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APPROVED
By Olivia Yu at 11:43 am, Jul 26, 2018

May 18, 2018

NMOCD approves of the additional site characterization and proposed groundwater monitoring wells for 1RP-1665, pending approval of NMOCD Hydrologist.

Olivia Yu
Environmental Specialist
New Mexico Oil Conservation Division, District 1
1625 N. French Drive
Hobbs, NM 88240

Re: Chevron Lovington Paddock Unit 96
2017 Site Assessment Report
Case No. RP-1665
Lea County, New Mexico

Dear Mr. Billings,

Please find enclosed for your files copies of the following report:

- Lovington Paddock Unit 96 – 2017 Site Assessment Report, Unit N, Section 3 – Township 16 South – Range 37, Lea County New Mexico.

The report was prepared by GHD Services (GHD) on behalf of Chevron Environmental Management Company (CEMC) to document on-going soil and groundwater assessment activities throughout 2017 at the Site.

Please do not hesitate to call Scott Foord with GHD at 713-734-3090 or myself at 713-372-0289, should you have any questions.

Sincerely,

Jason Michelson

Encl. Lovington Paddock Unit 96 – 2017 Site Assessment Report

C.C. Amy Barnhill, Chevron/MCBU

Site Assessment Report

Chevron Lovington Paddock Unit 96
RP-1665
Unit N, Section 3, Township 16 South, Range 37
Lea County, New Mexico

Chevron Environmental Management Company

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1. Introduction

On behalf of Chevron Environmental Management Company (CEMC), GHD Services Inc. (GHD) has prepared this report summarizing soil boring and monitoring well installation and sampling activities at the Lovington Paddock Unit (LPU) 96 site (hereafter referred to as the "Site"). The Site is located approximately 5 miles southeast of the City of Lovington in Unit N, Section 3, Township 16 South, Range 37 East, in Lea County, New Mexico. The land surface is owned by the City of Lovington. The location of the Site is presented on Figure 1 and Site details are shown on Figure 2.

2. Background

Chevron submitted a C-141 Form to the New Mexico Oil Conservation Division (NMOCD) dated November 19, 2007 reporting a release of 5 barrels of produced brine on November 16, 2007 from a polyethylene flow line. The released brine had a chloride concentration of 35,300 parts per million (ppm) and impacted surface soil in an approximate 30-ft diameter area. Remediation Permit (RP) 1665 was assigned to this release incident by the NMOCD Hobbs office.

Analytical results of surface soil samples collected by Tetra Tech at two locations on July 15, 2010 indicated no concentrations of total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene, and xylenes (BTEX); or chloride above laboratory detection limits. Results of trench samples collected at 1 to 2 feet below ground surface (bgs) from the same two locations on August 18, 2010 also indicated no detections of chloride.

On January 11, 2011, CEMC and GHD met with the NMOCD and discussed results of the previous assessment activities performed by Tetra Tech. Based on the topics discussed, GHD submitted a closure request report and a data information packet to the NMOCD on January 13, 2011. On April 13, 2011, NMOCD approved the proposed additional remedial activities included within the closure request report. From November 11 to 19, 2013, approximately 248 cubic yards of impacted soils were excavated from the impacted area and confirmatory soil samples were collected from eight locations (Figure 2). Analytical results from seven locations indicated exceedances of the Recommended Remedial Action Levels (RRALs) for BTEX, TPH and/or chlorides. Additional assessment activities were proposed that included the advancement of soil borings and, if the analytical results indicated potential for groundwater impacts, installation of groundwater monitoring wells.

On September 3 and 4, 2014, five soil borings (B-1 through B-5) were advanced outside of the former excavation area to depths ranging from 30 to 80 feet bgs. Soil analytical results for benzene and total BTEX in all borings were below the RRALs (10 and 50 milligrams per kilogram [mg/kg], respectively). TPH exceedances of the RRAL (100 mg/kg) extended to depths ranging from 5 to 10 feet bgs in two borings (B-1 and B-5, respectively), but were not detected at 40 feet bgs. Chloride exceeded the RRAL in soil samples extending down to at least 40 feet bgs in borings B-4 and B-5, and to at least 80 feet bgs in boring B-1. As such, the vertical extent of chloride impact was not confirmed and impact to groundwater was suspected.

Monitoring well MW-1 was installed adjacent to soil boring B-1 and sampled in October 2016. MW-1 was installed with mud-rotary drilling methods and no soil samples were collected during drilling activities. The groundwater sample was analyzed for BTEX by EPA Method 8021B and chloride by EPA Method 300. Detected constituents in groundwater consisted of benzene and chloride. Benzene was detected at a concentration of 0.00489 milligrams per liter (mg/L) which is below the 0.01 mg/L New Mexico Water Quality Control Commission (NMWQCC) standard for benzene. Chloride was detected at a concentration of 772 mg/L which exceeds the 250 mg/L NMWQCC standard for chloride.

Additional delineation activities were completed in 2017 that included the advancement of five (5) soil borings (SB-6 through SB-10) to 90 feet bgs. Four (4) additional monitoring wells (MW-2 through MW-5) were also installed to further assess groundwater (see Figure 2). Details of the assessment activities conducted in 2017 are provided below.

3. Remediation Standards

Soil

Information available on the Petroleum Recovery Research Center (PRRC) Mapping Portal, current (GHD) managed groundwater site(s) data, and the United States Geological Survey (USGS) Current Water Database for the Nation indicate:

- The depth to groundwater from the deepest impacted soil at the Site is less than 50-feet.
- The nearest private domestic water source is greater than 200-feet from the release site.
- The nearest public/municipal water source is greater than 1,000-feet from the release site.
- The release site lies more than 1,000 horizontal feet from the nearest surface water body.

The NMOCD provides guidance for remediation of contaminants of oil field wastes or products in Guidelines for Remediation of Leaks, Spills, and Releases (August 13, 1993). Consequently, the NMOCD total ranking criteria score is twenty (20) for the Site. The site-specific RRALs applied to this location by the NMOCD are 10 milligrams per kilogram (mg/kg) for benzene; 50 mg/kg for total benzene, toluene, ethylbenzene, and xylenes (BTEX); 100 mg/kg for total petroleum hydrocarbons (TPH); and an NMOCD accepted 600 mg/kg for horizontal and 250 mg/kg for vertical delineation of chlorides.

In an August 28, 2017 telephone conversation between Bernard Bockisch (GHD) and Jim Griswold (NMOCD Environmental Bureau Chief), GHD was informed that the NMOCD is accepting chloride concentrations of 600 mg/kg for the horizontal delineation assessment clean up levels.

Groundwater

The NMOCD provides guidance for remediation of contaminants of oil field wastes or products in Guidelines for Remediation of Leaks, Spills, and Releases (August 13, 1993). The guidance requires remediation of groundwater to the human health standards of the NMWQCC set forth in New Mexico Administrative Code 20.6.2.3103. Standards for BTEX and chloride are listed below.

Analyte	NMWQCC Groundwater Standard (mg/L)
Benzene	0.01
Toluene	0.75
Ethylbenzene	0.75
Total Xylenes	0.62
Chloride	250

NMWQCC groundwater standards do not include TPH.

4. Geophysical Survey – EM31

In September 2017, GHD completed a geophysical investigation at the Site. The purpose of the investigation was to delineate areas of elevated conductivity in order to map the extent of suspected chloride impacts to soil at the Site. The investigation consisted of an electromagnetic (EM) survey to delineate the footprint of the suspected impacts.

The EM survey was completed with an EM31 terrain conductivity meter. Prior to conducting the EM31 survey, a grid consisting of parallel lines was established over the proposed area of investigation indicated on Figure 3. Measurements of EM31 data were collected along 30-foot spaced grid lines over the area of investigation, with station spacings of approximately 4 feet on all grid lines.

4.1 EM31 Survey Methodology

The EM31 survey was completed to determine the horizontal extent or limits of chloride impacts in the shallow subsurface soils at the Site. The EM31 consists of transmitter and receiver coils located at opposite ends of a rigid boom. The coil separation for the EM31 is approximately 13 feet, which yields an approximate depth of penetration of 18 feet bgs in vertical dipole mode. Measurements of terrain conductivity from the EM31 were used to assess the extent of chloride impacts at the Site. The data for the EM31 survey were then processed as a colored contour plot. The plot was superimposed on an aerial image of the Site plan, and was used to locate elevated conductivity responses indicative of chloride-impacted areas relative to the Site features. Figure 3 depicts the EM31 survey results.

4.2 EM31 Survey Results

The colored contour conductivity plot presented on Figure 3 reveals that the highest intensity conductivity responses are colored red to purple, while areas of low response are colored blue. All remaining intermediate responses correspond to the color scale presented on the figure. Results from non-impacted areas within the survey coverage indicate that background conductivity responses were approximately 20 milliSiemens/meter (mS/m). Anomalous responses relative to background were generally 1.5 to 5 times higher, and ranged from approximately 30 to 100 mS/m within the assessment area. The EM31 survey results delineated one area on the west side of the Site with elevated responses. The anomalous area to the west will be investigated further.

4.3 Geophysical Survey Correlations/Conclusions

The geophysical investigation successfully delineated the horizontal extent of suspected brine-impacted areas in the shallow subsurface to the north, east, and south, but further investigation is warranted to the west.

5. 2017 Soil Assessment

In order to further define the horizontal extent of chloride impact, five (5) additional soil borings (SB-6 through SB-10) were advanced at the Site in October 2017. Site details and boring locations are shown on Figure 2. Prior to mobilizing drilling equipment to the Site, the boring locations were marked and utility notifications were submitted. Ground penetrating radar (GPR) survey activities were also conducted across the Site for additional utility clearance. The boring locations were cleared with a hydroexcavator to a depth of approximately 3 feet bgs before refusal was encountered. An air-rotary drilling rig operated by GHD subcontractor Harrison & Cooper, Inc. (HCI), a New Mexico-licensed water well driller, advanced the five (5) borings to total depths of 90 feet bgs. During drilling, a GHD geologist observed, visually inspected, and logged soil cuttings at 10-foot intervals and recorded subsurface lithology on boring logs.

Chloride screening was accomplished in the field by mixing soil samples with distilled water, then testing the rinsate using Hach chloride test strips. The soil types observed during drilling of SB-6 through SB-10 and MW-2 through MW-5 consisted primarily of caliche and light brown silty sands. The soils were logged in accordance with the Unified Soil Classification System, and soil boring logs prepared from this information are provided in Appendix A.

Soil samples were collected from each boring at 10-foot intervals beginning at the surface (0-1 foot bgs). The samples were screened with a photoionization detector (PID), placed into laboratory-supplied jars and stored in a cooler with ice. The soil samples were sent to Xenco Laboratories (Xenco) in Midland, Texas for analysis of BTEX by EPA Method SW 8260B, chlorides by EPA Method 300, and TPH by EPA Method SW8015 Modified.

