	-	-	3659.58
				11/30/2020	64.05	-	-	3659.36
MW-9 4"	3723.25	43	63	03/10/2016	61.95	60.16	1.79	3662.79
				05/27/2016	61.35	60.42	0.93	3662.68
				09/09/2016	61.12	60.78	0.34	3662.41
				12/01/2016	61.54	60.91	0.63	3662.24
				03/06/2017	62.00	61.02	0.98	3662.07
				06/08/2017	62.28	60.10	2.18	3662.79
				09/12/2017	61.44	61.39	0.05	3661.85
				12/13/2017	62.15	61.53	0.62	3661.62
				03/22/2018	62.83	61.65	1.18	3661.41
				06/12/2018	62.25	62.20	0.05	3661.04
				09/12/2018	62.05	62.03	0.02	3661.22
				12/10/2018	62.30	62.27	0.03	3660.98
				03/14/2019	62.66	62.45	0.21	3660.77
				06/11/2019	62.61	62.60	0.01	3660.65
				09/23/2019	62.97	62.85	0.12	3660.38
				12/09/2019	63.20	63.04	0.16	3660.18
				03/09/2020	63.35	62.98	0.37	3660.21
				06/12/2020	63.28	63.05	0.23	3660.16
				09/21/2020	63.28	63.15	0.13	3660.08
				11/30/2020	DR	-	-	-

Table 1 - Gauging and NAPL Thickness - Historical
 Kimbrough Sweet 8 inch
 Hobbs, NM
 SRS#: 2000-10757

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-10 2"	3724.14	40.1	60.1	03/10/2016	DR	-	-	-
				05/27/2016	DR	-	-	-
				09/09/2016	DR	-	-	-
				12/06/2016	DR	-	-	-
				03/06/2017	DR	-	-	-
				06/08/2017	DR	-	-	-
				09/12/2017	DR	-	-	-
				12/13/2017	DR	-	-	-
				03/22/2018	DR	-	-	-
				06/12/2018	DR	-	-	-
MW-11 2"	3722.55	40.7	60.7	03/10/2016	60.65	59.60	1.05	3662.78
				05/27/2016	60.63	59.58	1.05	3662.80
				09/09/2016	60.59	59.81	0.78	3662.61
				12/01/2016	60.64	59.98	0.66	3662.46
				03/06/2017	60.59	60.19	0.40	3662.29
				06/08/2017	60.59	60.30	0.29	3662.20
				09/12/2017	60.60	60.48	0.12	3662.05
				12/13/2017	DR	-	-	-
				03/22/2018	DR	-	-	-
				06/12/2018	DR	-	-	-
MW-11A 2"	3722.32	60	80	09/12/2018	61.71	-	-	3660.61
				12/10/2018	61.89	-	-	3660.43
				03/14/2019	62.14	-	-	3660.18
				06/11/2019	64.51	61.86	2.65	3660.02
				09/23/2019	66.00	61.78	4.22	3659.84
				12/09/2019	64.25	62.35	1.90	3659.89
				03/09/2020	62.88	62.84	0.04	3659.47
				06/12/2020	64.01	62.84	1.17	3659.29
				09/21/2020	63.87	63.15	0.72	3659.05
				11/30/2020	63.42	-	-	3658.90
MW-12 2"	3724.11	43	73	03/10/2016	63.08	-	-	3661.03
				05/27/2016	63.25	-	-	3660.86
				09/09/2016	63.42	-	-	3660.69
				12/06/2016	63.62	-	-	3660.49
				03/06/2017	63.30	-	-	3660.81
				06/08/2017	63.40	-	-	3660.71
				09/12/2017	64.13	-	-	3659.98
				12/13/2017	64.31	-	-	3659.80
				03/22/2018	61.46	-	-	3662.65
				06/12/2018	64.69	-	-	3659.42
				09/12/2018	64.73	-	-	3659.38
				12/10/2018	65.00	-	-	3659.11
				03/14/2019	65.18	-	-	3658.93
				06/11/2019	65.32	-	-	3658.79
				09/23/2019	65.50	-	-	3658.61
				12/09/2019	65.69	-	-	3658.42
				03/09/2020	65.88	-	-	3658.23
				06/12/2020	66.10	-	-	3658.01
				09/21/2020	66.30	-	-	3657.81
				11/30/2020	66.51	-	-	3657.60

Table 1 - Gauging and NAPL Thickness - Historical
 Kimbrough Sweet 8 inch
 Hobbs, NM
 SRS#: 2000-10757

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-13 2"	3723.19	43	73	03/10/2016	61.96	-	-	3661.23
				05/27/2016	62.10	-	-	3661.09
				09/09/2016	62.31	-	-	3660.88
				12/06/2016	62.47	-	-	3660.72
				03/06/2017	62.68	-	-	3660.51
				06/08/2017	62.85	-	-	3660.34
				09/12/2017	63.01	-	-	3660.18
				12/13/2017	63.19	-	-	3660.00
				03/22/2018	63.36	-	-	3659.83
				06/12/2018	63.60	-	-	3659.59
				09/12/2018	65.60	-	-	3657.59
				12/10/2018	63.57	-	-	3659.62
				03/14/2019	64.04	-	-	3659.15
				06/11/2019	64.17	-	-	3659.02
				09/23/2019	64.37	-	-	3658.82
				12/09/2019	64.54	-	-	3658.65
				03/09/2020	64.74	-	-	3658.45
				06/12/2020	65.00	-	-	3658.19
				09/21/2020	65.16	-	-	3658.03
				11/30/2020	65.35	-	-	3657.84
MW-14 4"	3725.1	62.3	82.3	03/10/2016	64.64	-	-	3660.46
				05/27/2016	64.78	-	-	3660.32
				09/09/2016	65.00	-	-	3660.10
				12/06/2016	65.15	-	-	3659.95
				03/06/2017	66.24	-	-	3658.86
				06/08/2017	65.55	-	-	3659.55
				09/12/2017	65.68	-	-	3659.42
				12/13/2017	65.85	-	-	3659.25
				03/22/2018	66.05	-	-	3659.05
				06/12/2018	66.24	-	-	3658.86
				09/12/2018	66.26	-	-	3658.84
				12/10/2018	66.46	-	-	3658.64
				03/14/2019	66.72	-	-	3658.38
				06/11/2019	66.84	-	-	3658.26
				09/23/2019	67.03	-	-	3658.07
				12/09/2019	67.25	-	-	3657.85
				03/09/2020	67.45	-	-	3657.65
				06/12/2020	67.65	-	-	3657.45
				09/21/2020	67.87	-	-	3657.23
				11/30/2020	68.05	-	-	3657.05
MW-15 4"	3726.06	59.2	79.2	03/10/2016	65.40	-	-	3660.66
				05/27/2016	65.56	-	-	3660.50
				09/09/2016	65.75	-	-	3660.31
				12/06/2016	65.90	-	-	3660.16
				03/06/2017	66.09	-	-	3659.97
				06/08/2017	66.32	-	-	3659.74
				09/12/2017	66.45	-	-	3659.61
				12/13/2017	66.63	-	-	3659.43
				03/22/2018	66.82	-	-	3659.24
				06/12/2018	67.03	-	-	3659.03
				09/12/2018	67.04	-	-	3659.02
				12/10/2018	67.32	-	-	3658.74
				03/14/2019	67.49	-	-	3658.57
				06/11/2019	67.62	-	-	3658.44
				09/23/2019	67.79	-	-	3658.27
				12/09/2019	68.00	-	-	3658.06
				03/09/2020	68.19	-	-	3657.87
				06/12/2020	68.40	-	-	3657.66
				09/21/2020	68.84	-	-	3657.22
				11/30/2020	68.81	-	-	3657.25

Table 1 - Gauging and NAPL Thickness - Historical
 Kimbrough Sweet 8 inch
 Hobbs, NM
 SRS#: 2000-10757

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-16 2"	3722.32	52.7	82.7	03/10/2016	61.23	-	-	3661.09
				05/27/2016	61.39	-	-	3660.93
				09/09/2016	61.60	-	-	3660.72
				12/06/2016	61.74	-	-	3660.58
				03/06/2017	61.95	-	-	3660.37
				06/08/2017	61.13	-	-	3661.19
				09/12/2017	62.27	-	-	3660.05
				12/13/2017	62.43	-	-	3659.89
				03/22/2018	62.63	-	-	3659.69
				06/12/2018	62.81	-	-	3659.51
				09/12/2018	62.89	-	-	3659.43
				12/10/2018	63.07	-	-	3659.25
				03/14/2019	63.32	-	-	3659.00
				06/11/2019	63.45	-	-	3658.87
				09/23/2019	63.64	-	-	3658.68
				12/09/2019	63.81	-	-	3658.51
				03/09/2020	64.02	-	-	3658.30
				06/12/2020	64.25	-	-	3658.07
				09/21/2020	64.44	-	-	3657.88
				11/30/2020	64.64	-	-	3657.68
MW-17 2"	3725.28	56.6	86.6	03/10/2016	65.55	-	-	3659.73
				05/27/2016	65.69	-	-	3659.59
				09/09/2016	65.90	-	-	3659.38
				12/06/2016	66.05	-	-	3659.23
				03/06/2017	65.35	-	-	3659.93
				06/08/2017	66.44	-	-	3658.84
				09/12/2017	66.56	-	-	3658.72
				12/13/2017	66.75	-	-	3658.53
				03/22/2018	66.95	-	-	3658.33
				06/12/2018	67.11	-	-	3658.17
				09/12/2018	67.16	-	-	3658.12
				12/10/2018	67.45	-	-	3657.83
				03/14/2019	67.82	-	-	3657.46
				06/11/2019	67.75	-	-	3657.53
				09/23/2019	67.93	-	-	3657.35
				12/09/2019	68.13	-	-	3657.15
				03/09/2020	68.35	-	-	3656.93
				06/12/2020	68.53	-	-	3656.75
				09/21/2020	68.76	-	-	3656.52
				11/30/2020	68.96	-	-	3656.32

Table 1 - Gauging and NAPL Thickness - Historical
 Kimbrough Sweet 8 inch
 Hobbs, NM
 SRS#: 2000-10757

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Sample Date	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-18 2"	3724.75	55.8	85.8	03/10/2016	64.80	-	-	3659.95
				05/27/2016	64.63	-	-	3660.12
				09/09/2016	65.12	-	-	3659.63
				12/06/2016	65.29	-	-	3659.46
				03/06/2017	65.49	-	-	3659.26
				06/08/2017	65.69	-	-	3659.06
				09/12/2017	65.83	-	-	3658.92
				12/13/2017	66.00	-	-	3658.75
				03/22/2018	66.18	-	-	3658.57
				06/12/2018	66.34	-	-	3658.41
				09/12/2018	66.40	-	-	3658.35
				12/10/2018	66.65	-	-	3658.10
				03/14/2019	66.84	-	-	3657.91
				06/11/2019	67.00	-	-	3657.75
				09/23/2019	67.17	-	-	3657.58
				12/09/2019	67.35	-	-	3657.40
				03/09/2020	67.56	-	-	3657.19
				06/12/2020	67.77	-	-	3656.98
				09/21/2020	68.00	-	-	3656.75
				11/30/2020	68.20	-	-	3656.55
MW-19 2"	3722.8	60	80	09/12/2018	61.58	-	-	3661.22
				12/10/2018	61.74	-	-	3661.06
				03/14/2019	62.02	-	-	3660.78
				06/11/2019	62.13	-	-	3660.67
				09/23/2019	62.34	-	-	3660.46
				12/09/2019	62.50	-	-	3660.30
				03/09/2020	62.68	-	-	3660.12
				06/12/2020	62.87	-	-	3659.93
				09/21/2020	63.09	-	-	3659.71
				11/30/2020	63.28	-	-	3659.52

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
 Kimbrough Sweet 8 inch
 Hobbs, NM
 SRS#: 2000-10757

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
NMOC - Groundwater		0.01	0.75	0.75	0.62	-
MW-1A	03/10/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/27/2016	0.00220	<0.000238	<0.000238	<0.000243	-
	09/09/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/06/2016	0.00609	<0.00100	<0.000657	<0.000642	-
	03/07/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/08/2017	0.00456	<0.00100	<0.000657	<0.000642	0.00456
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	09/28/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/24/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/10/2019	<0.000408	0.000650	<0.000657	<0.000630	0.000650
	03/10/2020	0.000410 J	<0.000367	<0.000657	<0.000630	0.000410 J
	06/15/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	11/30/2020	<0.002000	<0.002000	<0.002000	<0.002000	<0.002000
MW-2A	09/13/2018	2.41 D	0.808 D	0.233	0.593	4.04
	12/11/2018	0.924	0.169	0.0755	0.191	1.36
	03/18/2019	1.61	0.341	0.177	0.403	2.53
	06/12/2019	2.23	0.946	0.260	0.670	4.11
MW-3	03/10/2016	0.00110	<0.000238	<0.000238	<0.000243	-
	05/27/2016	0.00500	<0.000238	0.000300 J	<0.000243	-
	09/09/2016	0.0018	<0.000621	<0.000763	<0.000256	-
	12/06/2016	0.0269	<0.00100	0.00341	<0.000642	-
	03/07/2017	0.0016 J	<0.000367	<0.000657	<0.000630	0.0016
	06/08/2017	0.0745	0.00308	0.00441	0.00267	0.0847
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/22/2018	0.000910 J	<0.000367	<0.000657	<0.000630	0.000910 J
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/13/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
MW-6	03/20/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MW-6	12/01/2020	7.89 D	0.773 D	0.350	0.6770	9.690
MW-7A	09/13/2018	<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	<0.000657	<0.00063	<0.000367
	06/11/2019	<0.000408	<0.000367	<0.000657	0.000630	0.000630
	09/24/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/09/2019	<0.000408	0.000880	<0.000657	<0.000630	0.000880
	03/10/2020	0.000440 J	<0.000367	<0.000657	<0.000630	0.000440 J
	06/16/2020	0.000570 J	0.000640 J	<0.000657	<0.000630	0.00121 J
	09/23/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/01/2020	0.00103 J	<0.002000	<0.002000	<0.002000	0.001030 J
MW-8A	09/13/2018	<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	0.00752	0.0129	0.00952	0.0234	0.0533
	06/11/2019	0.00108	0.00225	0.00232	0.00776	0.0134
	09/24/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/09/2019	0.000470	0.00159	0.00360	0.00478	0.0104
	03/09/2020	0.000760 J	0.000380 J	0.00150 J	0.00102 J	0.00366
	06/16/2020	0.00102 J	0.000640 J	<0.000657	<0.000630	0.00166 J
	09/23/2020	0.00119 J	<0.000367	0.000730 J	0.00126 J	0.00318
	12/01/2020	0.000780 J	0.000740 J	<0.002000	<0.002000	0.001520 J
MW-11A	09/13/2018	0.215	<0.000367	0.00629	0.0840	0.305
	12/11/2018	0.505	<0.002560	0.0450	0.0355	0.586
	03/18/2019	2.08	0.00115	0.366	0.189	2.64
	11/30/2020	2.49 D	0.000690 J	0.878 D	0.5008	3.869

Table 2 - Groundwater Analytical Data - Historical
 Kimbrough Sweet 8 inch
 Hobbs, NM
 SRS#: 2000-10757

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-12	03/10/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/27/2016	0.00130	<0.000238	0.000400 J	0.000300 J	-
	09/09/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/06/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/07/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/08/2017	0.0016 J	<0.00100	<0.000657	<0.000642	0.0016 J
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/22/2018	0.00176 J	<0.000367	<0.000657	<0.000630	0.00176 J
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/13/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/18/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	06/12/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	09/25/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/10/2019	<0.000408	0.000510	<0.000657	<0.000630	0.000510
	03/10/2020	0.000550 J	<0.000367	<0.000657	<0.000630	0.000550 J
MW-13	06/15/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	09/23/2020	0.00171 J	<0.000367	<0.000657	<0.000630	0.00171 J
	11/30/2020	<0.002000	<0.002000	<0.002000	<0.002000	<0.002000
MW-14	03/10/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/27/2016	0.000800 J	<0.000238	<0.000238	<0.000243	-
	09/09/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/06/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/07/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/08/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/22/2018	<0.000408	0.000760 J	<0.000657	<0.000630	0.000760 J
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/13/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/18/2019	0.000570	<0.0005	<0.0005	<0.0005	0.000570
	06/11/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	09/24/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/10/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/10/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/15/2020	<0.000408	0.000670 J	<0.000657	<0.000630	0.000670 J
	09/22/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	11/30/2020	<0.002000	<0.002000	<0.002000	<0.002000	<0.002000

Table 2 - Groundwater Analytical Data - Historical
 Kimbrough Sweet 8 inch
 Hobbs, NM
 SRS#: 2000-10757