5.1 Soil Analytical Results

Analytical results are summarized in Table 1 and the distribution of analytical results is presented in map view on Figure 4. Soil analytical results for benzene and total BTEX in all borings were below the RRALs (10 and 50 mg/kg, respectively). A TPH exceedance of the RRAL (100 mg/kg) extended to a depth of 4-5 feet bgs in SB-6, but was not detected beyond 9-10 feet bgs. TPH was also detected in shallow soil samples collected from SB-8, SB-9, and SB-10 (see Table 1). Chloride concentrations in SB-6 ranged from 25.4 mg/kg (surface) to 1,290 mg/kg (69–70 feet bgs), and exceeded the RRAL (250 mg/kg) from 59-60 feet bgs to the terminal depth at 90 feet bgs. SB-7 exceeded the chloride RRAL at 9-10 feet bgs (597 mg/kg). RRAL exceedances for chloride were not reported in SB-8 or SB-9. Samples from SB-10 exceeded the RRAL for chloride at 0.5-1 feet bgs (762 mg/kg), 9-10 feet bgs (421 mg/kg), and 19-20 feet bgs (335 mg/kg).

RRAL exceedances for chloride were detected in three monitoring wells: MW-2 at 39-40 feet bgs (288 mg/kg); MW-3 at 4-5 feet bgs (327 mg/kg); and MW-4 at 59-60 feet bgs (289 mg/kg) and 79-80 feet bgs (79-80). TPH exceedances were reported for shallow soil samples collected from MW-2

through MW-5 (see Table 1). A TPH exceedance of the RRAL was reported for MW-3 at 9-10 feet bgs (2,608 mg/kg) and at 19-20 feet bgs (4,814 mg/kg), but concentrations were below the RRAL by 39-40 feet bgs and non-detect by 69-70 feet bgs. An additional TPH exceedance of the RRAL was reported for MW-4 at 4-5 feet bgs (4,260 mg/kg), but concentrations quickly diminished and were non-detect by 29-30 feet bgs.

The laboratory analytical reports are provided in Appendix B.

6. 2017 Groundwater Assessment

To further evaluate potential chloride impact to groundwater, four (4) additional monitoring wells (MW-2 through MW-5) were installed in October 2017.

6.1 Monitoring Well Installation

Monitoring wells MW-2 through MW-5 were installed on October 27-29, 2017 to further assess chloride impact to groundwater to the north, east, west, and south of MW-1 (Figure 2). Prior to mobilizing drilling equipment to the Site, the boring locations were marked and utility notifications were submitted. GPR survey activities were also conducted across the Site for additional utility clearance. Each monitoring well location was cleared with an air knife to a depth of approximately 3 feet bgs before refusal was encountered. An air-rotary drilling rig operated by GHD subcontractor HCI advanced each monitoring well to total depths ranging from 115 to 120 feet bgs. During drilling, a GHD geologist observed, visually inspected, and logged soil cuttings at 10-foot intervals and recorded subsurface lithology on boring logs.

The four monitoring wells (MW-2 through MW-5) were completed with two-inch diameter, schedule 40 polyvinyl chloride (PVC) casing, 30 feet of 0.010-inch PVC slotted screen, a 20/40 sand filter pack overlain by a 2-foot bentonite seal, and bentonite grout extending up to 10 feet bgs, and riser casing extending above the ground surface. The wells were completed at the surface with a stick-up protective casing set in an approximate 2 foot by 2 foot concrete pad. The wells were developed by bailing, followed by pumping as described below.

Preliminary gauging data indicated that groundwater was present at approximately 99 feet below the top of casing. The wells were developed by removal of sufficient volumes of water to clear the well casing and annulus of sediment. Turbid water was removed with 2-inch diameter bailers. Following bailing, well development was completed by pumping at approximately 9 gallons per minute with a submersible pump. Approximately 300 gallons of water were removed from each well during well development.

The boring logs, well construction diagrams, and the State Well Reports are provided in Appendix A. The monitoring wells were professionally surveyed by the State licensed Surveyor, West Company of Midland, Texas, in December 2017.

Soil cuttings, drilling fluids and well development water were contained in a lined mudbox. The drill cuttings/fluids and development water were transported as exploration and production (E&P) exempt waste to Sundance Services, Inc. near Eunice, New Mexico. Waste management documentation is provided in Appendix C.

6.2 Groundwater Sampling

Groundwater gauging was conducted and the vertical conductivity profiled throughout the entire water column of each of the monitoring wells (MW-1 through MW-5) prior to groundwater sampling activities. The water levels were measured to the nearest hundredth of a foot, and conductivity was measured at 5-foot intervals within the water column. The fluid levels were measured from the permanent reference point on the top of the casing in each well, or from the north side of the top of the casing where no permanent reference point had been marked.

Low-flow purging techniques were used prior to sampling. During purging, the flow rate was adjusted to approximately 100 milliliters per minute in order to achieve minimal drawdown from the static water level. Temperature, oxidation reduction potential (ORP), pH, conductivity, and dissolved oxygen (DO) were monitored during purging. Purging continued until at least three of these parameters remained stabilized within a 10 percent range during three consecutive measurements. A groundwater sample was then collected in a laboratory-supplied container, labeled, and chilled on ice in an insulated cooler to maintain a temperature of 40°F (4°C) or lower. Field equipment was decontaminated with a Liquinox™ wash and distilled water rinse before beginning field activities and between wells.

Groundwater samples were submitted to Xenco Laboratories in Midland, Texas for analysis of BTEX by EPA Method 8021B, TPH diesel range organics (DRO)/gasoline range organics (GRO) by EPA Method SW8015B, chlorides by EPA Method 300, and total dissolved solids (TDS) by Method SM2540C. Chain of custody documentation was maintained throughout the sample collection and delivery process. Analyses were completed within required holding times.

6.3 Groundwater Gradient

Groundwater level measurements collected during December 2017 gauging event are summarized in Table 2. The potentiometric surface map for the December 2017 gauging event is presented on Figure 5.

Groundwater elevations during the groundwater gauging event ranged from 3718.52 feet above mean sea level (feet msl) in MW-4 to 3718.39 feet above msl in MW-5, a difference of 0.13 feet across the Site with an average gradient of 0.0006 ft/ft toward the southeast.

6.4 Groundwater Analytical results

Groundwater analytical results for BTEX, TPH, chloride, and TDS are summarized in Table 3 for both 2016 and 2017 sampling events in reference to NMWQCC standards. Constituents detected above NMWQCC standards consisted of benzene, chloride, and TDS in MW-1 (central portion of Site) and MW-4 (west boundary).

- Benzene exceeded the 0.01 mg/L standard in MW-1 and MW-4 at 0.0421 mg/L and 0.381 mg/L, respectively in 2017. Benzene was detected below the screening level in MW-2, MW-3 and MW-5.
- Chloride exceeded the 250 mg/L standard in two wells; MW-1 at 772 mg/L (2016) and 523 mg/L (2017) and MW-4 at 1,020 mg/L (2017), respectively. Chloride was detected below or at the screening level in MW-2, MW-3 and MW-5.

- TDS exceeded the 1,000 mg/L standard in MW-1 and MW-4 at 1,450 mg/L and 2,140 mg/L, respectively.
- Ethylbenzene was detected below the NMWQCC standard in MW-1 and reported below the detection limits in MW-2, MW-3, MW-4, and MW-5. Detections of toluene, ethylbenzene, xylenes, and TPH were reported below NMWQCC standards in MW-4 and below the detection limits for MW-1 through MW-3 and MW-5.

The detected constituents in groundwater are presented in map view on Figure 6. The laboratory analytical report is provided in Appendix B.

7. Summary of Findings

Findings of the soil and groundwater assessment activities conducted at the Site in 2017 are summarized below:

- Soil analytical results for benzene and total BTEX in all borings were below the RRALs (10 and 50 mg/kg, respectively).
- TPH exceeded the RRAL (100 mg/kg) in shallow soil samples collected from SB-6, SB-8, SB-9, SB-10, MW-2, MW-3, MW-4, and MW-5 at concentrations ranging from 121 mg/kg (MW-4) to 4,814 mg/kg (MW-3). The deepest TPH exceedance was reported for MW-3 at 29-30 feet bgs, and all remaining soil samples to depth (90 feet bgs) were below the RRAL or non-detect.
- Chloride concentrations in SB-6 ranged from 25.4 mg/kg (surface) to 1,290 mg/kg (69–70 feet bgs) and exceeded the vertical RRAL of 250 mg/kg from 59-60 feet bgs to the terminal depth at 90 feet bgs. Samples from SB-10 exceeded the RRAL for chloride at 0.5-1 feet bgs (762 mg/kg), 9-10 feet bgs (421 mg/kg), and 19-20 feet bgs (335 mg/kg). Chloride concentrations in soil samples above the RRAL were reported in three monitoring wells: MW-2 at 39-40 feet bgs (288 mg/kg); MW-3 at 4-5 feet bgs (327 mg/kg); and MW-4 at 59-60 feet bgs (289 mg/kg) and 79-80 feet bgs (79-80). SB-7 exceeded the RRAL for chloride at 9-10 feet bgs (597 mg/kg). The RRAL for chloride was exceeded in MW-3 at 4-5 feet bgs (327 mg/kg). Chloride concentrations above the RRAL were not reported in SB-8, SB-9, or within MW-5.
- Groundwater elevations during the December 2017 groundwater monitoring event ranged from 3718.52 feet msl in MW-4 to 3718.39 feet msl in MW-5, a difference of 0.13 feet across the Site with an average gradient of 0.0006 ft/ft toward the southeast.
- Benzene, chloride, and TDS concentrations exceeded NMWQCC standards in two (MW-1 and MW-4) of the five monitoring wells.

The analytical data obtained from the assessment and delineation activities performed in 2017 indicates the horizontal extent of TPH and chloride impacts in soil are not delineated. The horizontal extent of chloride impact is not yet defined to the west of the Site. Benzene, TDS, and chloride exceed the NMWQCC standards in groundwater samples collected from MW-1 and MW-4. As such, additional activities to further assess groundwater impacts are warranted at the Site.

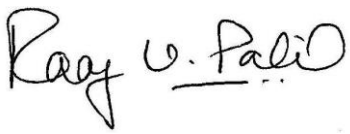
8. 2018 Assessment Activities

On February 13, 2018, GHD and Chevron representatives met with NMOCD and New Mexico State Land Office (NMSLO) to discuss further assessment activities addressing the presence of TPH, BTEX, chloride, and TDS concentrations at the Site. Additional assessment activities will be summarized in a Work Plan and submitted to NMOCD for review.