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-15	03/10/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/27/2016	0.0014	<0.000238	<0.000238	<0.000243	-
	09/09/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/06/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/07/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/08/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/22/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/13/2018	<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	0.000850	<0.000367	<0.000657	<0.00063	0.000850
	06/12/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	09/25/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/10/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/10/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/15/2020	<0.000408	0.000400 J	<0.000657	<0.000630	0.000400 J
	09/22/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	11/30/2020	<0.002000	<0.002000	<0.002000	<0.002000	<0.002000
MW-16	03/10/2016	<0.000223	0.000300 J	<0.000238	<0.000243	-
	05/27/2016	0.000800 J	<0.000238	<0.000238	<0.000243	-
	09/09/2016	0.000700 J	<0.000621	<0.000763	<0.000256	-
	12/06/2016	0.00268	<0.00100	<0.000657	<0.000642	-
	03/07/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/08/2017	0.00135 J	<0.00100	<0.000657	<0.000642	0.00135 J
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/22/2018	<0.000408	0.000740 J	<0.000657	<0.000630	0.000740 J
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/13/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/18/2019	0.00249	<0.0005	0.000550	<0.0005	0.00304
	06/12/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	09/24/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/09/2019	<0.000408	0.000490	<0.000657	<0.000630	0.000490
	03/10/2020	0.000490 J	<0.000367	<0.000657	<0.000630	0.000490 J
	06/15/2020	<0.000408	0.000600 J	<0.000657	<0.000630	0.000600 J
	09/23/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	11/30/2020	<0.002000	<0.002000	<0.002000	<0.002000	<0.002000
MW-17	03/10/2016	<0.000223	0.000500 J	<0.000238	<0.000243	-
	05/27/2016	0.0016	<0.000238	0.000300 J	<0.000243	-
	09/09/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/06/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/07/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/08/2017	0.00466	<0.00100	<0.000657	<0.000642	0.00466
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/22/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/13/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/18/2019	0.000780	<0.0005	<0.0005	<0.0005	0.000780
	06/11/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	09/25/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	12/10/2019	<0.000408	0.000470	<0.000657	<0.000630	0.00047
	03/10/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/15/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	09/22/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	11/30/2020	<0.002000 X	<0.002000	<0.002000	<0.002000	<0.002000

Table 2 - Groundwater Analytical Data - Historical
 Kimbrough Sweet 8 inch
 Hobbs, NM
 SRS#: 2000-10757

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-18	03/10/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/27/2016	0.0016	<0.000238	<0.000238	<0.000243	-
	09/09/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/06/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/07/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/08/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/19/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/22/2018	<0.000408	0.000710 J	<0.000657	<0.000630	0.000710 J
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/13/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/18/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	06/12/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	09/25/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
MW-19	12/10/2019	<0.000408	0.000380	<0.000657	<0.000630	0.000380
	03/10/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/15/2020	0.000530 J	0.000560 J	<0.000657	<0.000630	0.001090 J
	09/22/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	11/30/2020	<0.002000	<0.002000	<0.002000	<0.002000	<0.002000
	09/13/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/15/2019	0.00123	0.00490	0.00227	0.00763	0.0160
	06/11/2019	0.000690	<0.000367	<0.000657	<0.00063	0.000690
	09/24/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367

Notes:

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

Analyte concentration exceeds the standard for:

NMOCD - Groundwater

Table 3 - Groundwater Analytical Data - Historical - PAH Supplement
Kimbrough Sweet 8 inch
Hobbs, NM

Sample ID	Date Sampled	Pyrene	Naphthalene	Phenanthrene	Pyrene
		(mg/l)	(mg/l)	(mg/l)	(mg/l)
NMOC - Groundwater					
MW-1A	03/10/2016	<0.0000365	<0.0000638	<0.0000353	<0.0000792
MW-2A	03/18/2019	<0.0000041	<0.0000073	<0.0000076	<0.0000063
MW-7A	03/15/2019	<0.0000041	<0.0000074	<0.0000077	<0.0000064
	03/10/2020	<0.000116	<0.0000980	<0.000101	<0.000156
MW-8A	03/15/2019	<0.0000041	<0.0000073	<0.0000076	<0.0000063
	03/09/2020	<0.000107	<0.0000903	<0.0000930	<0.000144
MW-11A	03/18/2019	0.000112	<0.0000073	<0.0000076	<0.0000063
MW-12	03/22/2018	<0.000112	<0.000112	<0.000112	<0.000112
	03/18/2019	<0.0000041	<0.0000073	<0.0000076	<0.0000063
	03/10/2020	<0.000101	<0.0000852	<0.0000876	<0.000136
MW-16	03/10/2016	<0.0000350	<0.0000612	<0.0000338	<0.0000759
	03/22/2018	<0.000111	<0.000111	<0.000111	<0.000111
	03/18/2019	<0.0000041	<0.0000073	<0.0000076	<0.0000063
	03/10/2020	<0.000108	<0.0000913	<0.0000939	<0.000146
MW-17	03/10/2016	<0.0000357	<0.0000624	<0.0000345	<0.0000775
	03/22/2018	<0.000109	<0.000109	<0.000109	<0.000109
	03/18/2019	<0.0000042	<0.0000075	<0.0000077	<0.0000065
	03/10/2020	<0.000105	<0.0000886	<0.0000911	<0.000141
MW-18	03/10/2016	<0.0000373	<0.0000653	<0.0000361	<0.0000810
	03/22/2018	<0.000111	<0.000111	<0.000111	<0.000111
	03/18/2019	<0.0000041	<0.0000073	<0.0000076	<0.0000063
MW-19	03/15/2019	<0.00000410	<0.00000740	<0.00000740	<0.00000640
	03/09/2020	<0.000110	<0.0000923	<0.0000950	<0.000148

Notes

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

Analyte concentration exceeds the standard for:

Analyte concentration exceeds the NMOQD - Groundwater

APPENDIX C

Laboratory Analytical Data Reports and Chain of Custody Documentation



Analytical Report 655236

for

Talon LPE-Artesia

Project Manager: David Adkins

Kimbrough

700376.050.11

03.19.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



03.19.2020

Project Manager: **David Adkins**

Talon LPE-Artesia

408 West Texas St.
Artesia, NM 88210

Reference: XENCO Report No(s): **655236**

Kimbrough

Project Address:

David Adkins:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 655236. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 655236 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer
Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-8A	W	03.09.2020 13:35		655236-001
MW-19	W	03.09.2020 14:05		655236-002
MW-7A	W	03.10.2020 09:45		655236-003
MW-16	W	03.10.2020 10:25		655236-004
MW-17	W	03.10.2020 10:55		655236-005
MW-12	W	03.10.2020 11:20		655236-006
MW-8A	W	03.09.2020 13:35		655236-007
MW-19	W	03.09.2020 14:05		655236-008
MW-7A	W	03.10.2020 09:45		655236-009
MW-16	W	03.10.2020 10:25		655236-010
MW-17	W	03.10.2020 10:55		655236-011
MW-12	W	03.10.2020 11:20		655236-012
MW-14	W	03.10.2020 12:15		655236-013
MW-15	W	03.10.2020 12:55		655236-014
MW-18	W	03.10.2020 13:25		655236-015
MW-13	W	03.10.2020 13:45		655236-016
MW-1A	W	03.10.2020 14:35		655236-017



CASE NARRATIVE

Client Name: Talon LPE-Artesia

Project Name: Kimbrough

Project ID: 700376.050.11
Work Order Number(s): 655236

Report Date: 03.19.2020
Date Received: 03.10.2020

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

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3119522 PAHs by SW846 8270D SIM

Accuracy and/or precision fall outside of control limits. The number of failed analytes were within the marginal exceedances per TNI rule. No additional action is required

Benzo(g,h,i)perylene recovered below QC limits in the Blank Spike and Duplicate indicating bias low results. Samples in the analytical batch are: 655236-001, -002, -003, -004, -005, -006.



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: **MW-8A**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 655236-001

Date Collected: 03.09.2020 13:35

Date Received: 03.10.2020 16:45

Analytical Method: PAHs by SW846 8270D SIM

Prep Method: SW3511

Analyst: DNE

% Moist:

Tech: DNE

Seq Number: 3119522

Date Prep: 03.12.2020 15:25

Subcontractor: SUB: T104704215-19-30

Prep seq: 7698737

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.000107	0.000195	0.000107	mg/L	03.12.2020 19:11	U	1
Acenaphthylene	208-96-8	<0.0000903	0.000195	0.0000903	mg/L	03.12.2020 19:11	U	1
Anthracene	120-12-7	<0.0000930	0.000195	0.0000930	mg/L	03.12.2020 19:11	U	1
Benzo(a)anthracene	56-55-3	<0.000144	0.000195	0.000144	mg/L	03.12.2020 19:11	U	1
Benzo(a)pyrene	50-32-8	<0.0000612	0.000195	0.0000612	mg/L	03.12.2020 19:11	U	1
Benzo(b)fluoranthene	205-99-2	<0.0000763	0.000195	0.0000763	mg/L	03.12.2020 19:11	U	1
Benzo(g,h,i)perylene	191-24-2	<0.000122	0.000195	0.000122	mg/L	03.12.2020 19:11	UL	1
Benzo(k)fluoranthene	207-08-9	<0.000125	0.000195	0.000125	mg/L	03.12.2020 19:11	U	1
Chrysene	218-01-9	<0.000168	0.000195	0.000168	mg/L	03.12.2020 19:11	U	1
Dibenz(a,h)anthracene	53-70-3	<0.0000816	0.000195	0.0000816	mg/L	03.12.2020 19:11	U	1
Fluoranthene	206-44-0	<0.000169	0.000195	0.000169	mg/L	03.12.2020 19:11	U	1
Fluorene	86-73-7	<0.000108	0.000195	0.000108	mg/L	03.12.2020 19:11	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.0000980	0.000195	0.0000980	mg/L	03.12.2020 19:11	U	1
Naphthalene	91-20-3	<0.000104	0.000390	0.000104	mg/L	03.12.2020 19:11	U	1
Phenanthrene	85-01-8	<0.0000913	0.000195	0.0000913	mg/L	03.12.2020 19:11	U	1
Pyrene	129-00-0	<0.000140	0.000195	0.000140	mg/L	03.12.2020 19:11	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
2-Fluorobiphenyl	88	54 - 146	%		
Nitrobenzene-d5	79	46 - 151	%		
Terphenyl-D14	96	51 - 139	%		



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: **MW-19**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 655236-002

Date Collected: 03.09.2020 14:05

Date Received: 03.10.2020 16:45

Analytical Method: PAHs by SW846 8270D SIM

Prep Method: SW3511

Analyst: DNE

% Moist:

Tech: DNE

Seq Number: 3119522

Date Prep: 03.12.2020 15:28

Subcontractor: SUB: T104704215-19-30

Prep seq: 7698737

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.000110	0.000199	0.000110	mg/L	03.12.2020 19:29	U	1
Acenaphthylene	208-96-8	<0.0000923	0.000199	0.0000923	mg/L	03.12.2020 19:29	U	1
Anthracene	120-12-7	<0.0000950	0.000199	0.0000950	mg/L	03.12.2020 19:29	U	1
Benzo(a)anthracene	56-55-3	<0.000148	0.000199	0.000148	mg/L	03.12.2020 19:29	U	1
Benzo(a)pyrene	50-32-8	<0.0000626	0.000199	0.0000626	mg/L	03.12.2020 19:29	U	1
Benzo(b)fluoranthene	205-99-2	<0.0000780	0.000199	0.0000780	mg/L	03.12.2020 19:29	U	1
Benzo(g,h,i)perylene	191-24-2	<0.000124	0.000199	0.000124	mg/L	03.12.2020 19:29	UL	1
Benzo(k)fluoranthene	207-08-9	<0.000127	0.000199	0.000127	mg/L	03.12.2020 19:29	U	1
Chrysene	218-01-9	<0.000171	0.000199	0.000171	mg/L	03.12.2020 19:29	U	1
Dibenz(a,h)anthracene	53-70-3	<0.0000834	0.000199	0.0000834	mg/L	03.12.2020 19:29	U	1
Fluoranthene	206-44-0	<0.000172	0.000199	0.000172	mg/L	03.12.2020 19:29	U	1
Fluorene	86-73-7	<0.000111	0.000199	0.000111	mg/L	03.12.2020 19:29	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.000100	0.000199	0.000100	mg/L	03.12.2020 19:29	U	1
Naphthalene	91-20-3	<0.000107	0.000399	0.000107	mg/L	03.12.2020 19:29	U	1
Phenanthrene	85-01-8	<0.0000933	0.000199	0.0000933	mg/L	03.12.2020 19:29	U	1
Pyrene	129-00-0	<0.000143	0.000199	0.000143	mg/L	03.12.2020 19:29	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
2-Fluorobiphenyl	93	54 - 146	%		
Nitrobenzene-d5	84	46 - 151	%		
Terphenyl-D14	63	51 - 139	%		



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: **MW-7A**

Matrix: **Ground Water**

Sample Depth:

Lab Sample Id: **655236-003**

Date Collected: **03.10.2020 09:45**

Date Received: **03.10.2020 16:45**

Analytical Method: **PAHs by SW846 8270D SIM**

Prep Method: **SW3511**

Analyst: **DNE**

% Moist:

Tech: **DNE**

Seq Number: **3119522**

Date Prep: **03.12.2020 15:31**

Subcontractor: **SUB: T104704215-19-30**

Prep seq: **7698737**

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.000116	0.000212	0.000116	mg/L	03.12.2020 19:46	U	1
Acenaphthylene	208-96-8	<0.0000980	0.000212	0.0000980	mg/L	03.12.2020 19:46	U	1
Anthracene	120-12-7	<0.000101	0.000212	0.000101	mg/L	03.12.2020 19:46	U	1
Benzo(a)anthracene	56-55-3	<0.000156	0.000212	0.000156	mg/L	03.12.2020 19:46	U	1
Benzo(a)pyrene	50-32-8	<0.0000664	0.000212	0.0000664	mg/L	03.12.2020 19:46	U	1
Benzo(b)fluoranthene	205-99-2	<0.0000827	0.000212	0.0000827	mg/L	03.12.2020 19:46	U	1
Benzo(g,h,i)perylene	191-24-2	<0.000132	0.000212	0.000132	mg/L	03.12.2020 19:46	UL	1
Benzo(k)fluoranthene	207-08-9	<0.000135	0.000212	0.000135	mg/L	03.12.2020 19:46	U	1
Chrysene	218-01-9	<0.000182	0.000212	0.000182	mg/L	03.12.2020 19:46	U	1
Dibenz(a,h)anthracene	53-70-3	<0.0000884	0.000212	0.0000884	mg/L	03.12.2020 19:46	U	1
Fluoranthene	206-44-0	<0.000183	0.000212	0.000183	mg/L	03.12.2020 19:46	U	1
Fluorene	86-73-7	<0.000117	0.000212	0.000117	mg/L	03.12.2020 19:46	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.000106	0.000212	0.000106	mg/L	03.12.2020 19:46	U	1
Naphthalene	91-20-3	<0.000113	0.000423	0.000113	mg/L	03.12.2020 19:46	U	1
Phenanthrene	85-01-8	<0.0000990	0.000212	0.0000990	mg/L	03.12.2020 19:46	U	1
Pyrene	129-00-0	<0.000152	0.000212	0.000152	mg/L	03.12.2020 19:46	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
2-Fluorobiphenyl	90	54 - 146	%		
Nitrobenzene-d5	81	46 - 151	%		
Terphenyl-D14	95	51 - 139	%		



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: **MW-16**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 655236-004

Date Collected: 03.10.2020 10:25

Date Received: 03.10.2020 16:45

Analytical Method: PAHs by SW846 8270D SIM

Prep Method: SW3511

Analyst: DNE

% Moist:

Tech: DNE

Seq Number: 3119522

Date Prep: 03.12.2020 15:34

Subcontractor: SUB: T104704215-19-30

Prep seq: 7698737

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.000108	0.000197	0.000108	mg/L	03.12.2020 20:03	U	1
Acenaphthylene	208-96-8	<0.0000913	0.000197	0.0000913	mg/L	03.12.2020 20:03	U	1
Anthracene	120-12-7	<0.0000939	0.000197	0.0000939	mg/L	03.12.2020 20:03	U	1
Benzo(a)anthracene	56-55-3	<0.000146	0.000197	0.000146	mg/L	03.12.2020 20:03	U	1
Benzo(a)pyrene	50-32-8	<0.0000619	0.000197	0.0000619	mg/L	03.12.2020 20:03	U	1
Benzo(b)fluoranthene	205-99-2	<0.0000771	0.000197	0.0000771	mg/L	03.12.2020 20:03	U	1
Benzo(g,h,i)perylene	191-24-2	<0.000123	0.000197	0.000123	mg/L	03.12.2020 20:03	UL	1
Benzo(k)fluoranthene	207-08-9	<0.000126	0.000197	0.000126	mg/L	03.12.2020 20:03	U	1
Chrysene	218-01-9	<0.000169	0.000197	0.000169	mg/L	03.12.2020 20:03	U	1
Dibenz(a,h)anthracene	53-70-3	<0.0000824	0.000197	0.0000824	mg/L	03.12.2020 20:03	U	1
Fluoranthene	206-44-0	<0.000170	0.000197	0.000170	mg/L	03.12.2020 20:03	U	1
Fluorene	86-73-7	<0.000109	0.000197	0.000109	mg/L	03.12.2020 20:03	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.0000990	0.000197	0.0000990	mg/L	03.12.2020 20:03	U	1
Naphthalene	91-20-3	<0.000105	0.000394	0.000105	mg/L	03.12.2020 20:03	U	1
Phenanthrene	85-01-8	<0.0000922	0.000197	0.0000922	mg/L	03.12.2020 20:03	U	1
Pyrene	129-00-0	<0.000141	0.000197	0.000141	mg/L	03.12.2020 20:03	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
2-Fluorobiphenyl	91	54 - 146	%		
Nitrobenzene-d5	78	46 - 151	%		
Terphenyl-D14	89	51 - 139	%		