Submitted by:

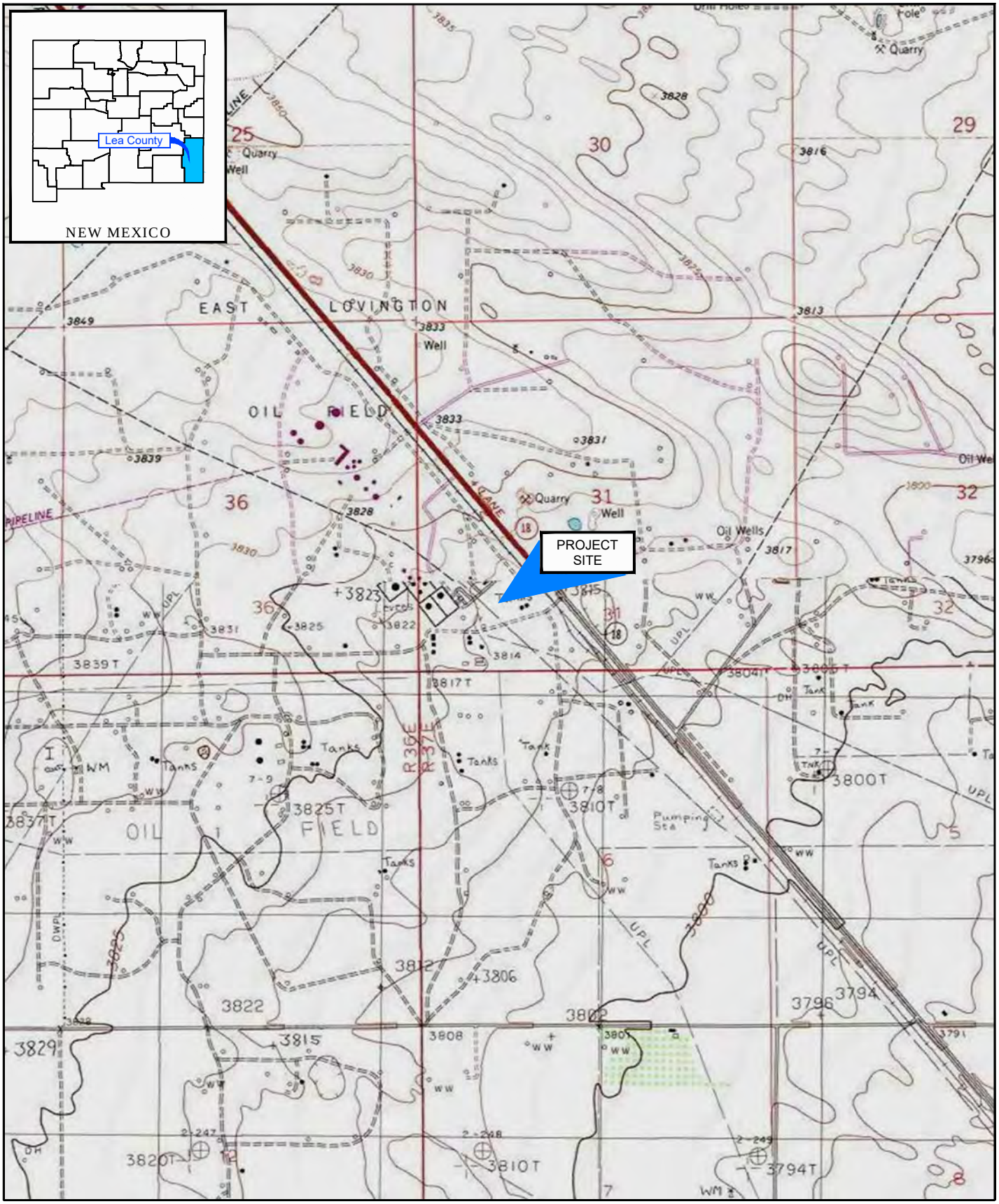
GHD Services, Inc.

Scott Foord, P.G., Project Manager



Raaj U. Patel, P.G., Senior Project Manager

Figures



Source: USGS 7.5 Minute Quad "Lovington SE and Lovington, New Mexico"

Lat/Long: 32.874112° North, 103.295337° West

0 1000 2000ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

CEMC
LEA COUNTY, NEW MEXICO
LOVINGTON PADDOCK UNIT 96

073816-00

Apr 10, 2018

SITE LOCATION MAP

FIGURE 1

CAD File: I:\CAD\Files\07----\073---\073816-Chevron-LPU #96\073816-00\073816-00(007)\073816-00(007)GN-DL001.dwg

Source: USGS 7.5 Minute Quad "Lovington SE and Lovington, New Mexico"

Lat/Long: 32.874112° North, 103.295337° West

0 15 30ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

CEMC
LEA COUNTY, NEW MEXICO
LOVINGTON PADDOCK UNIT 96

073816-00

Apr 10, 2018

SITE DETAILS MAP

FIGURE 2

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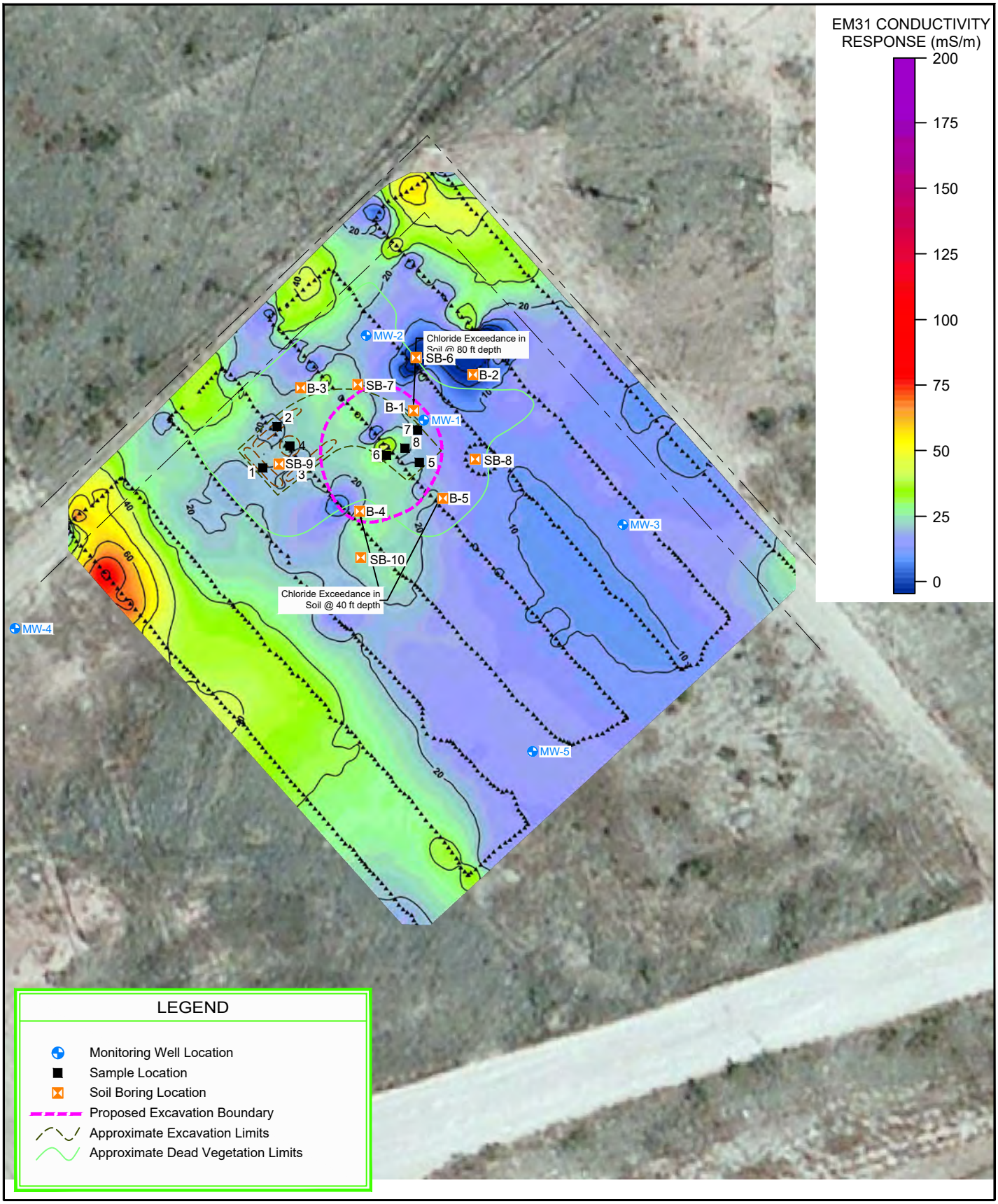

Source: Image courtesy of ImagePatch.com © Microsoft Corporation

0 30 60ft

Coordinate System:
NAD 83 STATE PLANE -
NEW MEXICO EAST (US FEET)

CEMC
LEA COUNTY, NEW MEXICO
LOVINGTON PADDOCK UNIT 96

73816-2017
Feb 7, 2018

EM31 GEOPHYSICAL SURVEY MAP

FIGURE 3

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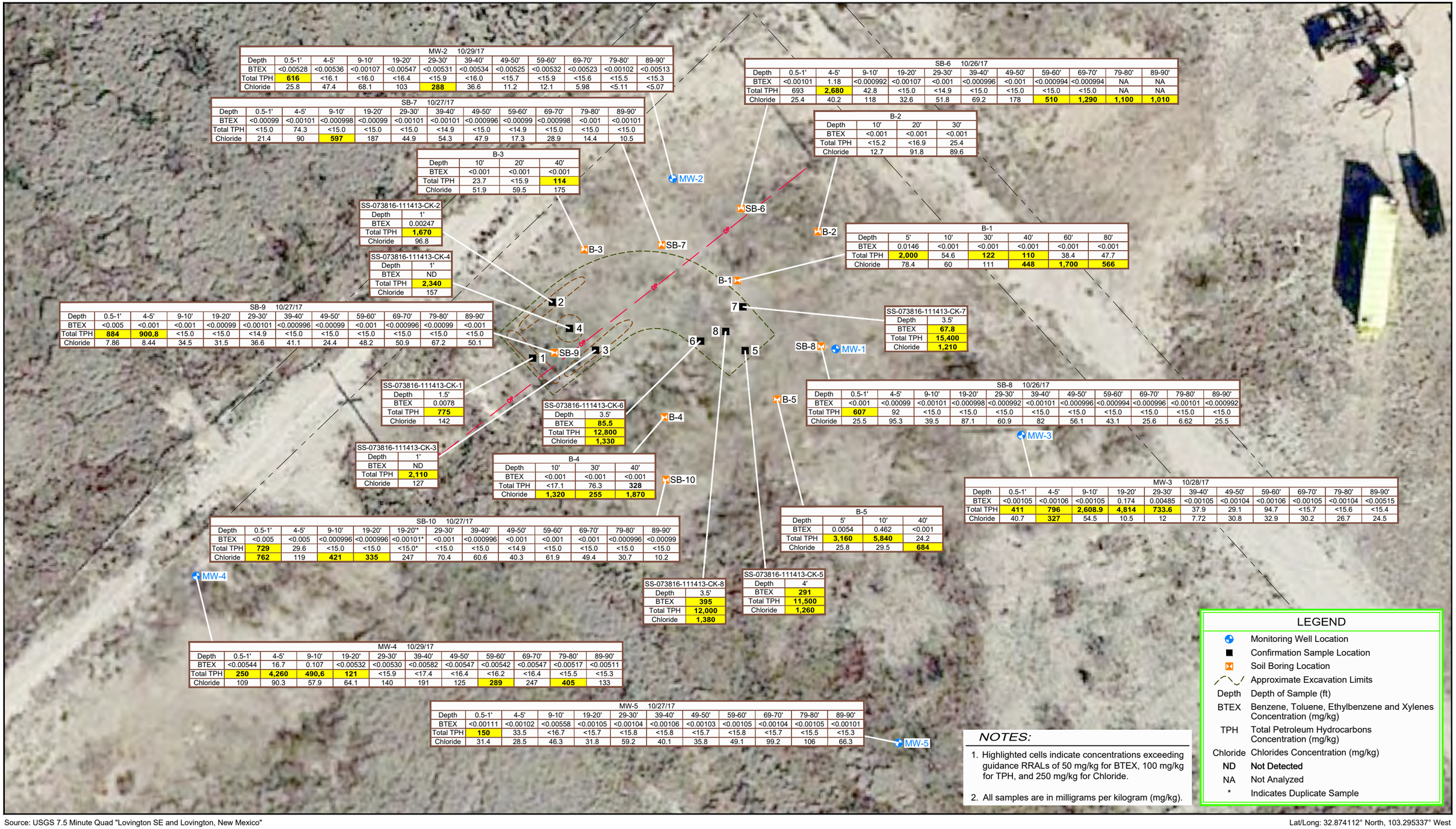

MW-2 10/29/17

Depth	0.5-1'	4-5'	9-10'	19-20'	29-30'	39-40'	49-50'	59-60'	69-70'	79-80'	89-90'
BTEX	<0.00528	<0.00536	<0.00107	<0.00547	<0.00531	<0.00534	<0.00525	<0.00532	<0.00523	<0.00102	<0.00513
Total TPH	**616**	<16.1	<16.0	<16.4	<15.9	<16.0	<15.7	<15.9	<15.6	<15.5	<15.3
Chloride	25.8	47.4	68.1	103	**288**	36.6	11.2	12.1	5.98	<5.11	<5.07

SB-7 10/27/17

Depth	0.5-1'	4-5'	9-10'	19-20'	29-30'	39-40'	49-50'	59-60'	69-70'	79-80'	89-90'
BTEX	<0.00099	<0.00101	<0.000998	<0.00099	<0.00101	<0.00101	<0.000996	<0.00099	<0.000998	<0.001	<0.00101
Total TPH	<15.0	74.3	<15.0	<15.0	<15.0	<14.9	<15.0	<14.9	<15.0	<15.0	<15.0
Chloride	21.4	90	**597**	187	44.9	54.3	47.9	17.3	28.9	14.4	10.5

B-3

Depth	10'	20'	40'
BTEX	<0.001	<0.001	<0.001
Total TPH	23.7	<15.9	**114**
Chloride	51.9	59.5	175

SS-073816-111413-CK-2

Depth	1'
BTEX	0.00247
Total TPH	**1,670**
Chloride	96.8

SS-073816-111413-CK-4

Depth	1'
BTEX	ND
Total TPH	**2,340**
Chloride	157

SB-9 10/27/17

Depth	0.5-1'	4-5'	9-10'	19-20'	29-30'	39-40'	49-50'	59-60'	69-70'	79-80'	89-90'
BTEX	<0.005	<0.001	<0.001	<0.00099	<0.00101	<0.000996	<0.00099	<0.001	<0.000996	<0.00099	<0.001
Total TPH	**884**	**900.8**	<15.0	<15.0	<14.9	<15.0	<15.0	<15.0	<15.0	<15.0	<15.0
Chloride	7.86	8.44	34.5	31.5	36.5	41.1	24.4	48.2	50.9	67.2	50.1

SS-073816-111413-CK-1

Depth	1.5'
BTEX	0.0078
Total TPH	**775**
Chloride	142

SS-073816-111413-CK-3

Depth	1'
BTEX	ND
Total TPH	**2,110**
Chloride	127

SS-073816-111413-CK-6

Depth	3.5'
BTEX	**85.5**
Total TPH	**12,800**
Chloride	**1,330**

B-4

Depth	10'	30'	40'
BTEX	<0.001	<0.001	<0.001
Total TPH	<17.1	76.3	**328**
Chloride	**1,320**	**255**	**1,870**

SB-10 10/27/17

Depth	0.5-1'	4-5'	9-10'	19-20'	19-20'*	29-30'	39-40'	49-50'	59-60'	69-70'	79-80'	89-90'
BTEX	<0.005	<0.005	<0.000996	<0.000996	<0.00101*	<0.001	<0.000996	<0.001	<0.001	<0.001	<0.000996	<0.00099
Total TPH	**729**	29.6	<15.0	<15.0	<15.0*	<15.0	<15.0	<14.9	<15.0	<15.0	<15.0	<15.0
Chloride	**762**	119	**421**	**335**	247	70.4	60.6	40.3	61.9	49.4	30.7	10.2

SS-073816-111413-CK-8

Depth	3.5'
BTEX	**395**
Total TPH	**12,000**
Chloride	**1,380**

SS-073816-111413-CK-5

Depth	4'
BTEX	**291**
Total TPH	**11,500**
Chloride	**1,260**

MW-4 10/29/17

Depth	0.5-1'	4-5'	9-10'	19-20'	29-30'	39-40'	49-50'	59-60'	69-70'	79-80'	89-90'
BTEX	<0.00544	16.7	0.107	<0.00532	<0.00530	<0.00582	<0.00547	<0.00542	<0.00547	<0.00517	<0.00511
Total TPH	**250**	**4,260**	**490.6**	**121**	<15.9	<17.4	<16.4	<16.2	<16.4	<15.5	<15.3
Chloride	109	90.3	57.9	64.1	140	191	125	**289**	247	**405**	133

MW-5 10/27/17

Depth	0.5-1'	4-5'	9-10'	19-20'	29-30'	39-40'	49-50'	59-60'	69-70'	79-80'	89-90'
BTEX	<0.00111	<0.00102	<0.00558	<0.00105	<0.00104	<0.00106	<0.00103	<0.00105	<0.00104	<0.00105	<0.00101
Total TPH	**150**	33.5	<16.7	<15.7	<15.8	<15.8	<15.7	<15.8	<15.7	<15.5	<15.3
Chloride	31.4	28.5	46.3	31.8	59.2	40.1	35.8	49.1	99.2	106	66.3

SB-6 10/26/17

Depth	0.5-1'	4-5'	9-10'	19-20'	29-30'	39-40'	49-50'	59-60'	69-70'	79-80'	89-90'
BTEX	<0.00101	1.18	<0.000992	<0.00107	<0.001	<0.000996	<0.001	<0.000994	<0.000994	NA	NA
Total TPH	693	**2,680**	42.8	<15.0	<14.9	<15.0	<15.0	<15.0	<15.0	NA	NA
Chloride	25.4	40.2	118	32.6	51.8	69.2	178	**510**	**1,290**	**1,100**	**1,010**

B-2

Depth	10'	20'	30'
BTEX	<0.001	<0.001	<0.001
Total TPH	<15.2	<16.9	25.4
Chloride	12.7	91.8	89.6

B-1

Depth	5'	10'	30'	40'	60'	80'
BTEX	0.0146	<0.001	<0.001	<0.001	<0.001	<0.001
Total TPH	**2,000**	54.6	**122**	**110**	38.4	47.7
Chloride	78.4	60	111	**448**	**1,700**	**566**

SS-073816-111413-CK-7

Depth	3.5'
BTEX	**67.8**
Total TPH	**15,400**
Chloride	**1,210**

SB-8 10/26/17

Depth	0.5-1'	4-5'	9-10'	19-20'	29-30'	39-40'	49-50'	59-60'	69-70'	79-80'	89-90'
BTEX	<0.001	<0.00099	<0.00101	<0.000998	<0.000992	<0.00101	<0.000996	<0.000994	<0.000996	<0.00101	<0.000992
Total TPH	**607**	92	<15.0	<15.0	<15.0	<15.0	<15.0	<15.0	<15.0	<15.0	<15.0
Chloride	25.5	95.3	39.5	87.1	60.9	82	56.1	43.1	25.6	6.62	25.5

B-5

Depth	5'	10'	40'
BTEX	0.0054	0.462	<0.001
Total TPH	**3,160**	**5,840**	24.2
Chloride	25.8	29.5	**684**

MW-3 10/28/17

Depth	0.5-1'	4-5'	9-10'	19-20'	29-30'	39-40'	49-50'	59-60'	69-70'	79-80'	89-90'
BTEX	<0.00105	<0.00106	<0.00105	0.174	0.00485	<0.00105	<0.00104	<0.00106	<0.00105	<0.00104	<0.00515
Total TPH	**411**	**796**	**2,608.9**	**4,814**	**733.6**	37.9	29.1	94.7	<15.7	<15.6	<15.4
Chloride	40.7	**327**	54.5	10.5	12	7.72	30.8	32.9	30.2	26.7	24.5

LEGEND

	Monitoring Well Location
	Confirmation Sample Location
	Soil Boring Location
	Approximate Excavation Limits
Depth	Depth of Sample (ft)
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes Concentration (mg/kg)
TPH	Total Petroleum Hydrocarbons Concentration (mg/kg)
Chloride	Chlorides Concentration (mg/kg)
ND	**Not Detected**
NA	Not Analyzed
*	Indicates Duplicate Sample

NOTES:

1. Highlighted cells indicate concentrations exceeding guidance RRALs of 50 mg/kg for BTEX, 100 mg/kg for TPH, and 250 mg/kg for Chloride.
2. All samples are in milligrams per kilogram (mg/kg).

Source: USGS 7.5 Minute Quad "Lovington SE and Lovington, New Mexico"

Lat/Long: 32.874112° North, 103.295337° West

0 15 30ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

Sample ID — SS-073816-111413-CK-3
Constituent — BTEX: ND; Total TPH: **2,110**; Chloride: 127
Sample Depth — Depth: 1'
Yellow shade and Bold Indicate Exceedance
Result (mg/kg)