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: **MW-17**

Matrix: **Ground Water**

Sample Depth:

Lab Sample Id: **655236-005**

Date Collected: **03.10.2020 10:55**

Date Received: **03.10.2020 16:45**

Analytical Method: **PAHs by SW846 8270D SIM**

Prep Method: **SW3511**

Analyst: **DNE**

% Moist:

Tech: **DNE**

Seq Number: **3119522**

Date Prep: **03.12.2020 15:37**

Subcontractor: **SUB: T104704215-19-30**

Prep seq: **7698737**

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.000105	0.000191	0.000105	mg/L	03.12.2020 20:20	U	1
Acenaphthylene	208-96-8	<0.0000886	0.000191	0.0000886	mg/L	03.12.2020 20:20	U	1
Anthracene	120-12-7	<0.0000911	0.000191	0.0000911	mg/L	03.12.2020 20:20	U	1
Benzo(a)anthracene	56-55-3	<0.000141	0.000191	0.000141	mg/L	03.12.2020 20:20	U	1
Benzo(a)pyrene	50-32-8	<0.0000600	0.000191	0.0000600	mg/L	03.12.2020 20:20	U	1
Benzo(b)fluoranthene	205-99-2	<0.0000748	0.000191	0.0000748	mg/L	03.12.2020 20:20	U	1
Benzo(g,h,i)perylene	191-24-2	<0.000119	0.000191	0.000119	mg/L	03.12.2020 20:20	UL	1
Benzo(k)fluoranthene	207-08-9	<0.000122	0.000191	0.000122	mg/L	03.12.2020 20:20	U	1
Chrysene	218-01-9	<0.000164	0.000191	0.000164	mg/L	03.12.2020 20:20	U	1
Dibenz(a,h)anthracene	53-70-3	<0.0000800	0.000191	0.0000800	mg/L	03.12.2020 20:20	U	1
Fluoranthene	206-44-0	<0.000165	0.000191	0.000165	mg/L	03.12.2020 20:20	U	1
Fluorene	86-73-7	<0.000106	0.000191	0.000106	mg/L	03.12.2020 20:20	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.0000961	0.000191	0.0000961	mg/L	03.12.2020 20:20	U	1
Naphthalene	91-20-3	<0.000102	0.000383	0.000102	mg/L	03.12.2020 20:20	U	1
Phenanthrene	85-01-8	<0.0000895	0.000191	0.0000895	mg/L	03.12.2020 20:20	U	1
Pyrene	129-00-0	<0.000137	0.000191	0.000137	mg/L	03.12.2020 20:20	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
2-Fluorobiphenyl	97	54 - 146	%		
Nitrobenzene-d5	84	46 - 151	%		
Terphenyl-D14	90	51 - 139	%		



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: **MW-12**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 655236-006

Date Collected: 03.10.2020 11:20

Date Received: 03.10.2020 16:45

Analytical Method: PAHs by SW846 8270D SIM

Prep Method: SW3511

Analyst: DNE

% Moist:

Tech: DNE

Seq Number: 3119522

Date Prep: 03.12.2020 15:40

Subcontractor: SUB: T104704215-19-30

Prep seq: 7698737

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.000101	0.000184	0.000101	mg/L	03.12.2020 20:38	U	1
Acenaphthylene	208-96-8	<0.0000852	0.000184	0.0000852	mg/L	03.12.2020 20:38	U	1
Anthracene	120-12-7	<0.0000876	0.000184	0.0000876	mg/L	03.12.2020 20:38	U	1
Benzo(a)anthracene	56-55-3	<0.000136	0.000184	0.000136	mg/L	03.12.2020 20:38	U	1
Benzo(a)pyrene	50-32-8	<0.0000577	0.000184	0.0000577	mg/L	03.12.2020 20:38	U	1
Benzo(b)fluoranthene	205-99-2	<0.0000719	0.000184	0.0000719	mg/L	03.12.2020 20:38	U	1
Benzo(g,h,i)perylene	191-24-2	<0.000115	0.000184	0.000115	mg/L	03.12.2020 20:38	UL	1
Benzo(k)fluoranthene	207-08-9	<0.000118	0.000184	0.000118	mg/L	03.12.2020 20:38	U	1
Chrysene	218-01-9	<0.000158	0.000184	0.000158	mg/L	03.12.2020 20:38	U	1
Dibenz(a,h)anthracene	53-70-3	<0.0000769	0.000184	0.0000769	mg/L	03.12.2020 20:38	U	1
Fluoranthene	206-44-0	<0.000159	0.000184	0.000159	mg/L	03.12.2020 20:38	U	1
Fluorene	86-73-7	<0.000102	0.000184	0.000102	mg/L	03.12.2020 20:38	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.0000924	0.000184	0.0000924	mg/L	03.12.2020 20:38	U	1
Naphthalene	91-20-3	<0.0000984	0.000368	0.0000984	mg/L	03.12.2020 20:38	U	1
Phenanthrene	85-01-8	<0.0000860	0.000184	0.0000860	mg/L	03.12.2020 20:38	U	1
Pyrene	129-00-0	<0.000132	0.000184	0.000132	mg/L	03.12.2020 20:38	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
2-Fluorobiphenyl	105	54 - 146	%		
Nitrobenzene-d5	89	46 - 151	%		
Terphenyl-D14	69	51 - 139	%		



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: MW-8A

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 655236-007

Date Collected: 03.09.2020 13:35

Date Received: 03.10.2020 16:45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3120028

Date Prep: 03.17.2020 10:30

Subcontractor: SUB: T104704400-19-19

Prep seq: 7699138

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000760	0.00200	0.000408	mg/L	03.17.2020 22:45	J	1
Toluene	108-88-3	0.000380	0.00200	0.000367	mg/L	03.17.2020 22:45	J	1
Ethylbenzene	100-41-4	0.00150	0.00200	0.000657	mg/L	03.17.2020 22:45	J	1
m,p-Xylenes	179601-23-1	0.00102	0.00400	0.000630	mg/L	03.17.2020 22:45	J	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	03.17.2020 22:45	U	1
Xylenes, Total	1330-20-7	0.00102		0.000630	mg/L	03.17.2020 22:45	J	
Total BTEX		0.00366		0.000367	mg/L	03.17.2020 22:45		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	99	70 - 130	%		

Sample Id: MW-19

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 655236-008

Date Collected: 03.09.2020 14:05

Date Received: 03.10.2020 16:45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3120028

Date Prep: 03.17.2020 10:30

Subcontractor: SUB: T104704400-19-19

Prep seq: 7699138

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000530	0.00200	0.000408	mg/L	03.17.2020 23:05	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	03.17.2020 23:05	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	03.17.2020 23:05	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	03.17.2020 23:05	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	03.17.2020 23:05	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	03.17.2020 23:05	U	
Total BTEX		0.000530		0.000367	mg/L	03.17.2020 23:05	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	106	70 - 130	%		



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: MW-7A

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 655236-009

Date Collected: 03.10.2020 09:45

Date Received: 03.10.2020 16:45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3120028

Date Prep: 03.17.2020 10:30

Subcontractor: SUB: T104704400-19-19

Prep seq: 7699138

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000440	0.00200	0.000408	mg/L	03.17.2020 23:26	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	03.17.2020 23:26	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	03.17.2020 23:26	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	03.17.2020 23:26	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	03.17.2020 23:26	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	03.17.2020 23:26	U	
Total BTEX		0.000440		0.000367	mg/L	03.17.2020 23:26	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	104	70 - 130	%		

Sample Id: MW-16

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 655236-010

Date Collected: 03.10.2020 10:25

Date Received: 03.10.2020 16:45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3120028

Date Prep: 03.17.2020 10:30

Subcontractor: SUB: T104704400-19-19

Prep seq: 7699138

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000490	0.00200	0.000408	mg/L	03.17.2020 23:46	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	03.17.2020 23:46	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	03.17.2020 23:46	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	03.17.2020 23:46	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	03.17.2020 23:46	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	03.17.2020 23:46	U	
Total BTEX		0.000490		0.000367	mg/L	03.17.2020 23:46	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	103	70 - 130	%		



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: MW-17

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 655236-011

Date Collected: 03.10.2020 10:55

Date Received: 03.10.2020 16:45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3120028

Date Prep: 03.17.2020 10:30

Subcontractor: SUB: T104704400-19-19

Prep seq: 7699138

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	03.18.2020 00:06	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	03.18.2020 00:06	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	03.18.2020 00:06	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	03.18.2020 00:06	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	03.18.2020 00:06	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	03.18.2020 00:06	U	
Total BTEX		<0.000367		0.000367	mg/L	03.18.2020 00:06	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	105	70 - 130	%		

Sample Id: MW-12

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 655236-012

Date Collected: 03.10.2020 11:20

Date Received: 03.10.2020 16:45

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3120028

Date Prep: 03.17.2020 10:30

Subcontractor: SUB: T104704400-19-19

Prep seq: 7699138

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000550	0.00200	0.000408	mg/L	03.18.2020 00:27	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	03.18.2020 00:27	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	03.18.2020 00:27	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	03.18.2020 00:27	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	03.18.2020 00:27	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	03.18.2020 00:27	U	
Total BTEX		0.000550		0.000367	mg/L	03.18.2020 00:27	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	99	70 - 130	%		



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: **MW-14**

Lab Sample Id: 655236-013

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3120028

Subcontractor: SUB: T104704400-19-19

Matrix: Ground Water

Date Collected: 03.10.2020 12:15

Sample Depth:

Date Received: 03.10.2020 16:45

Prep Method: 5030B

Tech: KTL

Date Prep: 03.17.2020 10:30

Prep seq: 7699138

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	03.18.2020 00:47	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	03.18.2020 00:47	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	03.18.2020 00:47	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	03.18.2020 00:47	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	03.18.2020 00:47	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	03.18.2020 00:47	U	
Total BTEX		<0.000367		0.000367	mg/L	03.18.2020 00:47	U	

Surrogate

% Recovery

Limits

Units

Analysis Date

Flag

1,4-Difluorobenzene

97

70 - 130

%

4-Bromofluorobenzene

101

70 - 130

%

Sample Id: **MW-15**

Lab Sample Id: 655236-014

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3120028

Subcontractor: SUB: T104704400-19-19

Matrix: Ground Water

Sample Depth:

Date Collected: 03.10.2020 12:55

Date Received: 03.10.2020 16:45

Prep Method: 5030B

Tech: KTL

Date Prep: 03.17.2020 10:30

Prep seq: 7699138

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	03.18.2020 01:08	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	03.18.2020 01:08	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	03.18.2020 01:08	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	03.18.2020 01:08	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	03.18.2020 01:08	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	03.18.2020 01:08	U	
Total BTEX		<0.000367		0.000367	mg/L	03.18.2020 01:08	U	

Surrogate

% Recovery

Limits

Units

Analysis Date

Flag

1,4-Difluorobenzene

99

70 - 130

%

4-Bromofluorobenzene

103

70 - 130

%



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: **MW-18**

Lab Sample Id: 655236-015

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3120028

Subcontractor: SUB: T104704400-19-19

Matrix: Ground Water

Date Collected: 03.10.2020 13:25

Sample Depth:

Date Received: 03.10.2020 16:45

Prep Method: 5030B

Tech: KTL

Date Prep: 03.17.2020 10:30

Prep seq: 7699138

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	03.18.2020 01:28	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	03.18.2020 01:28	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	03.18.2020 01:28	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	03.18.2020 01:28	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	03.18.2020 01:28	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	03.18.2020 01:28	U	
Total BTEX		<0.000367		0.000367	mg/L	03.18.2020 01:28	U	

Surrogate

% Recovery

Limits

Units

Analysis Date

Flag

1,4-Difluorobenzene

98

70 - 130

%

4-Bromofluorobenzene

105

70 - 130

%

Sample Id: **MW-13**

Lab Sample Id: 655236-016

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3120028

Subcontractor: SUB: T104704400-19-19

Matrix: Ground Water

Sample Depth:

Date Collected: 03.10.2020 13:45

Date Received: 03.10.2020 16:45

Prep Method: 5030B

Tech: KTL

Date Prep: 03.17.2020 10:30

Prep seq: 7699138

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	03.18.2020 01:48	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	03.18.2020 01:48	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	03.18.2020 01:48	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	03.18.2020 01:48	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	03.18.2020 01:48	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	03.18.2020 01:48	U	
Total BTEX		<0.000367		0.000367	mg/L	03.18.2020 01:48	U	

Surrogate

% Recovery

Limits

Units

Analysis Date

Flag

1,4-Difluorobenzene

99

70 - 130

%

4-Bromofluorobenzene

101

70 - 130

%



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: **MW-1A**

Matrix: **Ground Water**

Sample Depth:

Lab Sample Id: **655236-017**

Date Collected: **03.10.2020 14:35**

Date Received: **03.10.2020 16:45**

Analytical Method: **BTEX by EPA 8021**

Prep Method: **5030B**

Analyst: **KTL**

% Moist:

Tech: **KTL**

Seq Number: **3120028**

Date Prep: **03.17.2020 10:30**

Subcontractor: **SUB: T104704400-19-19**

Prep seq: **7699138**

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000410	0.00200	0.000408	mg/L	03.18.2020 03:10	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	03.18.2020 03:10	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	03.18.2020 03:10	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	03.18.2020 03:10	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	03.18.2020 03:10	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	03.18.2020 03:10	U	
Total BTEX		0.000410		0.000367	mg/L	03.18.2020 03:10	J	
Surrogate		% Recovery		Limits	Units	Analysis Date	Flag	
1,4-Difluorobenzene		97		70 - 130	%			
4-Bromofluorobenzene		96		70 - 130	%			



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: **7698737-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7698737-1-BLK

Date Collected:

Date Received:

Analytical Method: PAHs by SW846 8270D SIM

Prep Method: SW3511

Analyst: DNE

% Moist:

Tech: DNE

Seq Number: 3119522

Date Prep: 03.12.2020 15:16

Subcontractor: SUB: T104704215-19-30

Prep seq: 7698737

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Acenaphthene	83-32-9	<0.000100	0.000182	0.0001000	mg/L	03.12.2020 18:02	U	1
Acenaphthylene	208-96-8	<0.0000842	0.000182	0.0000842	mg/L	03.12.2020 18:02	U	1
Anthracene	120-12-7	<0.0000866	0.000182	0.0000866	mg/L	03.12.2020 18:02	U	1
Benzo(a)anthracene	56-55-3	<0.000134	0.000182	0.000134	mg/L	03.12.2020 18:02	U	1
Benzo(a)pyrene	50-32-8	<0.0000571	0.000182	0.0000571	mg/L	03.12.2020 18:02	U	1
Benzo(b)fluoranthene	205-99-2	<0.0000711	0.000182	0.0000711	mg/L	03.12.2020 18:02	U	1
Benzo(g,h,i)perylene	191-24-2	<0.000113	0.000182	0.000113	mg/L	03.12.2020 18:02	U	1
Benzo(k)fluoranthene	207-08-9	<0.000116	0.000182	0.000116	mg/L	03.12.2020 18:02	U	1
Chrysene	218-01-9	<0.000156	0.000182	0.000156	mg/L	03.12.2020 18:02	U	1
Dibenz(a,h)anthracene	53-70-3	<0.0000760	0.000182	0.0000760	mg/L	03.12.2020 18:02	U	1
Fluoranthene	206-44-0	<0.000157	0.000182	0.000157	mg/L	03.12.2020 18:02	U	1
Fluorene	86-73-7	<0.000101	0.000182	0.000101	mg/L	03.12.2020 18:02	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	<0.0000913	0.000182	0.0000913	mg/L	03.12.2020 18:02	U	1
Naphthalene	91-20-3	<0.0000972	0.000364	0.0000972	mg/L	03.12.2020 18:02	U	1
Phenanthrene	85-01-8	<0.0000850	0.000182	0.0000850	mg/L	03.12.2020 18:02	U	1
Pyrene	129-00-0	<0.000130	0.000182	0.000130	mg/L	03.12.2020 18:02	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
2-Fluorobiphenyl	99	54 - 146	%		
Nitrobenzene-d5	85	46 - 151	%		
Terphenyl-D14	106	51 - 139	%		



Certificate of Analytical Results

655236

Talon LPE-Artesia, Artesia, NM

Kimbrough

Sample Id: **7699138-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7699138-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3120028