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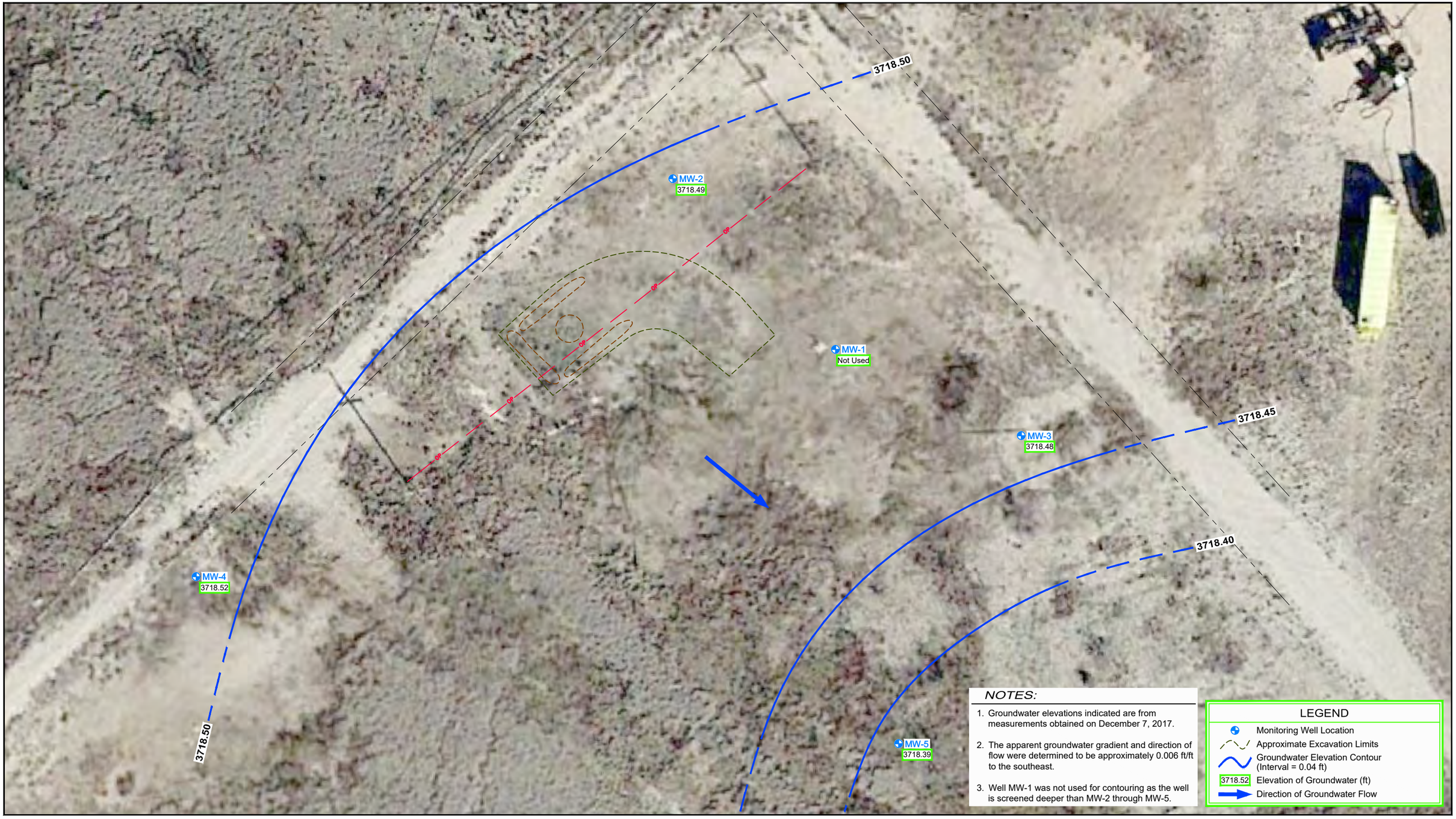
LEA COUNTY, NEW MEXICO
LOVINGTON PADDOCK UNIT 96

073816-00
Apr 10, 2018

BTEX, TPH, AND CHLORIDE CONCENTRATIONS IN SOILS

FIGURE 4

CAD File: I:\CAD\Files\07----\073---\073816-Chevron-LPU #96\073816-00\073816-00(007)\073816-00(007)GN-DL001.dwg



Source: USGS 7.5 Minute Quad "Lovington SE and Lovington, New Mexico"

Lat/Long: 32.874112° North, 103.295337° West

0 15 30ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

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LEA COUNTY, NEW MEXICO
LOVINGTON PADDOCK UNIT 96

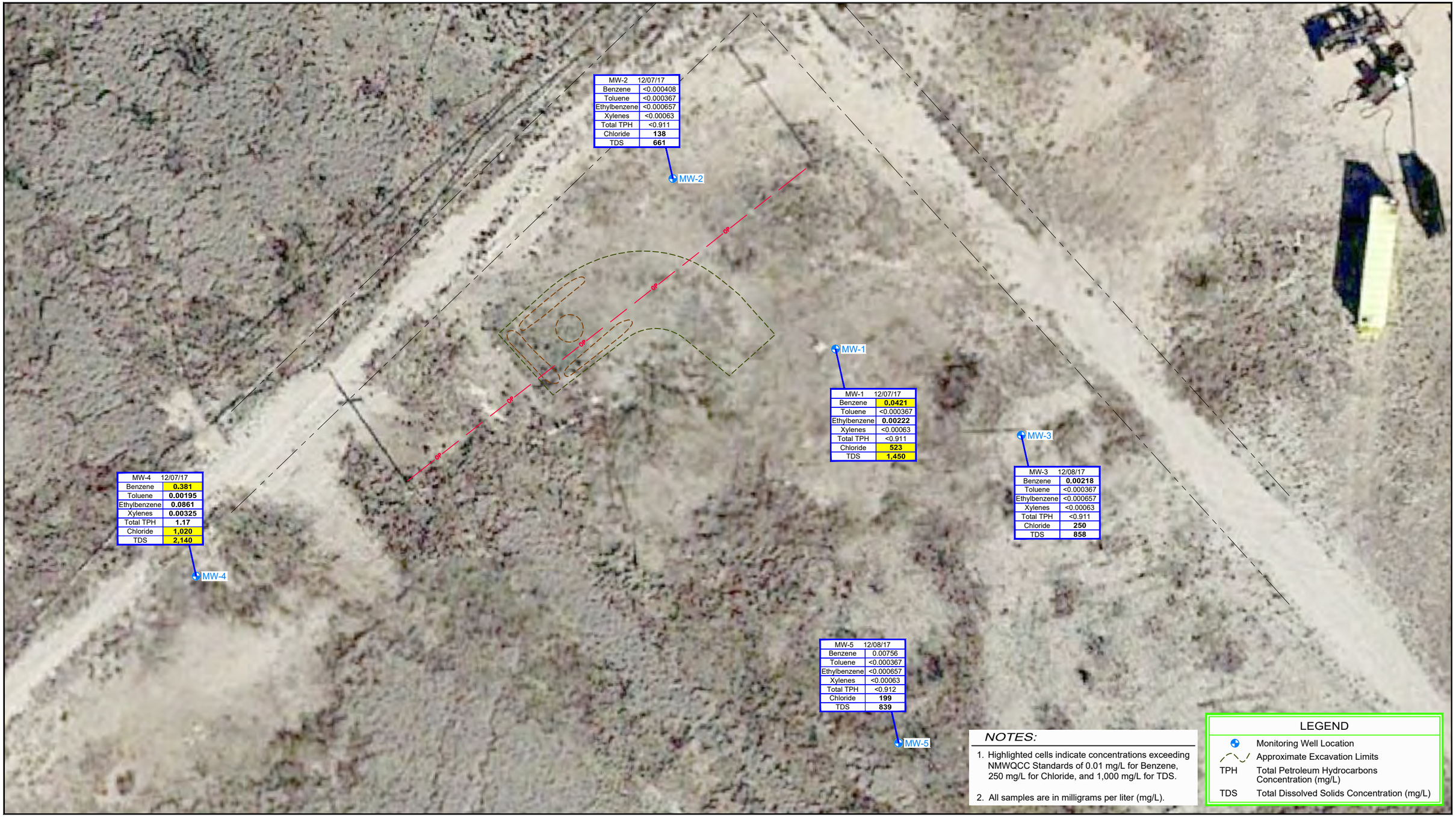
073816-00

Apr 10, 2018

POTENTIOMETRIC SURFACE MAP - DECEMBER 2017

FIGURE 5

CAD File: I:\CAD\Files\07----\073---\073816-Chevron-LPU #96\073816-00\073816-00(007)\073816-00(007)GN-DL001.dwg



Source: USGS 7.5 Minute Quad "Lovington SE and Lovington, New Mexico"

Lat/Long: 32.874112° North, 103.295337° West

0 15 30ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

Sample ID — MW-1 12/07/17 — Sample Depth
Constituent — Benzene 0.0421
Toluene <0.000367
Ethylbenzene 0.00222 — Result (mg/L)
Xylenes <0.00063
Total TPH <0.911
Chloride 523 — Yellow shade and Bold Indicate Exceedance
TDS 1,450

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LOVINGTON PADDOCK UNIT 96

BTEX, TPH, CHLORIDE, AND TDS CONCENTRATIONS IN GROUNDWATER

073816-00

Apr 10, 2018

FIGURE 6

CAD File: I:\CAD\Files\07----\073---\073816-Chevron-LPU #96\073816-00\073816-00(007)\073816-00(007)GN-DL001.dwg

Tables

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LOVINGTON PADDOCK UNIT 96
LEA COUNTRY, NEW MEXICO

Sample ID	Depth (feet)	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	TPH				Chloride
								TPH-GRO	TPH-DRO	TPH-ORO	Total	
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NMOCD Recommended Remediation Action Levels (Total Ranking Score = 10)												
			10	**--**	**--**	**--**	**50**	**--**	**--**	**--**	**100**	**250**
AH-1*	0-0.5	7/15/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 2.00	< 50.0	--	< 50.0	< 200
AH-2*	0-0.5	7/15/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 2.00	< 50.0	--	< 50.0	< 200
T-1*	1.5-2	8/18/2010	--	--	--	--	--	--	--	--	--	< 200
T-2*	1.5-2	8/18/2010	--	--	--	--	--	--	--	--	--	< 200
November 2013 Excavation	1.5	11/14/2013	< 0.0011	< 0.0021	0.004	0.0038	0.0078	21	675	79.4	**775**	142
	1	11/14/2013	< 0.001	< 0.0021	0.0025	< 0.001	0.00247	18.5	1480	170	**1670**	96.8
	1	11/14/2013	< 0.0011	< 0.0021	< 0.0011	< 0.0011	< 0.0011	28	1890	192	**2110**	127
	1	11/14/2013	< 0.0011	< 0.0021	< 0.0011	< 0.0011	< 0.0011	19.7	2130	191	**2340**	157
	4	11/14/2013	0.588	9.53	146	134	**291**	3300	7290	882	**11500**	**1260**
	3.5	11/14/2013	0.129	6.77	17.6	61	**85.5**	3230	8560	1050	**12800**	**1330**
	3.5	11/14/2013	1.09	2.43	33.2	31.1	**67.8**	4150	10100	1120	**15400**	**1210**
	3.5	11/14/2013	1.26	62.9	161	170	**395**	3430	7700	843	**12000**	**1380**
B-1	5	9/3/2014	< 0.001	< 0.002	< 0.001	0.0146	0.0146	57.2	1860	--	**2000**	78.4
	10	9/3/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.8	54.6	--	54.6	60
	30	9/3/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.5	122	--	**122**	111
	40	9/3/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.7	110	--	**110**	**448**
	60	9/4/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.4	38.4	--	38.4	**1700**
	80	9/4/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.6	47.7	--	47.7	**566**
B-2	10	9/4/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.2	< 15.2	--	< 15.2	12.7
	20	9/4/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.9	< 16.9	--	< 16.9	91.8
	30	9/4/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.5	25.4	--	25.4	89.6
B-3	10	9/4/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.2	23.7	--	23.7	51.9
	20	9/4/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.9	< 15.9	--	< 15.9	59.5
	40	9/4/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.9	114	--	**114**	175
B-4	10	9/4/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.1	< 17.1	--	< 17.1	**1320**
	30	9/4/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.1	76.3	--	76.3	**255**
	40	9/4/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.2	328	--	**328**	**1870**
B-5	5	9/4/2014	< 0.001	< 0.002	< 0.001	0.0054	0.0054	177	2770	--	**3160**	25.8
	10	9/4/2014	0.00368	0.0151	0.354	0.0891	0.462	534	5180	--	**5840**	29.5
	40	9/4/2014	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.0	24.2	--	24.2	**684**
SB-6	0.5-1	10/26/2017	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 14.9	693	--	**693**	25.4
	4-5	10/26/2017	< 0.0248	< 0.0248	0.452	0.724	1.18	310	2370	--	**2680**	40.2
	9-10	10/26/2017	< 0.000992	< 0.000992	< 0.000992	< 0.000992	< 0.000992	<14.9	42.8	--	42.8	118
	19-20	10/26/2017	< 0.00107	< 0.00107	< 0.00107	< 0.00107	< 0.00107	< 15.0	< 15.0	--	< 15.0	32.6
	29-30	10/26/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<14.9	<14.9	--	< 14.9	51.8
	39-40	10/26/2017	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 15.0	< 15.0	--	< 15.0	69.2
	49-50	10/26/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 15.0	< 15.0	--	< 15.0	178
	59-60	10/26/2017	< 0.000994	< 0.000994	< 0.000994	< 0.000994	< 0.000994	< 15.0	< 15.0	--	< 15.0	**510**
	69-70	10/26/2017	< 0.000994	< 0.000994	< 0.000994	< 0.000994	< 0.000994	< 15.0	< 15.0	--	< 15.0	**1290**
	79-80	10/26/2017	--	--	--	--	--	--	--	--	--	**1100**
	89-90	10/26/2017	--	--	--	--	--	--	--	--	--	**1010**

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LOVINGTON PADDOCK UNIT 96
LEA COUNTRY, NEW MEXICO

Sample ID	Depth (feet)	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	TPH				Chloride
								TPH-GRO	TPH-DRO	TPH-ORO	Total	
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NMOCD Recommended Remediation Action Levels (Total Ranking Score = 10)												
			10	**--**	**--**	**--**	**50**	**--**	**--**	**--**	**100**	**250**
SB-7	0.5-1	10/27/2017	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 15.0	< 15.0	--	< 15.0	21.4
	4-5	10/27/2017	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 15.0	74.3	--	74.3	90
	9-10	10/27/2017	< 0.000998	< 0.000998	< 0.000998	< 0.000998	< 0.000998	< 15.0	< 15.0	--	< 15.0	**597**
	19-20	10/27/2017	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 15.0	< 15.0	--	< 15.0	187
	29-30	10/27/2017	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 15.0	< 15.0	--	< 15.0	44.9
	39-40	10/27/2017	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 14.9	< 14.9	--	< 14.9	54.3
	49-50	10/27/2017	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 15.0	< 15.0	--	< 15.0	47.9
	59-60	10/27/2017	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 14.9	< 14.9	--	< 14.9	17.3
	69-70	10/27/2017	< 0.000998	< 0.000998	< 0.000998	< 0.000998	< 0.000998	< 15.0	< 15.0	--	< 15.0	28.9
	79-80	10/27/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 15.0	< 15.0	--	< 15.0	14.4
	89-90	10/27/2017	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 15.0	< 15.0	--	< 15.0	10.5
SB-8	0.5-1	10/26/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 15.0	607	--	**607**	25.5
	4-5	10/26/2017	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.00099	<14.9	92	--	92	95.3
	9-10	10/26/2017	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 15.0	< 15.0	--	< 15.0	39.5
	19-20	10/26/2017	< 0.000998	< 0.000998	< 0.000998	< 0.000998	< 0.000998	< 15.0	< 15.0	--	< 15.0	87.1
	29-30	10/26/2017	< 0.000992	< 0.000992	< 0.000992	< 0.000992	< 0.000992	< 15.0	< 15.0	--	< 15.0	60.9
	39-40	10/26/2017	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 15.0	< 15.0	--	< 15.0	82
	49-50	10/26/2017	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 15.0	< 15.0	--	< 15.0	56.1
	59-60	10/26/2017	< 0.000994	< 0.000994	< 0.000994	< 0.000994	< 0.000994	< 15.0	< 15.0	--	< 15.0	43.1
	69-70	10/26/2017	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 15.0	< 15.0	--	< 15.0	25.6
	79-80	10/26/2017	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 15.0	< 15.0	--	< 15.0	6.62
	89-90	10/26/2017	< 0.000992	< 0.000992	< 0.000992	< 0.000992	< 0.000992	< 15.0	< 15.0	--	< 15.0	25.5
SB-9	0.5-1	10/27/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 15.0	884	--	**884**	7.86
	4-5	10/27/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	25.8	875	--	**900.8**	8.44
	9-10	10/27/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 15.0	< 15.0	--	< 15.0	34.5
	19-20	10/27/2017	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 15.0	< 15.0	--	< 15.0	31.5
	29-30	10/27/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00101	< 14.9	< 14.9	--	< 14.9	36.6
	39-40	10/27/2017	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 15.0	< 15.0	--	< 15.0	41.1
	49-50	10/27/2017	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 15.0	< 15.0	--	< 15.0	24.4
	59-60	10/27/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 15.0	< 15.0	--	< 15.0	48.2
	69-70	10/27/2017	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 15.0	< 15.0	--	< 15.0	50.9
	79-80	10/27/2017	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 15.0	< 15.0	--	< 15.0	67.2
	89-90	10/27/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 15.0	< 15.0	--	< 15.0	50.1
SB-10	0.5-1	10/27/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 14.9	729	--	**729**	**762**
	4-5	10/27/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 15.0	29.6	--	**29.6**	119
	9-10	10/27/2017	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 15.0	< 15.0	--	< 15.0	**421**
	19-20	10/27/2017	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 15.0	< 15.0	--	< 15.0	**335**
(Dup)	19-20	10/27/2017	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 15.0	< 15.0	--	< 15.0	247
	29-30	10/27/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 15.0	< 15.0	--	< 15.0	70.4
	39-40	10/27/2017	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 15.0	< 15.0	--	< 15.0	60.6
	49-50	10/27/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 14.9	< 14.9	--	< 14.9	40.3
	59-60	10/27/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 15.0	< 15.0	--	< 15.0	61.9
	69-70	10/27/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 15.0	< 15.0	--	< 15.0	49.4
	79-80	10/27/2017	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 0.000996	< 15.0	< 15.0	--	< 15.0	30.7
	89-90	10/27/2017	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 15.0	< 15.0	--	< 15.0	10.2

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LOVINGTON PADDOCK UNIT 96
LEA COUNTRY, NEW MEXICO

Sample ID	Depth (feet)	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	TPH				Chloride
								TPH-GRO	TPH-DRO	TPH-ORO	Total	
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NMOCD Recommended Remediation Action Levels (Total Ranking Score = 10)												
			10	**--**	**--**	**--**	**50**	**--**	**--**	**--**	**100**	**250**
MW-2	0.5-1	10/29/2017	< 0.00528	< 0.00528	< 0.00528	< 0.00528	< 0.00528	< 15.8	616	--	**616**	25.8
	4-5	10/29/2017	< 0.00536	< 0.00536	< 0.00536	< 0.00536	< 0.00536	< 16.1	< 16.1	--	< 16.1	47.4
	9-10	10/29/2017	< 0.00107	< 0.00107	< 0.00107	< 0.00107	< 0.00107	< 16.0	< 16.0	--	< 16.0	68.1
	19-20	10/29/2017	< 0.00547	< 0.00547	< 0.00547	< 0.00547	< 0.00547	< 16.4	< 16.4	--	< 16.4	103
	29-30	10/29/2017	< 0.00531	< 0.00531	< 0.00531	< 0.00531	< 0.00531	< 15.9	< 15.9	--	< 15.9	**288**
	39-40	10/29/2017	< 0.00534	< 0.00534	< 0.00534	< 0.00534	< 0.00534	< 16.0	< 16.0	--	< 16.0	36.6
	49-50	10/29/2017	< 0.00525	< 0.00525	< 0.00525	< 0.00525	< 0.00525	< 15.7	< 15.7	--	< 15.7	11.2
	59-60	10/29/2017	< 0.00532	< 0.00532	< 0.00532	< 0.00532	< 0.00532	< 15.9	< 15.9	--	< 15.9	12.1
	69-70	10/29/2017	< 0.00523	< 0.00523	< 0.00523	< 0.00523	< 0.00523	< 15.6	< 15.6	--	< 15.6	5.98
	79-80	10/29/2017	< 0.00102	< 0.00102	< 0.00102	< 0.00102	< 0.00102	< 15.5	< 15.5	--	< 15.5	< 5.11
	89-90	10/29/2017	< 0.00513	< 0.00513	< 0.00513	< 0.00513	< 0.00513	< 15.3	< 15.3	--	< 15.3	< 5.07
MW-3	0.5-1	10/28/2017	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 15.7	411	--	**411**	40.7
	4-5	10/28/2017	< 0.00106	< 0.00106	< 0.00106	< 0.00106	< 0.00106	< 15.9	796	--	**796**	**327**
	9-10	10/28/2017	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 0.00105	18.9	2590	--	**2608.9**	54.5
	19-20	10/28/2017	0.00685	< 0.00104	0.166	0.00105	0.174	364	4450	--	**4814**	10.5
	29-30	10/28/2017	< 0.00106	< 0.00106	< 0.00106	0.00485	0.00485	20.6	713	--	**733.6**	12
	39-40	10/28/2017	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 15.8	37.9	--	37.9	7.72
	49-50	10/28/2017	< 0.00104	< 0.00104	< 0.00104	< 0.00104	< 0.00104	< 15.5	29.1	--	29.1	30.8
	59-60	10/28/2017	< 0.00106	< 0.00106	< 0.00106	< 0.00106	< 0.00106	< 15.7	94.7	--	94.7	32.9
	69-70	10/28/2017	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 15.7	< 15.7	--	< 15.7	30.2
	79-80	10/28/2017	< 0.00104	< 0.00104	< 0.00104	< 0.00104	< 0.00104	< 15.6	< 15.6	--	< 15.6	26.7
	89-90	10/28/2017	< 0.00515	< 0.00515	< 0.00515	< 0.00515	< 0.00515	< 15.4	< 15.4	--	< 15.4	24.5
MW-4	0.5-1	10/29/2017	< 0.00544	< 0.00544	< 0.00544	< 0.00544	< 0.00544	< 16.3	250	--	**250**	109
	4-5	10/29/2017	0.305	< 0.0279	15.6 D	0.751	16.7	1210	3050	--	**4260**	90.3
	9-10	10/29/2017	< 0.00580	< 0.00580	0.1007	< 0.00580	0.107	57.6	433	--	**490.6**	57.9
	19-20	10/29/2017	< 0.00532	< 0.00532	< 0.00532	< 0.00532	< 0.00532	< 15.9	121	--	**121**	64.1
	29-30	10/29/2017	< 0.00530	< 0.00530	< 0.00530	< 0.00530	< 0.00530	< 15.9	< 15.9	--	< 15.9	140
	39-40	10/29/2017	< 0.00582	< 0.00582	< 0.00582	< 0.00582	< 0.00582	< 17.4	< 17.4	--	< 17.4	191
	49-50	10/29/2017	< 0.00547	< 0.00547	< 0.00547	< 0.00547	< 0.00547	< 16.4	< 16.4	--	< 16.4	125
	59-60	10/29/2017	< 0.00542	< 0.00542	< 0.00542	< 0.00542	< 0.00542	< 16.2	< 16.2	--	< 16.2	**289**
	69-70	10/29/2017	< 0.00547	< 0.00547	< 0.00547	< 0.00547	< 0.00547	< 16.4	< 16.4	--	< 16.4	247
	79-80	10/29/2017	< 0.00517	< 0.00517	< 0.00517	< 0.00517	< 0.00517	< 15.5	< 15.5	--	< 15.5	**405**
	89-90	10/29/2017	< 0.00511	< 0.00511	< 0.00511	< 0.00511	< 0.00511	< 15.3	< 15.3	--	< 15.3	133