Date Prep: 03.17.2020 10:30

Subcontractor: SUB: T104704400-19-19

Prep seq: 7699138

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	03.17.2020 22:24	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	03.17.2020 22:24	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	03.17.2020 22:24	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	03.17.2020 22:24	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	03.17.2020 22:24	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	70 - 130	%		
4-Bromofluorobenzene	98	70 - 130	%		



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Form 2 - Surrogate Recoveries

Project Name: Kimbrough

Work Orders : 655236

Project ID: 700376.050.11

Lab Batch #: 3120028

Sample: 7699138-1-BKS / BKS

Batch: 1 **Matrix:** Water

Units: mg/L

Date Analyzed: 03.17.2020 20:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0294	0.0300	98	70-130	
4-Bromofluorobenzene		0.0308	0.0300	103	70-130	

Lab Batch #: 3120028

Sample: 7699138-1-BSD / BSD

Batch: 1 **Matrix:** Water

Units: mg/L

Date Analyzed: 03.17.2020 20:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0296	0.0300	99	70-130	
4-Bromofluorobenzene		0.0306	0.0300	102	70-130	

Lab Batch #: 3120028

Sample: 655236-007 S / MS

Batch: 1 **Matrix:** Ground Water

Units: mg/L

Date Analyzed: 03.17.2020 21:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0286	0.0300	95	70-130	
4-Bromofluorobenzene		0.0296	0.0300	99	70-130	

Lab Batch #: 3120028

Sample: 655236-007 SD / MSD

Batch: 1 **Matrix:** Ground Water

Units: mg/L

Date Analyzed: 03.17.2020 21:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0297	0.0300	99	70-130	
4-Bromofluorobenzene		0.0314	0.0300	105	70-130	

Lab Batch #: 3120028

Sample: 7699138-1-BLK / BLK

Batch: 1 **Matrix:** Water

Units: mg/L

Date Analyzed: 03.17.2020 22:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0291	0.0300	97	70-130	
4-Bromofluorobenzene		0.0295	0.0300	98	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Kimbrough

Work Orders : 655236

Project ID: 700376.050.11

Lab Batch #: 3119522

Sample: 7698737-1-BLK / BLK

Batch: 1 **Matrix:** Water

Units: mg/L

Date Analyzed: 03.12.2020 18:02

SURROGATE RECOVERY STUDY

PAHs by SW846 8270D SIM		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
2-Fluorobiphenyl		0.496	0.500	99	54-146	
Nitrobenzene-d5		0.425	0.500	85	46-151	
Terphenyl-D14		0.528	0.500	106	51-139	

Lab Batch #: 3119522

Sample: 7698737-1-BKS / BKS

Batch: 1 **Matrix:** Water

Units: mg/L

Date Analyzed: 03.12.2020 18:19

SURROGATE RECOVERY STUDY

PAHs by SW846 8270D SIM		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
2-Fluorobiphenyl		0.504	0.500	101	54-146	
Nitrobenzene-d5		0.455	0.500	91	46-151	
Terphenyl-D14		0.535	0.500	107	51-139	

Lab Batch #: 3119522

Sample: 7698737-1-BSD / BSD

Batch: 1 **Matrix:** Water

Units: mg/L

Date Analyzed: 03.12.2020 18:37

SURROGATE RECOVERY STUDY

PAHs by SW846 8270D SIM		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
2-Fluorobiphenyl		0.543	0.500	109	54-146	
Nitrobenzene-d5		0.463	0.500	93	46-151	
Terphenyl-D14		0.513	0.500	103	51-139	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries

Project Name: Kimbrough

Work Order #: 655236

Analyst: KTL

Date Prepared: 03.17.2020

Project ID: 700376.050.11

Lab Batch ID: 3120028

Sample: 7699138-1-BKS

Batch #: 1

Date Analyzed: 03.17.2020

Units: mg/L

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.000408	0.100	0.0973	97	0.100	0.0998	100	3	70-130	25	
Toluene	<0.000367	0.100	0.0956	96	0.100	0.0971	97	2	70-130	25	
Ethylbenzene	<0.000657	0.100	0.0966	97	0.100	0.0973	97	1	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.193	97	0.200	0.195	98	1	70-130	25	
o-Xylene	<0.000642	0.100	0.0982	98	0.100	0.0986	99	0	70-130	25	

Relative Percent Difference RPD = $200 \times |(C-F)/(C+F)|$

Blank Spike Recovery [D] = $100 \times (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 \times (F)/[E]$

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Kimbrough

Work Order #: 655236

Analyst: DNE

Date Prepared: 03.12.2020

Project ID: 700376.050.11

Lab Batch ID: 3119522

Sample: 7698737-1-BKS

Batch #: 1

Date Analyzed: 03.12.2020

Units: mg/L

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

PAHs by SW846 8270D SIM	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<0.000100	0.0182	0.0172	95	0.0182	0.0177	97	3	75-127	30	
Acenaphthylene	<0.0000842	0.0182	0.0158	87	0.0182	0.0179	98	12	78-133	30	
Anthracene	<0.0000866	0.0182	0.0168	92	0.0182	0.0175	96	4	73-145	30	
Benzo(a)anthracene	<0.000134	0.0182	0.0168	92	0.0182	0.0167	92	1	77-131	30	
Benzo(a)pyrene	<0.0000571	0.0182	0.0161	88	0.0182	0.0157	86	3	56-163	30	
Benzo(b)fluoranthene	<0.0000711	0.0182	0.0144	79	0.0182	0.0143	79	1	74-138	30	
Benzo(g,h,i)perylene	<0.000113	0.0182	0.0133	73	0.0182	0.0126	69	5	77-127	30	L
Benzo(k)fluoranthene	<0.000116	0.0182	0.0157	86	0.0182	0.0153	84	3	67-142	30	
Chrysene	<0.000156	0.0182	0.0171	94	0.0182	0.0171	94	0	66-126	30	
Dibenz(a,h)anthracene	<0.0000760	0.0182	0.0141	77	0.0182	0.0133	73	6	71-142	30	
Fluoranthene	<0.000157	0.0182	0.0170	93	0.0182	0.0177	97	4	78-138	30	
Fluorene	<0.000101	0.0182	0.0184	101	0.0182	0.0183	101	1	79-128	30	
Indeno(1,2,3-c,d)Pyrene	<0.0000913	0.0182	0.0145	80	0.0182	0.0139	76	4	76-140	30	
Naphthalene	<0.0000972	0.0182	0.0176	97	0.0182	0.0178	98	1	72-122	30	
Phenanthrene	<0.0000850	0.0182	0.0170	93	0.0182	0.0177	97	4	76-129	30	
Pyrene	<0.000130	0.0182	0.0193	106	0.0182	0.0197	108	2	74-138	30	

Relative Percent Difference RPD = $200 \times |(C-F)/(C+F)|$

Blank Spike Recovery [D] = $100 \times (C/[B])$

Blank Spike Duplicate Recovery [G] = $100 \times (F/[E])$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Kimbrough

Work Order #: 655236
Lab Batch ID: 3120028
Date Analyzed: 03.17.2020
Reporting Units: mg/L

QC- Sample ID: 655236-007 S **Batch #:** 1 **Matrix:** Ground Water
Date Prepared: 03.17.2020 **Analyst:** KTL

Project ID: 700376.050.11

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.000760	0.100	0.0936	93	0.100	0.104	103	11	70-130	25	
Toluene	0.000380	0.100	0.0920	92	0.100	0.102	102	10	70-130	25	
Ethylbenzene	0.00150	0.100	0.0939	92	0.100	0.104	103	10	70-130	25	
m,p-Xylenes	0.00102	0.200	0.187	93	0.200	0.206	102	10	70-130	25	
o-Xylene	<0.000642	0.100	0.0943	94	0.100	0.104	104	10	70-130	25	

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

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

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



Chain of Custody

Work Order No.: JK 155230

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

Page 2 of 2

Project Manager:	David Adkins	Bill to: (if different)	PLAINS ALL AMERICAN PIPELINE
Company Name:	Talon	Company Name:	ATTN: CAMILLE BRYANT
Address:	408 W. Texas Ave.	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575-616-4022 or 575-746-8905	Email:	dadkins@talonlp.com

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"/> PS/TUST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables: EDD <input type="checkbox"/> ADA/PT <input type="checkbox"/> Other: _____

SAMPLE RECEIPT	Temp Blank:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Wet Ice: Yes <input type="checkbox"/>	No <input type="checkbox"/>	ANALYSIS REQUEST												Work Order Notes			
						Routine <input checked="" type="checkbox"/>	Rush: <input type="checkbox"/>	Due Date:													
Temperature (°C):	<i>10.5</i>												Thermometer ID								
Received Intact:	<i>Yes</i>																				
Cooler Custody Seals:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	Correction Factor:																	
Sample Custody Seals:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	Total Containers:																	
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX												PAH	Sample Comments		
						PAH															
MW-17	<i>6-03</i>	<i>3-10-2010</i>	<i>10:55am</i>	<i>N/A</i>	<i>3</i>	<i>✓</i>														<i>EMALL ANALYTICALS</i>	
MW-12			<i>11:30pm</i>																	<i>TO</i>	
MW-14			<i>12:15pm</i>																	<i>CAMILLE BRYANT</i>	
MW-15			<i>12:55pm</i>																		
MW-18			<i>1:25pm</i>																		
MW-13			<i>1:45pm</i>																		
MW-1A		<i>6-03</i>	<i>3-10-2010</i>	<i>2:35pm</i>	<i>N/A</i>	<i>3</i>	<i>✓</i>														

Total 200.7 / 6010 200.8 / 6020:

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 2451 / 7470 / 7471 · Hg
1631 / 2451 / 7470 / 7471 · Hg

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

Relinquished by: (Signature)	<i>J</i>	Received by: (Signature)	<i>J</i>	Date/Time	<i>3/10/20 16:45</i>	Relinquished by: (Signature)	<i>J</i>	Received by: (Signature)	<i>J</i>	Date/Time	<i>3/10/20 16:45</i>
1	<i>Michael Collier</i>										
3											
5											

Inter-Office Shipment

Page 1 of 1

IOS Number 60006

Date/Time: 03/11/20 10:41

Created by: Elizabeth McClellan

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

Air Bill No.:

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
655236-007	W	MW-8A	03/09/20 13:35	SW8021B	BTEX by EPA 8021	03/16/20	03/23/20	JKR	BR4FBZ BZ BZME EBZ T	
655236-008	W	MW-19	03/09/20 14:05	SW8021B	BTEX by EPA 8021	03/16/20	03/23/20	JKR	BR4FBZ BZ BZME EBZ T	
655236-009	W	MW-7A	03/10/20 09:45	SW8021B	BTEX by EPA 8021	03/16/20	03/24/20	JKR	BR4FBZ BZ BZME EBZ T	
655236-010	W	MW-16	03/10/20 10:25	SW8021B	BTEX by EPA 8021	03/16/20	03/24/20	JKR	BR4FBZ BZ BZME EBZ T	
655236-011	W	MW-17	03/10/20 10:55	SW8021B	BTEX by EPA 8021	03/16/20	03/24/20	JKR	BR4FBZ BZ BZME EBZ T	
655236-012	W	MW-12	03/10/20 11:20	SW8021B	BTEX by EPA 8021	03/16/20	03/24/20	JKR	BR4FBZ BZ BZME EBZ T	
655236-013	W	MW-14	03/10/20 12:15	SW8021B	BTEX by EPA 8021	03/16/20	03/24/20	JKR	BR4FBZ BZ BZME EBZ T	
655236-014	W	MW-15	03/10/20 12:55	SW8021B	BTEX by EPA 8021	03/16/20	03/24/20	JKR	BR4FBZ BZ BZME EBZ T	
655236-015	W	MW-18	03/10/20 13:25	SW8021B	BTEX by EPA 8021	03/16/20	03/24/20	JKR	BR4FBZ BZ BZME EBZ T	
655236-016	W	MW-13	03/10/20 13:45	SW8021B	BTEX by EPA 8021	03/16/20	03/24/20	JKR	BR4FBZ BZ BZME EBZ T	
655236-017	W	MW-1A	03/10/20 14:35	SW8021B	BTEX by EPA 8021	03/16/20	03/24/20	JKR	BR4FBZ BZ BZME EBZ T	

Inter Office Shipment or Sample Comments:

Relinquished By:



Elizabeth McClellan

Date Relinquished: 03/11/2020

Received By:



Brianna Teel

Date Received: 03/12/2020 13:00Cooler Temperature: 1.6

Inter-Office Shipment

IOS Number : 60007

Date/Time: 03.11.2020

Created by: Elizabeth McClellan

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Houston**

Air Bill No.: 777996189189

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
655236-001	W	MW-8A	03.09.2020 13:35	SW8270D_SIM_PAH	PAHs by SW846 8270D SIM	03.16.2020	03.16.2020 13:35	JKR	ACNP ACNPY ANTH BZ	
655236-002	W	MW-19	03.09.2020 14:05	SW8270D_SIM_PAH	PAHs by SW846 8270D SIM	03.16.2020	03.16.2020 14:05	JKR	ACNP ACNPY ANTH BZ	
655236-003	W	MW-7A	03.10.2020 09:45	SW8270D_SIM_PAH	PAHs by SW846 8270D SIM	03.16.2020	03.17.2020 09:45	JKR	ACNP ACNPY ANTH BZ	
655236-004	W	MW-16	03.10.2020 10:25	SW8270D_SIM_PAH	PAHs by SW846 8270D SIM	03.16.2020	03.17.2020 10:25	JKR	ACNP ACNPY ANTH BZ	
655236-005	W	MW-17	03.10.2020 10:55	SW8270D_SIM_PAH	PAHs by SW846 8270D SIM	03.16.2020	03.17.2020 10:55	JKR	ACNP ACNPY ANTH BZ	
655236-006	W	MW-12	03.10.2020 11:20	SW8270D_SIM_PAH	PAHs by SW846 8270D SIM	03.16.2020	03.17.2020 11:20	JKR	ACNP ACNPY ANTH BZ	

Inter Office Shipment or Sample Comments:

Relinquished By:

Elizabeth McClellan

Date Relinquished: 03.11.2020

Received By:

Jose Londono

Date Received: 03.12.2020

Cooler Temperature: 3.5



Inter Office Report- Sample Receipt Checklist

Sent To: Midland

Acceptable Temperature Range: 0 - 6 degC

IOS #: 60006

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sent By: Elizabeth McClellan

Date Sent: 03/11/2020 10:41 AM

Received By: Brianna Teel

Date Received: 03/12/2020 01:00 PM

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

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____

Contacted by : _____

Date: _____

Checklist reviewed by:


 Brianna Teel

Date: 03/12/2020



XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

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

IOS #: 60007

Sent By: Elizabeth McClellan

Date Sent: 03.11.2020 10.41 AM

Received By: Jose Londono

Date Received: 03.12.2020 08.55 AM

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____

Contacted by : _____

Date: _____

Checklist reviewed by:

Jose F. Londono
Jose Londono

Date: 03.12.2020

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE-Artesia**Date/ Time Received:** 03.10.2020 04.45.00 PM**Work Order #:** 655236

Acceptable Temperature Range: 0 - 6 degC
 Air and Metal samples Acceptable Range: Ambient
 Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.4
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6*Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes
#18 Water VOC samples have zero headspace?	Yes
	Sample 012 sustained cracked lid during packing process in lab, lid wrapped in parafilm to prevent leakage.- EM
	PAH_SIM subbed to Stafford, BTEX subbed to Midland.

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

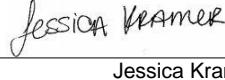
Analyst:

PH Device/Lot#:

Checklist completed by:

 Elizabeth McClellan

Date: 03.11.2020

Checklist reviewed by:

 Jessica Kramer

Date: 03.16.2020



Xenco

Analytical Report 664627

for

Talon LPE-Artesia

Project Manager: David Adkins

Plains Kimbrough

700376 050 11

07.02.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



Xenco

07.02.2020

Project Manager: **David Adkins****Talon LPE-Artesia**408 West Texas St.
Artesia, NM 88210Reference: Eurofins Xenco, LLC Report No(s): **664627****Plains Kimbrough**

Project Address: Hobbs, New Mexico

David Adkins:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 664627. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 664627 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 664627**Talon LPE-Artesia, Artesia, NM**

Plains Kimbrough

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW 1A	W	06.15.2020 11:30		664627-001
MW 17	W	06.15.2020 12:00		664627-002
MW 18	W	06.15.2020 13:10		664627-003
MW 13	W	06.15.2020 13:30		664627-004
MW 15	W	06.15.2020 14:50		664627-005
MW 14	W	06.15.2020 14:30		664627-006
MW 12	W	06.15.2020 14:45		664627-007
MW 16	W	06.15.2020 14:10		664627-008
MW 19	W	06.16.2020 08:55		664627-009
MW 8A	W	06.16.2020 09:25		664627-010
MW 7A	W	06.16.2020 10:05		664627-011

CASE NARRATIVE

Client Name: Talon LPE-Artesia
Project Name: Plains Kimbrough

Project ID: 700376 050 11
Work Order Number(s): 664627

Report Date: 07.02.2020
Date Received: 06.16.2020

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

Sample receipt non conformances and comments:

V1.001 Revision (client email) Corrected sample name from MW-9A to MW-7A

Sample receipt non conformances and comments per sample:

None



Xenco

Certificate of Analytical Results**664627****Talon LPE-Artesia, Artesia, NM**

Plains Kimbrough

Sample Id: **MW 1A**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 664627-001

Date Collected: 06.15.2020 11:30

Date Received: 06.16.2020 15:36

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMF

% Moist:

Tech: AMF

Seq Number: 3129759

Date Prep: 06.23.2020 13:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7706061

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	06.23.2020 17:07	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	06.23.2020 17:07	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	06.23.2020 17:07	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	06.23.2020 17:07	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	06.23.2020 17:07	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	06.23.2020 17:07	U	
Total BTEX		<0.000367		0.000367	mg/L	06.23.2020 17:07	U	

Surrogate**% Recovery****Limits****Units****Analysis Date****Flag**

1,4-Difluorobenzene

87

70 - 130

%

4-Bromofluorobenzene

98

70 - 130

%

Sample Id: **MW 17**

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 664627-002

Date Collected: 06.15.2020 12:00

Date Received: 06.16.2020 15:36

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMF

% Moist:

Tech: AMF

Seq Number: 3129759

Date Prep: 06.23.2020 13:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7706061

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	06.23.2020 17:27	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	06.23.2020 17:27	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	06.23.2020 17:27	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	06.23.2020 17:27	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	06.23.2020 17:27	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	06.23.2020 17:27	U	
Total BTEX		<0.000367		0.000367	mg/L	06.23.2020 17:27	U	

Surrogate**% Recovery****Limits****Units****Analysis Date****Flag**

1,4-Difluorobenzene

87

70 - 130

%

4-Bromofluorobenzene

101

70 - 130

%



Xenco

Certificate of Analytical Results**664627****Talon LPE-Artesia, Artesia, NM**

Plains Kimbrough

Sample Id: **MW 18**

Lab Sample Id: 664627-003

Analytical Method: BTEX by EPA 8021

Analyst: AMF

Seq Number: 3129759

Subcontractor: SUB: T104704400-19-19

Matrix: Ground Water

Date Collected: 06.15.2020 13:10

Sample Depth:

Date Received: 06.16.2020 15:36

Prep Method: 5030B

Tech: AMF

Date Prep: 06.23.2020 13:00

Prep seq: 7706061

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000530	0.00200	0.000408	mg/L	06.23.2020 17:48	J	1
Toluene	108-88-3	0.000560	0.00200	0.000367	mg/L	06.23.2020 17:48	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	06.23.2020 17:48	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	06.23.2020 17:48	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	06.23.2020 17:48	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	06.23.2020 17:48	U	
Total BTEX		0.00109		0.000367	mg/L	06.23.2020 17:48	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	87	70 - 130	%		
4-Bromofluorobenzene	103	70 - 130	%		

Sample Id: **MW 13**

Lab Sample Id: 664627-004

Analytical Method: BTEX by EPA 8021

Analyst: AMF

Seq Number: 3129759

Subcontractor: SUB: T104704400-19-19

Matrix: Ground Water

Date Collected: 06.15.2020 13:30

Sample Depth:

Date Received: 06.16.2020 15:36

Prep Method: 5030B

Tech: AMF

Date Prep: 06.23.2020 13:00

Prep seq: 7706061

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	06.23.2020 18:08	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	06.23.2020 18:08	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	06.23.2020 18:08	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	06.23.2020 18:08	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	06.23.2020 18:08	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	06.23.2020 18:08	U	
Total BTEX		<0.000367		0.000367	mg/L	06.23.2020 18:08	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	84	70 - 130	%		
4-Bromofluorobenzene	101	70 - 130	%		



Xenco

Certificate of Analytical Results

664627

Talon LPE-Artesia, Artesia, NM

Plains Kimbrough

Sample Id: MW 15

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 664627-005

Date Collected: 06.15.2020 14:50

Date Received: 06.16.2020 15:36

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMF

% Moist:

Tech: AMF

Seq Number: 3129759

Date Prep: 06.23.2020 13:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7706061

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	06.23.2020 18:28	U	1
Toluene	108-88-3	0.000400	0.00200	0.000367	mg/L	06.23.2020 18:28	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	06.23.2020 18:28	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	06.23.2020 18:28	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	06.23.2020 18:28	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	06.23.2020 18:28	U	
Total BTEX		0.000400		0.000367	mg/L	06.23.2020 18:28	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	86	70 - 130	%		
4-Bromofluorobenzene	105	70 - 130	%		

Sample Id: MW 14

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 664627-006

Date Collected: 06.15.2020 14:30

Date Received: 06.16.2020 15:36

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMF

% Moist:

Tech: AMF

Seq Number: 3129759

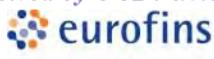
Date Prep: 06.23.2020 13:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7706061

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	06.23.2020 18:49	U	1
Toluene	108-88-3	0.000670	0.00200	0.000367	mg/L	06.23.2020 18:49	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	06.23.2020 18:49	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	06.23.2020 18:49	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	06.23.2020 18:49	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	06.23.2020 18:49	U	
Total BTEX		0.000670		0.000367	mg/L	06.23.2020 18:49	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	89	70 - 130	%		
4-Bromofluorobenzene	112	70 - 130	%		



Xenco

Certificate of Analytical Results

664627

Talon LPE-Artesia, Artesia, NM

Plains Kimbrough

Sample Id: MW 12

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 664627-007

Date Collected: 06.15.2020 14:45

Date Received: 06.16.2020 15:36

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMF

% Moist:

Tech: AMF

Seq Number: 3129759

Date Prep: 06.23.2020 13:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7706061

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	06.23.2020 19:09	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	06.23.2020 19:09	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	06.23.2020 19:09	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	06.23.2020 19:09	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	06.23.2020 19:09	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	06.23.2020 19:09	U	
Total BTEX		<0.000367		0.000367	mg/L	06.23.2020 19:09	U	

Surrogate

% Recovery

Limits

Units

Analysis Date

Flag

1,4-Difluorobenzene

92

70 - 130

%

4-Bromofluorobenzene

113

70 - 130

%

Sample Id: MW 16

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 664627-008

Date Collected: 06.15.2020 14:10

Date Received: 06.16.2020 15:36

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMF

% Moist:

Tech: AMF

Seq Number: 3129759

Date Prep: 06.23.2020 13:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7706061

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	06.23.2020 19:29	U	1
Toluene	108-88-3	0.000600	0.00200	0.000367	mg/L	06.23.2020 19:29	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	06.23.2020 19:29	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	06.23.2020 19:29	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	06.23.2020 19:29	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	06.23.2020 19:29	U	
Total BTEX		0.000600		0.000367	mg/L	06.23.2020 19:29	J	

Surrogate

% Recovery

Limits

Units

Analysis Date

Flag

1,4-Difluorobenzene

95

70 - 130

%

4-Bromofluorobenzene

120

70 - 130

%



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Certificate of Analytical Results

664627

Talon LPE-Artesia, Artesia, NM

Plains Kimbrough

Sample Id: MW 19

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 664627-009

Date Collected: 06.16.2020 08:55

Date Received: 06.16.2020 15:36

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMF

Tech: AMF

Seq Number: 3129759

Date Prep: 06.23.2020 13:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7706061

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	06.23.2020 19:50	U	1
Toluene	108-88-3	0.000460	0.00200	0.000367	mg/L	06.23.2020 19:50	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	06.23.2020 19:50	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	06.23.2020 19:50	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	06.23.2020 19:50	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	06.23.2020 19:50	U	
Total BTEX		0.000460		0.000367	mg/L	06.23.2020 19:50	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	92	70 - 130	%		
4-Bromofluorobenzene	113	70 - 130	%		

Sample Id: MW 8A

Matrix: Ground Water

Sample Depth:

Lab Sample Id: 664627-010

Date Collected: 06.16.2020 09:25

Date Received: 06.16.2020 15:36

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMF

Tech: AMF

Seq Number: 3129759

Date Prep: 06.23.2020 13:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7706061

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00102	0.00200	0.000408	mg/L	06.23.2020 20:10	J	1
Toluene	108-88-3	0.000640	0.00200	0.000367	mg/L	06.23.2020 20:10	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	06.23.2020 20:10	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	06.23.2020 20:10	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	06.23.2020 20:10	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	06.23.2020 20:10	U	
Total BTEX		0.00166		0.000367	mg/L	06.23.2020 20:10	J	

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



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Certificate of Analytical Results**664627****Talon LPE-Artesia, Artesia, NM**

Plains Kimbrough

Sample Id: **MW 7A**Matrix: **Ground Water**

Sample Depth:

Lab Sample Id: **664627-011**Date Collected: **06.16.2020 10:05**Date Received: **06.16.2020 15:36**Analytical Method: **BTEX by EPA 8021**Prep Method: **5030B**Analyst: **AMF**Tech: **AMF**Seq Number: **3129759**Date Prep: **06.23.2020 13:00**Subcontractor: **SUB: T104704400-19-19**Prep seq: **7706061**

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000570	0.00200	0.000408	mg/L	06.23.2020 21:32	J	1
Toluene	108-88-3	0.000640	0.00200	0.000367	mg/L	06.23.2020 21:32	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	06.23.2020 21:32	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	06.23.2020 21:32	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	06.23.2020 21:32	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	06.23.2020 21:32	U	
Total BTEX		0.00121		0.000367	mg/L	06.23.2020 21:32	J	
Surrogate		% Recovery		Limits	Units	Analysis Date	Flag	
1,4-Difluorobenzene		89		70 - 130	%			
4-Bromofluorobenzene		106		70 - 130	%			



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Certificate of Analytical Results

664627**Talon LPE-Artesia, Artesia, NM**

Plains Kimbrough

Sample Id: **7706061-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7706061-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: AMF

Tech: AMF

Seq Number: 3129759

Date Prep: 06.23.2020 13:00

Subcontractor: SUB: T104704400-19-19

Prep seq: 7706061

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	06.23.2020 16:46	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	06.23.2020 16:46	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	06.23.2020 16:46	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	06.23.2020 16:46	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	06.23.2020 16:46	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	90	70 - 130	%		
4-Bromofluorobenzene	102	70 - 130	%		



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Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

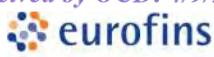
SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



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Form 2 - Surrogate Recoveries

Project Name: Plains Kimbrough

Report Date: 07022020

Project ID: 700376 050 11

Work Orders : 664627

Lab Batch #: 3129759

Sample: 7706061-1-BKS / BKS

Batch: 1 **Matrix:** Water

Units: mg/L

Date Analyzed: 06.23.2020 14:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0300	0.0300	100	70-130	
4-Bromofluorobenzene		0.0316	0.0300	105	70-130	

Lab Batch #: 3129759

Sample: 7706061-1-BSD / BSD

Batch: 1 **Matrix:** Water

Units: mg/L

Date Analyzed: 06.23.2020 15:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0319	0.0300	106	70-130	
4-Bromofluorobenzene		0.0331	0.0300	110	70-130	

Lab Batch #: 3129759

Sample: 664627-001 S / MS

Batch: 1 **Matrix:** Ground Water

Units: mg/L

Date Analyzed: 06.23.2020 15:21

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0292	0.0300	97	70-130	
4-Bromofluorobenzene		0.0321	0.0300	107	70-130	

Lab Batch #: 3129759

Sample: 664627-001 SD / MSD

Batch: 1 **Matrix:** Ground Water

Units: mg/L

Date Analyzed: 06.23.2020 15:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0298	0.0300	99	70-130	
4-Bromofluorobenzene		0.0336	0.0300	112	70-130	

Lab Batch #: 3129759

Sample: 7706061-1-BLK / BLK

Batch: 1 **Matrix:** Water

Units: mg/L

Date Analyzed: 06.23.2020 16:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0270	0.0300	90	70-130	
4-Bromofluorobenzene		0.0305	0.0300	102	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



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BS / BSD Recoveries

Project Name: Plains Kimbrough

Work Order #: 664627

Analyst: AMF

Date Prepared: 06.23.2020

Project ID: 700376 050 11

Lab Batch ID: 3129759

Sample: 7706061-1-BKS

Batch #: 1

Date Analyzed: 06.23.2020

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.0981	98	0.100	0.100	100	2	70-130	25	
Toluene	<0.000367	0.100	0.0950	95	0.100	0.0974	97	2	70-130	25	
Ethylbenzene	<0.000657	0.100	0.103	103	0.100	0.100	100	3	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.210	105	0.200	0.213	107	1	70-130	25	
o-Xylene	<0.000642	0.100	0.104	104	0.100	0.103	103	1	70-130	25	

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

All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: Plains Kimbrough

Work Order #: 664627

Lab Batch ID: 3129759

Date Analyzed: 06.23.2020

Reporting Units: mg/L

QC- Sample ID: 664627-001 S

Date Prepared: 06.23.2020

Report Date: 07022020

Project ID: 700376 050 11

Batch #: 1 Matrix: Ground Water

Analyst: AMF

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.0936	94	0.100	0.0960	96	3	70-130	25	
Toluene	<0.000367	0.100	0.0892	89	0.100	0.0910	91	2	70-130	25	
Ethylbenzene	<0.000657	0.100	0.0948	95	0.100	0.0955	96	1	70-130	25	
m,p-Xylenes	<0.000630	0.200	0.190	95	0.200	0.193	97	2	70-130	25	
o-Xylene	<0.000642	0.100	0.0966	97	0.100	0.0984	98	2	70-130	25	

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

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

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



Chain of Custody

Work Order No.: level 27

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 535-3443 Lubbock, TX (806) 794-1296 Odessa, NM (432) 704-5440
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Page 1 of 2

Project Manager:	DAVID ADKINS	Bill to: (if different)	Plains All American
Company Name:	TAKES LPE	Company Name:	PIPELINE
Address:	408 W TELAS ST	Address:	ATLANTA, GEORGIA, 30316
City, State ZIP:	ARTESIA, NEW MEXICO, 88210	City, State ZIP:	SRS # 2000-10257
Phone:	575 441 4835	Email:	DADKINS@TAKESLPE.COM

Project Name:	Plains Kimbrough	Turn Around	ANALYSIS REQUEST	Preservative Codes
Project Number:	704320 050 11	Routine	Pres. Code	MeOH; Me
Project Location:	Hobbs, New Mexico	Rush:		None; NO
Sampler's Name:	BILL RIGGS	Due Date:		HNO3; HN
PO #:	3000-10257	Quote #:		H2SO4; H2

SAMPLE RECEIPT		Temp Blank:	Wet Ice:	Number of Containers
Temperature (°C):	1.8 / 1.6	(Yes) Yes	(Yes) Yes	
Received Intact:	Yes	No	Thermometer ID: TNM007	
Cooler Custody Seals:	Yes	No	N/A	Correction Factor: -0.2
Sample Custody Seals:	Yes	No	N/A	Total Containers: 33

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Sample Comments
MW 1A	X	GW	6-15-2020	11:30AM	3	
MW 17	X	GW	6-15-2020	12:00PM	3	
MW 18	X	GW	6-15-2020	1:15PM	3	
MW 13	X	GW	6-15-2020	1:30PM	3	
MW 15	X	GW	6-15-2020	2:50PM	3	
MW 14	X	GW	6-15-2020	2:50PM	3	
MW 12	X	GW	6-15-2020	1:45PM	3	
MW 16	X	GW	6-15-2020	2:10PM	3	
MW 19	X	GW	6-16-2020	8:55AM	3	

Total 200.7 / 6020: 200.8 / 6020:
 Circle Method(s) and Metal(s) to be analyzed

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
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<u>Bill Riggs</u>	<u>J.</u>	6/16/20 15:36			
		2			
		4			
		6			



Chain of Custody

Work Order No: 1641027

Houston, TX (281) 240-4200 Dallas, TX (214) 982-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Crasbord, NM (432) 704-5440
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Page 2 of 2

Project Manager:	DAVID ADKINS	Bill to: (if different)	PHANS ALL AMERICAN
Company Name:	TALON LPE	Company Name:	PIPELINE
Address:	408 WEST TEXAS ST.	Address:	ATTN: CAMILLE BRYANT
City, State ZIP:	ARTESIA NEW MEXICO 88210	City, State ZIP:	SRS # 2000-10257
Phone:	525 441 4835	Email:	

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: <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/JUST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables: EDD <input type="checkbox"/> AdAPT <input type="checkbox"/> Other: _____

SAMPLE RECEIPT		ANALYSIS REQUEST		Preservative Codes	
Project Number:	700376 050 11	Temp Blank:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet-ice:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Project Location:	Hobbs New Mexico	Routine:	<input checked="" type="checkbox"/>	Pres. Code:	
Sampler's Name:	BILL RIGGS	Rush:		Due Date:	
PO #:	SPS 2000-10257	Quote #:			
Temperature (°C):	20	Thermometer ID:			
Received intact:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Correction Factor:			
Cooler/Custody Seal:	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Total Containers:			
Sample Custody Seals:	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Number of Containers			