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LOVINGTON PADDOCK UNIT 96
LEA COUNTRY, NEW MEXICO

Sample ID	Depth (feet)	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	TPH				Chloride
								TPH-GRO	TPH-DRO	TPH-ORO	Total	
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NMOCD Recommended Remediation Action Levels (Total Ranking Score = 10)												
			10	**--**	**--**	**--**	**50**	**--**	**--**	**--**	**100**	**250**
MW-5	0.5-1	10/27/2017	< 0.00111	< 0.00111	< 0.00111	< 0.00111	< 0.00111	< 16.6	150	--	**150**	31.4
	4-5	10/27/2017	< 0.00102	< 0.00102	< 0.00102	< 0.00102	< 0.00102	< 15.3	33.5	--	33.5	28.5
	9-10	10/27/2017	< 0.00558	< 0.00558	< 0.00558	< 0.00558	< 0.00558	< 16.7	< 16.7	--	< 16.7	46.3
	19-20	10/27/2017	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 15.7	< 15.7	--	< 15.7	31.8
	29-30	10/27/2017	< 0.00104	< 0.00104	< 0.00104	< 0.00104	< 0.00104	< 15.8	< 15.8	--	< 15.8	59.2
	39-40	10/27/2017	< 0.00106	< 0.00106	< 0.00106	< 0.00106	< 0.00106	< 15.8	< 15.8	--	< 15.8	40.1
	49-50	10/27/2017	< 0.00103	< 0.00103	< 0.00103	< 0.00103	< 0.00103	< 15.7	< 15.7	--	< 15.7	35.8
	59-60	10/27/2017	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 15.8	< 15.8	--	< 15.8	49.1
	69-70	10/27/2017	< 0.00104	< 0.00104	< 0.00104	< 0.00104	< 0.00104	< 15.7	< 15.7	--	< 15.7	99.2
	79-80	10/27/2017	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 0.00105	< 15.5	< 15.5	--	< 15.5	106
	89-90	10/27/2017	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 0.00101	< 15.3	< 15.3	--	< 15.3	66.3

Notes:

1. * = Data collected by Tetra Tech
2. Highlighted values indicate exceedance of NMOCD regulatory limits
3. -- = Not analyzed
4. < = Value less than Reporting Limit (RL)
5. TPH = Total petroleum hydrocarbons
6. GRO/DRO/ORO = Gasoline/Diesel/Oil Range Organics
7. NMOCD = New Mexico Oil Conservation Division
8. RRALs = Recommended Remediation Action Levels
9. NMOCD RRALS based on a vertical separation from groundwater less than 100'

TABLE 2
SUMMARY OF GROUNDWATER ELEVATIONS
LOVINGTON PADDOCK UNIT 96
LEA COUNTY, NEW MEXICO

Well ID	Collection Date	Casing Elevation (ft)	Depth to Groundwater (ft TOC)	Groundwater Elevation (ft)	Total Depth (ft TOC)	Casing Diameter (in)	Well Screen Interval (ft bgs)
MW-1	12/07/17	*3817.46*	99.10	3718.36	224.97	4	89-219
MW-2	12/07/17	*3817.39*	98.90	3718.49	121.03	2	88-118
MW-3	12/07/17	*3818.18*	99.70	3718.48	122.97	2	90-120
MW-4	12/07/17	*3817.85*	99.33	3718.52	118.03	2	85-115
MW-5	12/07/17	*3817.69*	99.30	3718.39	123.70	2	90-120

Notes:
TOC - Top of Casing.
bgs - below ground surface.

TABLE 3

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
LOVINGTON PADDOCK UNIT 96
LEA COUNTY, NEW MEXICO

Well ID	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total TPH	Chloride	TDS
NMWQCC Standards		0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--- mg/L	250 mg/L	1000 mg/L
MW-1	10/19/16	**0.00489**	<0.0020	<0.0020	<0.0020	NA	**772**	NA
MW-1	12/7/17	**0.0421**	<0.000367	**0.00222**	<0.00063	<0.911	**523**	**1450**
MW-2	12/7/17	<0.000408	<0.000367	<0.000657	<0.00063	<0.911	**138**	**661**
MW-3	12/8/17	**0.00218**	<0.000367	<0.000657	<0.00063	<0.911	**250**	**858**
MW-4	12/7/17	**0.381**	**0.00195**	**0.0861**	**0.00325**	**1.17**	**1020**	**2140**
MW-5	12/8/17	**0.00756**	<0.000367	<0.000657	<0.00063	<0.912	**199**	**839**
MW-5 (dup)	12/8/17	**0.00374**	<0.000367	<0.000657	<0.00063	<0.911	**201**	**925**

NOTES:

NMWQCC - New Mexico Water Quality Control Commission

'mg/L' indicates milligrams per liter

NA' indicates analyte not analyzed

Yellow-shaded cells indicate that concentration exceeds NMWQCC standard.

- BTEX analysis by EPA Method 8021B.
- Chlorides analyzed by EPA Method 300.1

Appendices

Appendix A
Boring Logs and State Well Reports

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-02
DATE COMPLETED: 28 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
0	TOP SOIL							
	CALICHE; light brown	1.00						
4				4-5		1.0		<28
7.50	SILTY SAND (SM); light brown, contains caliche							
9-10				9-10		1.0		<28
15.00	SILTY SAND (SM); light brown							
19-20				19-20		1.0		52
29-30				29-30		1.0		74

NOTES:

WATER FOUND ▽

LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-02
DATE COMPLETED: 28 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
36								
38								
40			Portland/bentonite grout	39-40		1.0		<28
42								
44			2-inch SCH 40 PVC riser					
46								
48								
50				49-50		1.0		<28
52								
54								
56								
58								
60				59-60		1.0		<28
62								
64								
66								
68				69-70		1.0		<28

NOTES:

WATER FOUND ▽
LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-02
DATE COMPLETED: 28 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
72								
74								
76								
78								
80				79-80		1.0		<28
82			← Bentonite					
84								
86								
88								
90				89-90		1.0		<28
92								
94								
96	SILTY SAND (SM); light reddish brown	95.00						
98								
100			← Filter pack 20/40 sieve					
102								
104			← 2-inch SCH 40 PVC screen 0.010 slot					

NOTES:

WATER FOUND ▽

LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-02
DATE COMPLETED: 28 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE				
				DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	Chloride (mg/kg)
106								
108								
110								
112								
114								
116								
118								
120	END OF BOREHOLE @ 120.0ft BGS	120.00	WELL DETAILS Screened interval: 88.00 to 118.00ft BGS Length: 30ft Slot Size: 0.01 Material: PVC Seal: 81.00 to 83.00ft BGS Material: Bentonite 3/8-inch chips Sand Pack: 83.00 to 118.00ft BGS Material: 20/40 sieve sand BOREHOLE DIAMETER 2					
122								
124								
126								
128								
130								
132								
134								
136								
138								

NOTES:

WATER FOUND ▽
LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-03
DATE COMPLETED: 28 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
0	TOP SOIL							
	SILTY CLAY; dark brown	1.00						
4				4-5		1.0		<28
7.50	SILTY SAND (SM); light brown, contains caliche							
9-10				9-10		1.0		42
15.00	SILTY SAND (SM); light brown							
19-20				19-20		1.0		35
29-30				29-30		1.0		<28

NOTES:

WATER FOUND ▽

LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-03
DATE COMPLETED: 28 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
36								
38								
40				39-40		1.0		<28
42			Portland/bentonite grout					
44								
46			2-inch SCH 40 PVC riser					
48								
50				49-50		1.0		42
52								
54								
56								
58								
60				59-60		1.0		56
62								
64								
66								
68				69-70		1.0		<28

NOTES:

WATER FOUND ▽
LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-03
DATE COMPLETED: 28 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
72								
74								
76								
78								
80				79-80		1.0		<28
82								
84			← Bentonite					
86								
88								
90				89-90		1.0		<28
92								
94								
96	SILTY SAND (SM); light reddish brown	95.00						
98								
100			▽					
102			← Filter pack 20/40 sieve					
104								

NOTES:

WATER FOUND ▽

LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-03
DATE COMPLETED: 28 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE				
				DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	Chloride (mg/kg)
106			2-inch SCH 40 PVC screen 0.010 slot					
108								
110								
112								
114								
116								
118								
120	END OF BOREHOLE @ 120.0ft BGS	120.00	WELL DETAILS Screened interval: 90.00 to 120.00ft BGS Length: 30ft Slot Size: 0.01 Material: PVC Seal: 83.00 to 85.00ft BGS Material: Bentonite 3/8-inch chips Sand Pack: 85.00 to 120.00ft BGS Material: 20/40 sieve sand BOREHOLE DIAMETER 2					
122								
124								
126								
128								
130								
132								
134								
136								
138								

NOTES:

WATER FOUND ▽
LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-04
DATE COMPLETED: 29 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
0	TOP SOIL							
	CALICHE; light brown	1.00						
4				4-5		1.0		28
7.50	SILTY SAND (SM); light brown, contains caliche							
9				9-10		1.0		46
15.00	SILTY SAND (SM); light brown							
19				19-20		1.0		<28
29				29-30		1.0		59

NOTES:

WATER FOUND ▽

LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-04
DATE COMPLETED: 29 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
36								
38								
40			Portland/bentonite grout	39-40		1.0		82
42			2-inch SCH 40 PVC riser					
44								
46								
48								
50				49-50		1.0		74
52								
54								
56								
58								
60				59-60		1.0		<28
62								
64								
66								
68				69-70		1.0		90

NOTES:

WATER FOUND ▽

LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-04
DATE COMPLETED: 29 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
72								
74								
76								
78			Bentonite					
80				79-80		1.0		46
82								
84								
86								
88								
90				89-90		1.0		<28
92								
94								
96	SILTY SAND (SM); light reddish brown	95.00	Filter pack 20/40 sieve					
98								
100			2-inch SCH 40 PVC screen 0.010 slot					
102								
104								

NOTES:

WATER FOUND ▽

LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-04
DATE COMPLETED: 29 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE				
				DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	Chloride (mg/kg)
106								
108								
110								
112								
114								
116								
118								
120	END OF BOREHOLE @ 120.0ft BGS	120.00	WELL DETAILS Screened interval: 85.00 to 115.00ft BGS Length: 30ft Slot Size: 0.01 Material: PVC Seal: 78.00 to 80.00ft BGS Material: Bentonite 3/8-inch chips Sand Pack: 80.00 to 115.00ft BGS Material: 20/40 sieve sand BOREHOLE DIAMETER 2					
122								
124								
126								
128								
130								
132								
134								
136								
138								