MeOH; Me
None; NO
HNO3; HN
H2SO4; H2
HCl; HL
NaOH; Na
Zn Acetate+ NaOH; Zn

TAT starts the day received by the lab, if received by 4:00pm
Sample Comments
<i>EMAI ANALYTICAL</i>
<i>TO CAMILLE BRYANT</i>

Total 200.7 / 6010	200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed	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
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	
<i>EMAI ANALYTICAL</i>	
Relinquished by: (Signature)	Received by: (Signature)
<i>Bill Riggs</i>	<i>J</i>
Date/Time	6/6/20 15:36

Inter-Office Shipment

IOS Number : 65543

Date/Time: 06.17.2020

Created by: Elizabeth McClellan

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

Air Bill No.:

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
664627-001	W	MW 1A	06.15.2020 11:30	SW8021B	BTEX by EPA 8021	06.22.2020	06.29.2020	JKR	BR4FBZ BZ BZME EBZ	
664627-002	W	MW 17	06.15.2020 12:00	SW8021B	BTEX by EPA 8021	06.22.2020	06.29.2020	JKR	BR4FBZ BZ BZME EBZ	
664627-003	W	MW 18	06.15.2020 13:10	SW8021B	BTEX by EPA 8021	06.22.2020	06.29.2020	JKR	BR4FBZ BZ BZME EBZ	
664627-004	W	MW 13	06.15.2020 13:30	SW8021B	BTEX by EPA 8021	06.22.2020	06.29.2020	JKR	BR4FBZ BZ BZME EBZ	
664627-005	W	MW 15	06.15.2020 14:50	SW8021B	BTEX by EPA 8021	06.22.2020	06.29.2020	JKR	BR4FBZ BZ BZME EBZ	
664627-006	W	MW 14	06.15.2020 14:30	SW8021B	BTEX by EPA 8021	06.22.2020	06.29.2020	JKR	BR4FBZ BZ BZME EBZ	
664627-007	W	MW 12	06.15.2020 14:45	SW8021B	BTEX by EPA 8021	06.22.2020	06.29.2020	JKR	BR4FBZ BZ BZME EBZ	
664627-008	W	MW 16	06.15.2020 14:10	SW8021B	BTEX by EPA 8021	06.22.2020	06.29.2020	JKR	BR4FBZ BZ BZME EBZ	
664627-009	W	MW 19	06.16.2020 08:55	SW8021B	BTEX by EPA 8021	06.22.2020	06.30.2020	JKR	BR4FBZ BZ BZME EBZ	
664627-010	W	MW 8A	06.16.2020 09:25	SW8021B	BTEX by EPA 8021	06.22.2020	06.30.2020	JKR	BR4FBZ BZ BZME EBZ	
664627-011	W	MW 9A	06.16.2020 10:05	SW8021B	BTEX by EPA 8021	06.22.2020	06.30.2020	JKR	BR4FBZ BZ BZME EBZ	

Inter Office Shipment or Sample Comments:

Relinquished By:



Elizabeth McClellan

Date Relinquished: 06.17.2020

Received By:



Brianna Teel

Date Received: 06.18.2020

Cooler Temperature: 0.5



Inter Office Report- Sample Receipt Checklist

Sent To: Midland

Acceptable Temperature Range: 0 - 6 degC

IOS #: 65543

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sent By: Elizabeth McClellan

Date Sent: 06.17.2020 10.34 AM

Received By: Brianna Teel

Date Received: 06.18.2020 11.15 AM

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

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

NonConformance:**Corrective Action Taken:**

Nonconformance Documentation

Contact: _____

Contacted by : _____

Date: _____

Checklist reviewed by:

Brianna Teel

Date: 06.18.2020

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE-Artesia**Date/ Time Received:** 06.16.2020 03.36.00 PM**Work Order #:** 664627

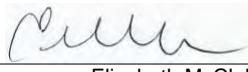
Acceptable Temperature Range: 0 - 6 degC
 Air and Metal samples Acceptable Range: Ambient
 Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6*Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes
#18 Water VOC samples have zero headspace?	Subbed to Midland. Yes

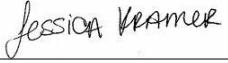
* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

 Elizabeth McClellan

Date: 06.17.2020

Checklist reviewed by:

 Jessica Kramer

Date: 06.18.2020

Analytical Report 673422

for

Talon LPE-Artesia

Project Manager: David Adkins

Kimbrough Sweet 8"

700376.050.11

09.28.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



09.28.2020

Project Manager: **David Adkins**

Talon LPE-Artesia

408 West Texas St.
Artesia, NM 88210

Reference: Eurofins Xenco, LLC Report No(s): **673422**

Kimbrough Sweet 8"

Project Address:

David Adkins:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 673422. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 673422 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 673422****Talon LPE-Artesia, Artesia, NM**

Kimbrough Sweet 8"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
KMW 17	W	09.22.2020 09:40		673422-001
KMW 18	W	09.22.2020 10:20		673422-002
KMW 15	W	09.22.2020 13:00		673422-003
KMW 14	W	09.22.2020 14:45		673422-004
KMW 13	W	09.22.2020 10:45		673422-005
KMW 12	W	09.23.2020 09:00		673422-006
KMW 16	W	09.23.2020 08:50		673422-007
KMW 8A	W	09.23.2020 12:15		673422-008
KMW 7A	W	09.23.2020 13:50		673422-009
KMW 19	W	09.23.2020 10:30		673422-010



CASE NARRATIVE

Client Name: Talon LPE-Artesia
Project Name: Kimbrough Sweet 8"

Project ID: 700376.050.11
Work Order Number(s): 673422

Report Date: 09.28.2020
Date Received: 09.23.2020

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

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results**673422****Talon LPE-Artesia, Artesia, NM**

Kimbrough Sweet 8"

Sample Id: **KMW 17**

Lab Sample Id: 673422-001

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3138194

Subcontractor: SUB: T104704400-20-21

Matrix: Water

Date Collected: 09.22.2020 09:40

Sample Depth:

Date Received: 09.23.2020 16:20

Prep Method: 5030B

Tech: KTL

Date Prep: 09.26.2020 14:00

Prep seq: 7712143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.27.2020 04:31	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.27.2020 04:31	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.27.2020 04:31	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.27.2020 04:31	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.27.2020 04:31	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.27.2020 04:31	U	
Total BTEX		<0.000367		0.000367	mg/L	09.27.2020 04:31	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	90	70 - 130	%		
4-Bromofluorobenzene	118	70 - 130	%		

Sample Id: **KMW 18**

Lab Sample Id: 673422-002

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3138194

Subcontractor: SUB: T104704400-20-21

Matrix: Water

Date Collected: 09.22.2020 10:20

Sample Depth:

Date Received: 09.23.2020 16:20

Prep Method: 5030B

Tech: KTL

Date Prep: 09.26.2020 14:00

Prep seq: 7712143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.27.2020 04:51	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.27.2020 04:51	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.27.2020 04:51	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.27.2020 04:51	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.27.2020 04:51	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.27.2020 04:51	U	
Total BTEX		<0.000367		0.000367	mg/L	09.27.2020 04:51	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	107	70 - 130	%		

Certificate of Analytical Results

673422

Talon LPE-Artesia, Artesia, NM

Kimbrough Sweet 8"

Sample Id: **KMW 15**

Lab Sample Id: 673422-003

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3138194

Subcontractor: SUB: T104704400-20-21

Matrix: Water

Date Collected: 09.22.2020 13:00

Sample Depth:

Date Received: 09.23.2020 16:20

Prep Method: 5030B

Tech: KTL

Date Prep: 09.26.2020 14:00

Prep seq: 7712143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.27.2020 05:12	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.27.2020 05:12	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.27.2020 05:12	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.27.2020 05:12	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.27.2020 05:12	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.27.2020 05:12	U	
Total BTEX		<0.000367		0.000367	mg/L	09.27.2020 05:12	U	

Surrogate

% Recovery

Limits

Units

Analysis Date

Flag

1,4-Difluorobenzene

90

70 - 130

%

4-Bromofluorobenzene

103

70 - 130

%

Sample Id: **KMW 14**

Lab Sample Id: 673422-004

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3138194

Subcontractor: SUB: T104704400-20-21

Matrix: Water

Sample Depth:

Date Collected: 09.22.2020 14:45

Date Received: 09.23.2020 16:20

Prep Method: 5030B

Tech: KTL

Date Prep: 09.26.2020 14:00

Prep seq: 7712143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.27.2020 05:32	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.27.2020 05:32	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.27.2020 05:32	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.27.2020 05:32	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.27.2020 05:32	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.27.2020 05:32	U	
Total BTEX		<0.000367		0.000367	mg/L	09.27.2020 05:32	U	

Surrogate

% Recovery

Limits

Units

Analysis Date

Flag

1,4-Difluorobenzene

91

70 - 130

%

4-Bromofluorobenzene

112

70 - 130

%

Certificate of Analytical Results**673422****Talon LPE-Artesia, Artesia, NM**

Kimbrough Sweet 8"

Sample Id: **KMW 13**

Lab Sample Id: 673422-005

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3138194

Subcontractor: SUB: T104704400-20-21

Matrix: Water

Date Collected: 09.22.2020 10:45

Sample Depth:

Date Received: 09.23.2020 16:20

Prep Method: 5030B

Tech: KTL

Date Prep: 09.26.2020 14:00

Prep seq: 7712143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.27.2020 05:53	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.27.2020 05:53	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.27.2020 05:53	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.27.2020 05:53	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.27.2020 05:53	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.27.2020 05:53	U	
Total BTEX		<0.000367		0.000367	mg/L	09.27.2020 05:53	U	

Surrogate**% Recovery****Limits****Units****Analysis Date****Flag**

1,4-Difluorobenzene

94

70 - 130

%

4-Bromofluorobenzene

113

70 - 130

%

Sample Id: **KMW 12**

Lab Sample Id: 673422-006

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3138194

Subcontractor: SUB: T104704400-20-21

Matrix: Water

Sample Depth:

Date Collected: 09.23.2020 09:00

Date Received: 09.23.2020 16:20

Prep Method: 5030B

Tech: KTL

Date Prep: 09.26.2020 14:00

Prep seq: 7712143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00171	0.00200	0.000408	mg/L	09.27.2020 06:14	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.27.2020 06:14	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.27.2020 06:14	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.27.2020 06:14	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.27.2020 06:14	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.27.2020 06:14	U	
Total BTEX		0.00171		0.000367	mg/L	09.27.2020 06:14	J	

Surrogate**% Recovery****Limits****Units****Analysis Date****Flag**

1,4-Difluorobenzene

91

70 - 130

%

4-Bromofluorobenzene

116

70 - 130

%

Certificate of Analytical Results

673422

Talon LPE-Artesia, Artesia, NM

Kimbrough Sweet 8"

Sample Id: **KMW 16**

Lab Sample Id: 673422-007

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3138194

Subcontractor: SUB: T104704400-20-21

Matrix: Water

Date Collected: 09.23.2020 08:50

Sample Depth:

Date Received: 09.23.2020 16:20

Prep Method: 5030B

Tech: KTL

Date Prep: 09.26.2020 14:00

Prep seq: 7712143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.27.2020 06:34	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.27.2020 06:34	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.27.2020 06:34	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.27.2020 06:34	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.27.2020 06:34	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.27.2020 06:34	U	
Total BTEX		<0.000367		0.000367	mg/L	09.27.2020 06:34	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	118	70 - 130	%		

Sample Id: **KMW 8A**

Lab Sample Id: 673422-008

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3138194

Subcontractor: SUB: T104704400-20-21

Matrix: Water

Date Collected: 09.23.2020 12:15

Sample Depth:

Date Received: 09.23.2020 16:20

Prep Method: 5030B

Tech: KTL

Date Prep: 09.26.2020 14:00

Prep seq: 7712143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00119	0.00200	0.000408	mg/L	09.27.2020 06:55	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.27.2020 06:55	U	1
Ethylbenzene	100-41-4	0.000730	0.00200	0.000657	mg/L	09.27.2020 06:55	J	1
m,p-Xylenes	179601-23-1	0.00126	0.00400	0.000630	mg/L	09.27.2020 06:55	J	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.27.2020 06:55	U	1
Xylenes, Total	1330-20-7	0.00126		0.000630	mg/L	09.27.2020 06:55	J	
Total BTEX		0.00318		0.000367	mg/L	09.27.2020 06:55		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	70 - 130	%		
4-Bromofluorobenzene	122	70 - 130	%		

Certificate of Analytical Results**673422****Talon LPE-Artesia, Artesia, NM**

Kimbrough Sweet 8"

Sample Id: **KMW 7A**

Lab Sample Id: 673422-009

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3138194

Subcontractor: SUB: T104704400-20-21

Matrix: Water

Date Collected: 09.23.2020 13:50

Sample Depth:

Date Received: 09.23.2020 16:20

Prep Method: 5030B

Tech: KTL

Date Prep: 09.26.2020 14:00

Prep seq: 7712143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.27.2020 07:16	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.27.2020 07:16	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.27.2020 07:16	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.27.2020 07:16	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.27.2020 07:16	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.27.2020 07:16	U	
Total BTEX		<0.000367		0.000367	mg/L	09.27.2020 07:16	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	89	70 - 130	%		
4-Bromofluorobenzene	120	70 - 130	%		

Sample Id: **KMW 19**

Lab Sample Id: 673422-010

Analytical Method: BTEX by EPA 8021

Analyst: KTL

Seq Number: 3138194

Subcontractor: SUB: T104704400-20-21

Matrix: Water

Date Collected: 09.23.2020 10:30

Sample Depth:

Date Received: 09.23.2020 16:20

Prep Method: 5030B

Tech: KTL

Date Prep: 09.26.2020 14:00

Prep seq: 7712143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.27.2020 07:37	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.27.2020 07:37	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.27.2020 07:37	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.27.2020 07:37	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.27.2020 07:37	U	1
Xylenes, Total	1330-20-7	<0.000630		0.000630	mg/L	09.27.2020 07:37	U	
Total BTEX		<0.000367		0.000367	mg/L	09.27.2020 07:37	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	70 - 130	%		
4-Bromofluorobenzene	125	70 - 130	%		

Certificate of Analytical Results**673422****Talon LPE-Artesia, Artesia, NM**

Kimbrough Sweet 8"

Sample Id: **7712143-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7712143-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Tech: KTL

Seq Number: 3138194

Date Prep: 09.26.2020 14:00

Subcontractor: SUB: T104704400-20-21

Prep seq: 7712143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.27.2020 04:06	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.27.2020 04:06	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.27.2020 04:06	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.27.2020 04:06	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.27.2020 04:06	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	78	70 - 130	%		
4-Bromofluorobenzene	102	70 - 130	%		

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: Kimbrough Sweet 8"

Work Orders : 673422

Report Date: 09282020

Lab Batch #: 3138194

Sample: 7712143-1-BKS / BKS

Batch: 1 **Matrix:**Water

Units: mg/L

Date Analyzed: 09.27.2020 01:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0289	0.0300	96	70-130	
4-Bromofluorobenzene		0.0339	0.0300	113	70-130	

Lab Batch #: 3138194

Sample: 7712143-1-BSD / BSD

Batch: 1 **Matrix:**Water

Units: mg/L

Date Analyzed: 09.27.2020 02:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0279	0.0300	93	70-130	
4-Bromofluorobenzene		0.0332	0.0300	111	70-130	

Lab Batch #: 3138194

Sample: 673422-001 S / MS

Batch: 1 **Matrix:**Water

Units: mg/L

Date Analyzed: 09.27.2020 02:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0286	0.0300	95	70-130	
4-Bromofluorobenzene		0.0346	0.0300	115	70-130	

Lab Batch #: 3138194

Sample: 673422-001 SD / MSD

Batch: 1 **Matrix:**Water

Units: mg/L

Date Analyzed: 09.27.2020 03:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0279	0.0300	93	70-130	
4-Bromofluorobenzene		0.0334	0.0300	111	70-130	

Lab Batch #: 3138194

Sample: 7712143-1-BLK / BLK

Batch: 1 **Matrix:**Water

Units: mg/L

Date Analyzed: 09.27.2020 04:06

SURROGATE RECOVERY STUDY

BTEX by EPA 8021		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0233	0.0300	78	70-130	
4-Bromofluorobenzene		0.0305	0.0300	102	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Kimbrough Sweet 8"

Work Order #: 673422

Project ID: 700376.050.11

Analyst: KTL

Date Prepared: 09.26.2020

Date Analyzed: 09.27.2020

Lab Batch ID: 3138194

Sample: 7712143-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.116	116	0.100	0.106	106	9	70-130	25	
Toluene	<0.000367	0.100	0.116	116	0.100	0.105	105	10	70-130	25	
Ethylbenzene	<0.000657	0.100	0.110	110	0.100	0.0998	100	10	70-130	25	
m_p-Xylenes	<0.000630	0.200	0.212	106	0.200	0.190	95	11	70-130	25	
o-Xylene	<0.000642	0.100	0.109	109	0.100	0.0985	99	10	70-130	25	

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

All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: Kimbrough Sweet 8"

Work Order # : 673422

Report Date: 09282020

Lab Batch ID: 3138194

Project ID: 700376.050.11

Date Analyzed: 09.27.2020

QC- Sample ID: 673422-001 S

Batch #: 1

Matrix: Water

Reporting Units: mg/L

Date Prepared: 09.26.2020

Analyst: KTL

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.122	122	0.100	0.117	117	4	70-130	25	
Toluene	<0.000367	0.100	0.120	120	0.100	0.116	116	3	70-130	25	
Ethylbenzene	<0.000657	0.100	0.115	115	0.100	0.110	110	4	70-130	25	
m,p-Xylenes	<0.000630	0.200	0.222	111	0.200	0.211	106	5	70-130	25	
o-Xylene	<0.000642	0.100	0.114	114	0.100	0.110	110	4	70-130	25	

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

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

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



Chain of Custody

Work Order No.: L673422

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Crashbad, NM (432) 704-5440
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-9800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

www.xenco.com

Page 1 of 1

Project Manager:	<u>David Adkins</u>	Bill to: (if different)	<u>Plains All American</u>
Company Name:	<u>Talon LPE</u>	Company Name:	<u>Pipeline</u>
Address:	<u>408 Texas St</u>	Address:	<u>Atn: Camille Bryant</u>
City, State ZIP:	<u>Artesia, NM 88210</u>	City, State ZIP:	<u>SRS# 2000-10757</u>
Phone:	<u>575-441-4835</u>	Email:	<u>dadkins@talonlpe.com</u>

Project Name:	<u>Kimbrough Sweet 8"</u>	Turn Around	ANALYSIS REQUEST				
Project Number:	<u>7003-46.050.11</u>	Routine	Pres.	Code	Preservative Codes		
Project Location	<u>SRS# 2000-10757</u>	Rush:			MeOH: Me		
Sampler's Name:	<u>Roy Bell</u>	Due Date:			None: NO		
PO #:		Quote #:			HNO3: HN		
SAMPLE RECEIPT	Temp Blank: <u>(C)</u> No	Wet Ice: <u>(Y)</u> Yes			H2SO4: H2		
Temperature (°C):	<u>2.2</u>	Thermometer ID:			HCl: HL		
Received Intact:	<u>Yes</u>	Correction Factor:	<u>-0.0</u>		NaOH: Na		
Cooler Custody Seals:	<u>Yes</u>	Total Containers:	<u>30</u>		Zn Acetate+ NaOH: Zn		
Sample Custody Seals:	<u>No</u>	N/A					

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Sample Comments
KMW 17		<u>GW</u>	<u>9/22/20</u>	<u>9:40</u>		<u>3</u>	<u>X BTEX</u>
KMW 18		<u>GW</u>	<u>9/22/20</u>	<u>10:20</u>			
KMW 15		<u>GW</u>	<u>9/22/20</u>	<u>1:00</u>			
KMW 14		<u>GW</u>	<u>9/22/20</u>	<u>2:45</u>			
KMW 13		<u>GW</u>	<u>9/22/20</u>	<u>10:45</u>			
KMW 12		<u>GW</u>	<u>9/23/20</u>	<u>9:00</u>			
KMW 16		<u>GW</u>	<u>9/23/20</u>	<u>9:50</u>			
KMW 8A		<u>GW</u>	<u>9/23/20</u>	<u>12:15</u>			
KMW 7A		<u>GW</u>	<u>9/23/20</u>	<u>1:50</u>			
KMW 19		<u>GW</u>	<u>9/23/20</u>	<u>10:30</u>			

Total 200.7 / 6010 200.8 / 6020:

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

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
 TCIPL / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Inter-Office Shipment**IOS Number : 70946**

Date/Time:	09.24.2020	Created by:	Cloe Clifton	Please send report to:	Jessica Kramer
Lab# From:	Carlsbad	Delivery Priority:		Address:	1089 N Canal Street
Lab# To:	Midland	Air Bill No.:		E-Mail:	jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
673422-001	W	KMW 17	09.22.2020 09:40	SW8021B	BTEX by EPA 8021	09.29.2020	10.06.2020	JKR	BR4FBZ BZ BZME EBZ	
673422-002	W	KMW 18	09.22.2020 10:20	SW8021B	BTEX by EPA 8021	09.29.2020	10.06.2020	JKR	BR4FBZ BZ BZME EBZ	
673422-003	W	KMW 15	09.22.2020 13:00	SW8021B	BTEX by EPA 8021	09.29.2020	10.06.2020	JKR	BR4FBZ BZ BZME EBZ	
673422-004	W	KMW 14	09.22.2020 14:45	SW8021B	BTEX by EPA 8021	09.29.2020	10.06.2020	JKR	BR4FBZ BZ BZME EBZ	
673422-005	W	KMW 13	09.22.2020 10:45	SW8021B	BTEX by EPA 8021	09.29.2020	10.06.2020	JKR	BR4FBZ BZ BZME EBZ	
673422-006	W	KMW 12	09.23.2020 09:00	SW8021B	BTEX by EPA 8021	09.29.2020	10.07.2020	JKR	BR4FBZ BZ BZME EBZ	
673422-007	W	KMW 16	09.23.2020 08:50	SW8021B	BTEX by EPA 8021	09.29.2020	10.07.2020	JKR	BR4FBZ BZ BZME EBZ	
673422-008	W	KMW 8A	09.23.2020 12:15	SW8021B	BTEX by EPA 8021	09.29.2020	10.07.2020	JKR	BR4FBZ BZ BZME EBZ	
673422-009	W	KMW 7A	09.23.2020 13:50	SW8021B	BTEX by EPA 8021	09.29.2020	10.07.2020	JKR	BR4FBZ BZ BZME EBZ	
673422-010	W	KMW 19	09.23.2020 10:30	SW8021B	BTEX by EPA 8021	09.29.2020	10.07.2020	JKR	BR4FBZ BZ BZME EBZ	

Inter Office Shipment or Sample Comments:

Relinquished By:

Cloe Clifton

Date Relinquished: 09.24.2020

Received By:

Jessica Kramer

Date Received: 09.25.2020

Cooler Temperature: 2.6

Eurofins Xenco, LLC

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

Acceptable Temperature Range: 0 - 6 degC

IOS #: 70946

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: Cloe Clifton

Date Sent: 09.24.2020 03.42 PM

Received By: Jessica Kramer

Date Received: 09.25.2020 11.35 AM

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____

Contacted by : _____

Date: _____

Checklist reviewed by:

Jessica Kramer

Jessica Kramer

Date: 09.25.2020 _____

Eurofins Xenco, LLC
Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE-Artesia**Date/ Time Received:** 09.23.2020 04.20.00 PM**Work Order #:** 673422

Acceptable Temperature Range: 0 - 6 degC
 Air and Metal samples Acceptable Range: Ambient
 Temperature Measuring device used : T_NM_007

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Cloe Clifton
 Cloe Clifton

Date: 09.24.2020

Checklist reviewed by:

Jessica Kramer
 Jessica Kramer

Date: 09.25.2020

Analytical Report 679460

for

Talon LPE-Artesia

Project Manager: David Adkins

Kimbrough Sweet 8"

700376.050.11

12.09.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



12.09.2020

Project Manager: **David Adkins**

Talon LPE-Artesia

408 West Texas St.
Artesia, NM 88210

Reference: Eurofins Xenco, LLC Report No(s): **679460**

Kimbrough Sweet 8"

Project Address: Hobbs, New Mexico

David Adkins:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 679460. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 679460 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 679460****Talon LPE-Artesia, Artesia, NM**

Kimbrough Sweet 8"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-17	W	11.30.2020 09:50		679460-001
MW-18	W	11.30.2020 10:45		679460-002
MW-13	W	11.30.2020 11:15		679460-003
MW-15	W	11.30.2020 12:15		679460-004
MW-16	W	11.30.2020 12:55		679460-005
MW-12	W	11.30.2020 13:20		679460-006
MW-14	W	11.30.2020 13:50		679460-007
MW-11	W	11.30.2020 15:05		679460-008
MW-1 A	W	11.30.2020 14:20		679460-009
MW-19	W	12.01.2020 08:50		679460-010
MW-7 A	W	12.01.2020 10:05		679460-011
MW-6	W	12.01.2020 10:40		679460-012
MW-8 A	W	12.01.2020 11:30		679460-013



CASE NARRATIVE

Client Name: Talon LPE-Artesia
Project Name: Kimbrough Sweet 8"

Project ID: 700376.050.11
Work Order Number(s): 679460

Report Date: 12.09.2020
Date Received: 12.02.2020

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

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3144049 BTEX by EPA 8021B

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

Samples affected are: 679460-008,679460-012.

Lab Sample ID 679460-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 679460-001, -002, -003, -004, -005, -006, -007, -008, -010, -011, -012.

The Laboratory Control Sample for Benzene is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analytical Results

679460

Talon LPE-Artesia, Artesia, NM

Kimbrough Sweet 8"

Sample Id: MW-17

Matrix: Water

Sample Depth:

Lab Sample Id: 679460-001

Date Collected: 11.30.2020 09:50

Date Received: 12.02.2020 08:05

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144049

Date Prep: 12.06.2020 14:00

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716497

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.07.2020 06:00	UX	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.07.2020 06:00	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.07.2020 06:00	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.07.2020 06:00	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 06:00	U	1
Total Xylenes	1330-20-7	<0.0006300		0.0006300	mg/L	12.07.2020 06:00	U	
Total BTEX		<0.0003670		0.0003670	mg/L	12.07.2020 06:00	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	96	70 - 130	%		
4-Bromofluorobenzene	104	70 - 130	%		

Sample Id: MW-18

Matrix: Water

Sample Depth:

Lab Sample Id: 679460-002

Date Collected: 11.30.2020 10:45

Date Received: 12.02.2020 08:05

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144049

Date Prep: 12.06.2020 14:00

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716497

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.07.2020 06:21	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.07.2020 06:21	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.07.2020 06:21	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.07.2020 06:21	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 06:21	U	1
Total Xylenes	1330-20-7	<0.0006300		0.0006300	mg/L	12.07.2020 06:21	U	
Total BTEX		<0.0003670		0.0003670	mg/L	12.07.2020 06:21	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	70 - 130	%		
4-Bromofluorobenzene	110	70 - 130	%		

Certificate of Analytical Results**679460****Talon LPE-Artesia, Artesia, NM**

Kimbrough Sweet 8"

Sample Id: **MW-13**

Matrix: Water

Sample Depth:

Lab Sample Id: 679460-003

Date Collected: 11.30.2020 11:15

Date Received: 12.02.2020 08:05

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144049

Date Prep: 12.06.2020 14:00

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716497

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.07.2020 06:41	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.07.2020 06:41	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.07.2020 06:41	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.07.2020 06:41	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 06:41	U	1
Total Xylenes	1330-20-7	<0.0006300		0.0006300	mg/L	12.07.2020 06:41	U	
Total BTEX		<0.0003670		0.0003670	mg/L	12.07.2020 06:41	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	96	70 - 130	%		
4-Bromofluorobenzene	108	70 - 130	%		

Sample Id: **MW-15**

Matrix: Water

Sample Depth:

Lab Sample Id: 679460-004

Date Collected: 11.30.2020 12:15

Date Received: 12.02.2020 08:05

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144049

Date Prep: 12.06.2020 14:00

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716497

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.07.2020 07:01	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.07.2020 07:01	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.07.2020 07:01	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.07.2020 07:01	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 07:01	U	1
Total Xylenes	1330-20-7	<0.0006300		0.0006300	mg/L	12.07.2020 07:01	U	
Total BTEX		<0.0003670		0.0003670	mg/L	12.07.2020 07:01	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	106	70 - 130	%		

Certificate of Analytical Results**679460****Talon LPE-Artesia, Artesia, NM**

Kimbrough Sweet 8"

Sample Id: **MW-16**

Matrix: Water

Sample Depth:

Lab Sample Id: 679460-005

Date Collected: 11.30.2020 12:55

Date Received: 12.02.2020 08:05

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144049

Date Prep: 12.06.2020 14:00

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716497

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.07.2020 07:22	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.07.2020 07:22	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.07.2020 07:22	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.07.2020 07:22	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 07:22	U	1
Total Xylenes	1330-20-7	<0.0006300		0.0006300	mg/L	12.07.2020 07:22	U	
Total BTEX		<0.0003670		0.0003670	mg/L	12.07.2020 07:22	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	70 - 130	%		
4-Bromofluorobenzene	103	70 - 130	%		

Sample Id: **MW-12**

Matrix: Water

Sample Depth:

Lab Sample Id: 679460-006

Date Collected: 11.30.2020 13:20

Date Received: 12.02.2020 08:05

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144049

Date Prep: 12.06.2020 14:00

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716497

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.07.2020 07:42	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.07.2020 07:42	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.07.2020 07:42	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.07.2020 07:42	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 07:42	U	1
Total Xylenes	1330-20-7	<0.0006300		0.0006300	mg/L	12.07.2020 07:42	U	
Total BTEX		<0.0003670		0.0003670	mg/L	12.07.2020 07:42	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	110	70 - 130	%		

Certificate of Analytical Results**679460****Talon LPE-Artesia, Artesia, NM**

Kimbrough Sweet 8"

Sample Id: **MW-14**

Lab Sample Id: 679460-007

Analytical Method: BTEX by EPA 8021B

Analyst: KTL

Seq Number: 3144049

Subcontractor: SUB: T104704400-20-21

Matrix: Water

Date Collected: 11.30.2020 13:50

Sample Depth:

Date Received: 12.02.2020 08:05

Prep Method: 5030B

% Moist:

Date Prep: 12.06.2020 14:00

Tech: KTL

Prep seq: 7716497

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.07.2020 08:03	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.07.2020 08:03	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.07.2020 08:03	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.07.2020 08:03	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 08:03	U	1
Total Xylenes	1330-20-7	<0.0006300		0.0006300	mg/L	12.07.2020 08:03	U	
Total BTEX		<0.0003670		0.0003670	mg/L	12.07.2020 08:03	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	70 - 130	%		
4-Bromofluorobenzene	115	70 - 130	%		

Sample Id: **MW-11**

Lab Sample Id: 679460-008

Analytical Method: BTEX by EPA 8021B

Analyst: KTL

Seq Number: 3144049

Subcontractor: SUB: T104704400-20-21

Matrix: Water

Date Collected: 11.30.2020 15:05

Sample Depth:

Date Received: 12.02.2020 08:05

Prep Method: 5030B

% Moist:

Date Prep: 12.06.2020 14:00

Tech: KTL

Prep seq: 7716497

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	2.49	0.200	0.0408	mg/L	12.07.2020 20:57	D	100
Toluene	108-88-3	0.000690	0.00200	0.000367	mg/L	12.07.2020 08:23	J	1
Ethylbenzene	100-41-4	0.878	0.200	0.0657	mg/L	12.07.2020 20:57	D	100
m,p-Xylenes	179601-23-1	0.474	0.00400	0.000630	mg/L	12.07.2020 08:23		1
o-Xylene	95-47-6	0.0268	0.00200	0.000642	mg/L	12.07.2020 08:23		1
Total Xylenes	1330-20-7	0.5008		0.0006300	mg/L	12.07.2020 08:23		
Total BTEX		3.869		0.0003670	mg/L	12.07.2020 20:57		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	150	70 - 130	%		**
4-Bromofluorobenzene	151	70 - 130	%		**

Certificate of Analytical Results**679460****Talon LPE-Artesia, Artesia, NM**

Kimbrough Sweet 8"

Sample Id: **MW-1 A**

Matrix: Water

Sample Depth:

Lab Sample Id: 679460-009

Date Collected: 11.30.2020 14:20

Date Received: 12.02.2020 08:05

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144151

Date Prep: 12.07.2020 14:30

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716593

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.07.2020 23:21	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.07.2020 23:21	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.07.2020 23:21	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.07.2020 23:21	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 23:21	U	1
Total Xylenes	1330-20-7	<0.0006300		0.0006300	mg/L	12.07.2020 23:21	U	
Total BTEX		<0.0003670		0.0003670	mg/L	12.07.2020 23:21	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	107	70 - 130	%		

Sample Id: **MW-19**

Matrix: Water

Sample Depth:

Lab Sample Id: 679460-010

Date Collected: 12.01.2020 08:50

Date Received: 12.02.2020 08:05

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144049

Date Prep: 12.06.2020 14:00

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716497

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.0132	0.00200	0.000408	mg/L	12.07.2020 09:04		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.07.2020 09:04	U	1
Ethylbenzene	100-41-4	0.00315	0.00200	0.000657	mg/L	12.07.2020 09:04		1
m,p-Xylenes	179601-23-1	0.00265	0.00400	0.000630	mg/L	12.07.2020 09:04	J	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 09:04	U	1
Total Xylenes	1330-20-7	0.002650		0.0006300	mg/L	12.07.2020 09:04		
Total BTEX		0.01900		0.0003670	mg/L	12.07.2020 09:04		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	106	70 - 130	%		

Certificate of Analytical Results

679460

Talon LPE-Artesia, Artesia, NM

Kimbrough Sweet 8"

Sample Id: MW-7 A

Matrix: Water

Sample Depth:

Lab Sample Id: 679460-011

Date Collected: 12.01.2020 10:05

Date Received: 12.02.2020 08:05

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144049

Date Prep: 12.06.2020 14:00

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716497

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00103	0.00200	0.000408	mg/L	12.07.2020 10:26	J	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.07.2020 10:26	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.07.2020 10:26	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.07.2020 10:26	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 10:26	U	1
Total Xylenes	1330-20-7	<0.0006300		0.0006300	mg/L	12.07.2020 10:26	U	
Total BTEX		0.001030		0.0003670	mg/L	12.07.2020 10:26	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	96	70 - 130	%		
4-Bromofluorobenzene	110	70 - 130	%		

Sample Id: MW-6

Matrix: Water

Sample Depth:

Lab Sample Id: 679460-012

Date Collected: 12.01.2020 10:40

Date Received: 12.02.2020 08:05

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144049

Date Prep: 12.06.2020 14:00

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716497

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	7.89	0.200	0.0408	mg/L	12.07.2020 21:17	D	100
Toluene	108-88-3	0.773	0.200	0.0367	mg/L	12.07.2020 21:17	D	100
Ethylbenzene	100-41-4	0.350	0.00200	0.000657	mg/L	12.07.2020 10:47		1
m,p-Xylenes	179601-23-1	0.486	0.00400	0.000630	mg/L	12.07.2020 10:47		1
o-Xylene	95-47-6	0.191	0.00200	0.000642	mg/L	12.07.2020 10:47		1
Total Xylenes	1330-20-7	0.6770		0.0006300	mg/L	12.07.2020 10:47		
Total BTEX		9.690		0.0006300	mg/L	12.07.2020 21:17		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	246	70 - 130	%		**
4-Bromofluorobenzene	140	70 - 130	%		**

Certificate of Analytical Results**679460****Talon LPE-Artesia, Artesia, NM**

Kimbrough Sweet 8"

Sample Id: **MW-8 A**

Matrix: Water

Sample Depth:

Lab Sample Id: 679460-013

Date Collected: 12.01.2020 11:30

Date Received: 12.02.2020 08:05

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144151

Date Prep: 12.07.2020 14:30

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716593

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000780	0.00200	0.000408	mg/L	12.07.2020 23:41	J	1
Toluene	108-88-3	0.000740	0.00200	0.000367	mg/L	12.07.2020 23:41	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.07.2020 23:41	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.07.2020 23:41	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 23:41	U	1
Total Xylenes	1330-20-7	<0.0006300		0.0006300	mg/L	12.07.2020 23:41	U	
Total BTEX		0.001520		0.0003670	mg/L	12.07.2020 23:41	J	
Surrogate		% Recovery		Limits	Units	Analysis Date	Flag	
1,4-Difluorobenzene		97		70 - 130	%			
4-Bromofluorobenzene		108		70 - 130	%			

Certificate of Analytical Results

679460**Talon LPE-Artesia, Artesia, NM**

Kimbrough Sweet 8"

Sample Id: **7716497-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7716497-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144049

Date Prep: 12.06.2020 14:00

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716497

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.07.2020 05:39	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.07.2020 05:39	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.07.2020 05:39	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.07.2020 05:39	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 05:39	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	107	70 - 130	%		

Sample Id: **7716593-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7716593-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3144151

Date Prep: 12.07.2020 14:30

Tech: KTL

Subcontractor: SUB: T104704400-20-21

Prep seq: 7716593

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	12.07.2020 17:51	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	12.07.2020 17:51	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	12.07.2020 17:51	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	12.07.2020 17:51	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	12.07.2020 17:51	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	96	70 - 130	%		
4-Bromofluorobenzene	111	70 - 130	%		

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

**Form 2 - Surrogate Recoveries****Project Name: Kimbrough Sweet 8"****Work Orders :** 679460**Lab Batch #:** 3144049**Sample:** 7716497-1-BKS / BKS**Batch:** 1 **Matrix:**Water**Units:** mg/L**Date Analyzed:** 12.07.2020 03:39**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	70-130	
4-Bromofluorobenzene	0.0306	0.0300	102	70-130	

Lab Batch #: 3144049**Sample:** 7716497-1-BSD / BSD**Batch:** 1 **Matrix:**Water**Units:** mg/L**Date Analyzed:** 12.07.2020 04:00**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	70-130	
4-Bromofluorobenzene	0.0296	0.0300	99	70-130	

Lab Batch #: 3144049**Sample:** 679460-001 S / MS**Batch:** 1 **Matrix:**Water**Units:** mg/L**Date Analyzed:** 12.07.2020 04:20**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	70-130	
4-Bromofluorobenzene	0.0302	0.0300	101	70-130	

Lab Batch #: 3144049**Sample:** 679460-001 SD / MSD**Batch:** 1 **Matrix:**Water**Units:** mg/L**Date Analyzed:** 12.07.2020 04:40**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	70-130	
4-Bromofluorobenzene	0.0300	0.0300	100	70-130	

Lab Batch #: 3144049**Sample:** 7716497-1-BLK / BLK**Batch:** 1 **Matrix:**Water**Units:** mg/L**Date Analyzed:** 12.07.2020 05:39**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	70-130	
4-Bromofluorobenzene	0.0322	0.0300	107	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

**Form 2 - Surrogate Recoveries****Project Name: Kimbrough Sweet 8"****Work Orders :** 679460**Report Date:** 12092020**Lab Batch #:** 3144151**Sample:** 7716593-1-BKS / BKS**Batch:** 1 **Matrix:**Water**Units:** mg/L**Date Analyzed:** 12.07.2020 15:53**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	70-130	
4-Bromofluorobenzene	0.0297	0.0300	99	70-130	

Lab Batch #: 3144151**Sample:** 7716593-1-BSD / BSD**Batch:** 1 **Matrix:**Water**Units:** mg/L**Date Analyzed:** 12.07.2020 16:14**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	70-130	
4-Bromofluorobenzene	0.0297	0.0300	99	70-130	

Lab Batch #: 3144151**Sample:** 679546-014 S / MS**Batch:** 1 **Matrix:**Ground Water**Units:** mg/L**Date Analyzed:** 12.07.2020 16:34**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	70-130	
4-Bromofluorobenzene	0.0294	0.0300	98	70-130	

Lab Batch #: 3144151**Sample:** 679546-014 SD / MSD**Batch:** 1 **Matrix:**Ground Water**Units:** mg/L**Date Analyzed:** 12.07.2020 16:55**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	70-130	
4-Bromofluorobenzene	0.0305	0.0300	102	70-130	

Lab Batch #: 3144151**Sample:** 7716593-1-BLK / BLK**Batch:** 1 **Matrix:**Water**Units:** mg/L**Date Analyzed:** 12.07.2020 17:51**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	70-130	
4-Bromofluorobenzene	0.0332	0.0300	111	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Kimbrough Sweet 8"

Work Order #: 679460

Analyst: KTL

Lab Batch ID: 3144049

Units: mg/L

Date Prepared: 12.06.2020

Sample: 7716497-1-BKS

Batch #: 1

Project ID: 700376.050.11

Date Analyzed: 12.07.2020

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.09570	96	0.100	0.08570	86	11	70-130	25	
Toluene	<0.000367	0.100	0.09160	92	0.100	0.08070	81	13	70-130	25	
Ethylbenzene	<0.000657	0.100	0.09880	99	0.100	0.08590	86	14	70-130	25	
m,p-Xylenes	<0.000630	0.200	0.1960	98	0.200	0.1690	85	15	70-130	25	
o-Xylene	<0.000642	0.100	0.09710	97	0.100	0.08400	84	14	70-130	25	

Analyst: KTL

Date Prepared: 12.07.2020

Date Analyzed: 12.07.2020

Lab Batch ID: 3144151

Sample: 7716593-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.09540	95	0.100	0.09050	91	5	70-130	25	
Toluene	<0.000367	0.100	0.09100	91	0.100	0.08650	87	5	70-130	25	
Ethylbenzene	<0.000657	0.100	0.1000	100	0.100	0.09510	95	5	70-130	25	
m,p-Xylenes	<0.000630	0.200	0.1960	98	0.200	0.1870	94	5	70-130	25	
o-Xylene	<0.000642	0.100	0.09620	96	0.100	0.09140	91	5	70-130	25	

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

All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries**Project Name: Kimbrough Sweet 8"****Work Order #:** 679460**Report Date:** 12092020**Lab Batch ID:** 3144049**Project ID:** 700376.050.11**Date Analyzed:** 12.07.2020**QC- Sample ID:** 679460-001 S**Batch #:** 1**Matrix:** Water**Reporting Units:** mg/L**Date Prepared:** 12.06.2020**Analyst:** KTL**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.135	135	0.100	0.123	123	9	70-130	25	X
Toluene	<0.000367	0.100	0.116	116	0.100	0.106	106	9	70-130	25	
Ethylbenzene	<0.000657	0.100	0.112	112	0.100	0.104	104	7	70-130	25	
m,p-Xylenes	<0.000630	0.200	0.226	113	0.200	0.209	105	8	70-130	25	
o-Xylene	<0.000642	0.100	0.108	108	0.100	0.101	101	7	70-130	25	

Lab Batch ID: 3144151**QC- Sample ID:** 679546-014 S**Batch #:** 1 **Matrix:** Ground Water**Date Analyzed:** 12.07.2020**Date Prepared:** 12.07.2020**Analyst:** KTL**Reporting Units:** mg/L**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.146	146	0.100	0.152	152	4	70-130	25	X
Toluene	<0.000367	0.100	0.122	122	0.100	0.131	131	7	70-130	25	X
Ethylbenzene	<0.000657	0.100	0.118	118	0.100	0.127	127	7	70-130	25	
m,p-Xylenes	<0.000630	0.200	0.232	116	0.200	0.254	127	9	70-130	25	
o-Xylene	<0.000642	0.100	0.112	112	0.100	0.120	120	7	70-130	25	

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

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

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



Chain of Custody

Work Order No: 1679460

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Phoenix, AZ (480) 355-0000 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Page 1 of 2

Project Manager:	David 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:	5RS# 2000-10757
Phone:	575-441-4835	Email:	dadkins@talonlpe.com
Project Name:	Kimberrough Sweet 8"	Turn Around	
Project Number:	200376.050.11	Routine	<input checked="" type="checkbox"/>
Project Location	Hobbs NM	Rush:	
Sampler's Name:	Roy Bell	Due Date:	
PO #:	5RS# 2000-10757	Quote #:	
SAMPLE RECEIPT			
Temperature (°C):	1.3	Temp Blank: (Yes) No	Wet Ice: (Yes) No
Received Intact:	Yes	Thermometer ID: NWW007	
Cooler/Custody Seals:	Yes (No)	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	39
Number of Containers			
Lab ID	Sample Identification	Matrix	Date Sampled
MW-17	GW 11/19/20 9:50	N/A	3
MW-18	10:45		X
MW-13	11:15		
MW-15	12:15		
MW-16	12:55		
MW-12	1:20		
MW-11	1:50		
MW-1A	3:05		
MW-19	2:20		
MW-23	12/1/20 8:50		
Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed			
8RCRA 13PM 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			

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/JUST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____

ANALYSIS REQUEST	Preservative Codes
Temperature (°C):	MeOH: Me
Received Intact:	None: NO
Cooler/Custody Seals:	HNO ₃ : HN
Sample Custody Seals:	H ₂ SO ₄ : H2
Lab ID	HCl: HL
Sample Identification	NaOH: Na
Matrix	Zn Acetate+ NaOH: Zn
Date Sampled	TAT starts the day received by the lab, if received by 4:00pm
Time Sampled	Sample Comments
Depth	Emaill Analyticals To: Camille Bryant

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.					
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>David Adkins</i>	<i>J</i>	12/2/20 08:05 ²			
		4			
		6			



Chain of Custody

Work Order No: 16794160

Project Manager: David Adkins		Bill to: (if different) Plains All American	Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-5800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 659-6701	www.xenco.com	Page 2 of 2
Company Name: Talon LPE	Address: 408 Texas Street	Company Name: Pipeline	Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRRC <input type="checkbox"/> Superfund <input type="checkbox"/>	Work Order Comments	
City, State ZIP: Artesia, NM 88210	Address: Atn: Camille Bryant	City, State ZIP: SRS# 2000 - 10757	State of Project:	Reporting Level: <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PSTRU <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Phone: 575-441-4835	Email: adkins@talon-lpe.com	Deliverables: EDD <input type="checkbox"/> ADA/PT <input type="checkbox"/> Other: _____			

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):		Thermometer ID					
Received Intact:		Yes	No				
Cooler Custody Seals:		Yes	No	N/A	Correction Factor:		
Sample Custody Seals:		Yes	No	N/A	Total Containers:		
Number of Containers							
EX 8021							
HCl: HL							
NaOH: Na							
Zn Acetate+ NaOH: Zn							
TAT starts the day received by the lab, if received by 4:00pm							

Notice: Signature of this document and relinquishment of samples constitutes a purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each request and a charge of \$5.00 for each sample submitted to Xenco.

Reinquished by: (Signature)

Revised Date 02/26/19 Rev 2019.1

Inter-Office Shipment**IOS Number : 74146**

Date/Time: 12.02.2020

Created by: Cloe Clifton

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

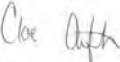
Air Bill No.:

E-Mail: jessica.kramer@eurofinset.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
679460-001	W	MW-17	11.30.2020 09:50	SW8021B	BTEX by EPA 8021B	12.08.2020	12.14.2020	JKR	BR4FBZ BZ BZME EBZ	
679460-002	W	MW-18	11.30.2020 10:45	SW8021B	BTEX by EPA 8021B	12.08.2020	12.14.2020	JKR	BR4FBZ BZ BZME EBZ	
679460-003	W	MW-13	11.30.2020 11:15	SW8021B	BTEX by EPA 8021B	12.08.2020	12.14.2020	JKR	BR4FBZ BZ BZME EBZ	
679460-004	W	MW-15	11.30.2020 12:15	SW8021B	BTEX by EPA 8021B	12.08.2020	12.14.2020	JKR	BR4FBZ BZ BZME EBZ	
679460-005	W	MW-16	11.30.2020 12:55	SW8021B	BTEX by EPA 8021B	12.08.2020	12.14.2020	JKR	BR4FBZ BZ BZME EBZ	
679460-006	W	MW-12	11.30.2020 13:20	SW8021B	BTEX by EPA 8021B	12.08.2020	12.14.2020	JKR	BR4FBZ BZ BZME EBZ	
679460-007	W	MW-14	11.30.2020 13:50	SW8021B	BTEX by EPA 8021B	12.08.2020	12.14.2020	JKR	BR4FBZ BZ BZME EBZ	
679460-008	W	MW-11	11.30.2020 15:05	SW8021B	BTEX by EPA 8021B	12.08.2020	12.14.2020	JKR	BR4FBZ BZ BZME EBZ	
679460-009	W	MW-1 A	11.30.2020 14:20	SW8021B	BTEX by EPA 8021B	12.08.2020	12.14.2020	JKR	BR4FBZ BZ BZME EBZ	
679460-010	W	MW-19	12.01.2020 08:50	SW8021B	BTEX by EPA 8021B	12.08.2020	12.15.2020	JKR	BR4FBZ BZ BZME EBZ	
679460-011	W	MW-7 A	12.01.2020 10:05	SW8021B	BTEX by EPA 8021B	12.08.2020	12.15.2020	JKR	BR4FBZ BZ BZME EBZ	
679460-012	W	MW-6	12.01.2020 10:40	SW8021B	BTEX by EPA 8021B	12.08.2020	12.15.2020	JKR	BR4FBZ BZ BZME EBZ	
679460-013	W	MW-8 A	12.01.2020 11:30	SW8021B	BTEX by EPA 8021B	12.08.2020	12.15.2020	JKR	BR4FBZ BZ BZME EBZ	

Inter Office Shipment or Sample Comments:

Relinquished By:


Cloe Clifton

Date Relinquished: 12.02.2020

Received By:


Jessica Kramer

Date Received: 12.03.2020

Cooler Temperature: 3.0

Eurofins Xenco, LLC

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

Acceptable Temperature Range: 0 - 6 degC

IOS #: 74146

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: Cloe Clifton

Date Sent: 12.02.2020 02.04 PM

Received By: Jessica Kramer

Date Received: 12.03.2020 12.04 PM

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

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____

Contacted by : _____

Date: _____

Checklist reviewed by:

Jessica Kramer

Jessica Kramer

Date: 12.03.2020 _____

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 23556

CONDITIONS

Operator: PLAIN MARKETING L.P. 333 Clay St, Ste 1600 Houston, TX 77002	OGRID: 34053
	Action Number: 23556
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of 2020 ANNUAL GROUNDWATER MONITORING REPORT: Content satisfactory Contractor recommendations approved by OCD and are as follows; 1. Complete monthly MDPE events 2. Perform quarterly groundwater monitoring events in accordance with NMOCD directives 3. OCD approves request to reduces the sampling frequency from MW-12, MW-13, MW-14, and MW-15 to a semi-annual basis 4. Submit annual report to OCD no later than March 31,2022.	1/11/2022