NOTES:

WATER FOUND ▽
LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-05
DATE COMPLETED: 28 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
0	TOP SOIL							
	CALICHE; light brown	1.00						
4				4-5		1.0		<28
7.5	SILTY SAND (SM); light grayish brown	7.50						
9				9-10		1.0		46
15	SILTY SAND (SM); light brown	15.00						
19				19-20		1.0		46
29				29-30		1.0		<28

NOTES:

WATER FOUND ▽

LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-05
DATE COMPLETED: 28 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
36								
38								
40				39-40		1.0		<28
42			Portland/bentonite grout					
44								
46			2-inch SCH 40 PVC riser					
48								
50				49-50		1.0		<28
52								
54								
56								
58								
60				59-60		1.0		28
62								
64								
66								
68				69-70		1.0		52

NOTES:

WATER FOUND ▽

LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-05
DATE COMPLETED: 28 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
72								
74								
76								
78								
80				79-80		1.0		52
82								
84			← Bentonite					
86								
88								
90				89-90		1.0		46
92								
94								
96								
98								
100			▽					
102			← Filter pack 20/40 sieve					
104								

NOTES:

WATER FOUND ▽

LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: MW-05
DATE COMPLETED: 28 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE				
				DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	Chloride (mg/kg)
106			2-inch SCH 40 PVC screen 0.010 slot					
108								
110								
112								
114								
116								
118								
120	END OF BOREHOLE @ 120.0ft BGS	120.00	WELL DETAILS Screened interval: 90.00 to 120.00ft BGS Length: 30ft Slot Size: 0.01 Material: PVC Seal: 83.00 to 85.00ft BGS Material: Bentonite 3/8-inch chips Sand Pack: 85.00 to 120.00ft BGS Material: 20/40 sieve sand BOREHOLE DIAMETER 2					
122								
124								
126								
128								
130								
132								
134								
136								
138								

NOTES:

WATER FOUND ▽
LABORATORY ANALYSIS ⬭

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-06
DATE COMPLETED: 26 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
0	TOP SOIL						
	CALICHE; light brown	1.00					
2							
4			4-5		1.0		<28
6							
8	CALICHE; gray brown	7.50					
10			9-10		1.0		34
12							
14							
	SILTY SAND (SM); light brown	15.00					
16							
18							
20			19-20		1.0		<28
22							
24							
26							
28							
30			29-30		1.0		<28
32							
34							

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-06
DATE COMPLETED: 26 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	Chloride (mg/kg)
36							
38							
40			39-40		1.0		<28
42							
44							
46							
48							
50			49-50		1.0		66
52							
54							
56							
58							
60			59-60		1.0		189
62							
64							
66							
68			69-70		1.0		315

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-06
DATE COMPLETED: 26 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE				
			DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	Chloride (mg/kg)
72							
74							
76							
78							
80			79-80		1.0		293
82							
84							
86							
88							
90			89-90		1.0		288
	END OF BOREHOLE @ 90.0ft BGS	90.00					
92							
94							
96							
98							
100							
102							
104							

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-07
DATE COMPLETED: 27 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
	TOP SOIL						
	CALICHE; light brown	1.00					
4			4-5		1.0		<28
8	SILTY SAND (SM); light brown, contains caliche	7.50					
10			9-10		1.0		198
15	SILTY SAND (SM); light brown	15.00					
20			19-20		1.0		183
30			29-30		1.0		56

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-07
DATE COMPLETED: 27 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
36							
38							
40			39-40		1.0		<28
42							
44							
46							
48							
50			49-50		1.0		<28
52							
54							
56							
58							
60			59-60		1.0		<28
62							
64							
66							
68			69-70		1.0		<28

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-07
DATE COMPLETED: 27 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE				
			DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	Chloride (mg/kg)
72							
74							
76							
78							
80			79-80		1.0		<28
82							
84							
86							
88							
90			89-90		1.0		<28
	END OF BOREHOLE @ 90.0ft BGS	90.00					
92							
94							
96							
98							
100							
102							
104							

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-08
DATE COMPLETED: 26 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
0	TOP SOIL						
	SILTY CLAY; dark brown	1.00					
4			4-5		1.0		<28
	CALICHE; gray brown	7.50					
10			9-10		1.0		<28
	SILTY SAND (SM); light brown, contains caliche	15.00					
20			19-20		1.0		<28
	SILTY SAND (SM); light brown	25.00					
30			29-30		1.0		34

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-08
DATE COMPLETED: 26 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
36							
38							
40			39-40		1.0		34
42							
44							
46							
48							
50			49-50		1.0		28
52							
54							
56							
58							
60			59-60		1.0		<28
62							
64							
66							
68			69-70		1.0		<28

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-08
DATE COMPLETED: 26 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	Chloride (mg/kg)
72							
74							
76							
78							
80			79-80		1.0		<28
82							
84							
86							
88							
90	END OF BOREHOLE @ 90.0ft BGS	90.00	89-90		1.0		<28
92							
94							
96							
98							
100							
102							
104							

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-09
DATE COMPLETED: 27 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
0	TOP SOIL						
	CALICHE; gray brown	1.00					
2							
4			4-5		1.0		<28
6							
8	SILTY SAND (SM); gray	7.50					
10			9-10		1.0		<28
12							
14							
16	SILTY SAND (SM); reddish brown	15.00					
18							
20			19-20		1.0		<28
22							
24							
26	SILTY SAND (SM); light brown	25.00					
28							
30			29-30		1.0		<28
32							
34							

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-09
DATE COMPLETED: 27 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	Chloride (mg/kg)
36							
38							
40			39-40		1.0		<28
42							
44							
46							
48							
50			49-50		1.0		<28
52							
54							
56							
58							
60			59-60		1.0		<28
62							
64							
66							
68			69-70		1.0		<28

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-09
DATE COMPLETED: 27 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
72							
74							
76							
78							
80			79-80		1.0		<28
82							
84							
86							
88							
90	END OF BOREHOLE @ 90.0ft BGS	90.00	89-90		1.0		<28
92							
94							
96							
98							
100							
102							
104							

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-10
DATE COMPLETED: 27 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE PP (tsf)	SAMPLE Chloride (mg/kg)
	TOP SOIL						
	CALICHE; light brown	1.00					
4			4-5		1.0		56
8	SILTY SAND (SM); light brown	7.50					
10			9-10		1.0		131
20			19-20		1.0		81
30			29-30		1.0		<28

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-10
DATE COMPLETED: 27 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	Chloride (mg/kg)
36							
38							
40			39-40		1.0		<28
42							
44							
46							
48							
50			49-50		1.0		<28
52							
54							
56							
58							
60			59-60		1.0		<28
62							
64							
66							
68			69-70		1.0		42

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: LPU-96
PROJECT NUMBER: 73816
CLIENT: Chevron
LOCATION: Lovington

HOLE DESIGNATION: SB-10
DATE COMPLETED: 27 October 2017
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Rebecca Jones

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE				
			DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	Chloride (mg/kg)
72							
74							
76							
78							
80			79-80		1.0		42
82							
84							
86							
88							
90			89-90		1.0		<28
	END OF BOREHOLE @ 90.0ft BGS	90.00					
92							
94							
96							
98							
100							
102							
104							

NOTES:

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 073816 LPU 96.GPJ CRA_CORP.GDT 28/3/18

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
MW-2 (LPU-96)		L-14377

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Chevron Midcontinent, L.P.	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
1400 Smith Street	Houston	TX	77002

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	52	26.871	N
	LONGITUDE	-103	17	42.9966	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1670	Ken Cooper	Harrison & Cooper, INC.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
10/29/2017	10/29/2017	118'	118'	

COMPLETED WELL IS: ARTESIAN DRY HOLE ● SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT)

DRILLING FLUID: ● AIR MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ● ROTARY HAMMER CABLE TOOL OTHER – SPECIFY:

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	88	6.75	RISER	FJ	2	SCH 40	
88	118	6.75	SCREEN	FJ	2	SCH 40	.010

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	2	6.75	CEMENT	1	POURED
2	83	6.75	BENTONITE SLURRY	1	POURED
83	118	6.75	SAND - 8/16	1	POURED

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES **(attach supplemental sheets to fully describe all units)**	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	2	2	TOPSOIL	Y N	
2	104	102	SILTY SAND	Y N	
102	118	16	SAND-TAN	Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

KEN COOPER — 11/07/2017

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 2 OF 2

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
MW-3 (LPU-96)		L-14377

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Chevron Midcontinent, L.P.	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
1400 Smith Street	Houston	TX	77002

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	52	26.1834	N
	LONGITUDE	-103	17	42.216	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1670	Ken Cooper	Harrison & Cooper, INC.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
10/28/2017	10/28/2017	120'	120'	

COMPLETED WELL IS: ARTESIAN DRY HOLE ● SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT)

DRILLING FLUID: ● AIR MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ● ROTARY HAMMER CABLE TOOL OTHER – SPECIFY:

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	90	6.75	RISER	FJ	2	SCH 40	
90	120	6.75	SCREEN	FJ	2	SCH 40	.010

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	2	6.75	CEMENT	1	POURED
2	85	6.75	BENTONITE SLURRY	1	POURED
85	120	6.75	SAND - 8/16	1	POURED

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES **(attach supplemental sheets to fully describe all units)**	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	2	2	TOPSOIL	Y N	
2	104	102	SILTY SAND	Y N	
102	120	18	SAND-TAN	Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

KEN COOPER — 11/07/2017

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 2 OF 2

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
MW-4 (LPU-96)		L-14377

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Chevron Midcontinent, L.P.	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
1400 Smith Street	Houston	TX	77002

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	52	25.7874	N
	LONGITUDE	-103	17	45.3624	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1670	Ken Cooper	Harrison & Cooper, INC.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
10/29/2017	10/29/2017	115'	115'	

COMPLETED WELL IS: ARTESIAN DRY HOLE ● SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT)

DRILLING FLUID: ● AIR MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ● ROTARY HAMMER CABLE TOOL OTHER – SPECIFY:

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	85	6.75	RISER	FJ	2	SCH 40	
85	115	6.75	SCREEN	FJ	2	SCH 40	.010

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	2	6.75	CEMENT	1	POURED
2	80	6.75	BENTONITE SLURRY	1	POURED
80	115	6.75	SAND - 8/16	1	POURED

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES **(attach supplemental sheets to fully describe all units)**	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	2	2	TOPSOIL	Y N	
2	104	102	SILTY SAND	Y N	
102	115	13	SAND-TAN	Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

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6. SIGNATURE

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KEN COOPER — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

11/07/2017 — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 2 OF 2

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
MW-5 (LPU-96)		L-14377

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Chevron Midcontinent, L.P.	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
1400 Smith Street	Houston	TX	77002

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	52	25.2582	N
	LONGITUDE	-103	17	42.7158	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHJIP, RANGE) WHERE AVAILABLE

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1670	Ken Cooper	Harrison & Cooper, INC.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
10/28/2017	10/28/2017	120'	120'	

COMPLETED WELL IS: ARTESIAN DRY HOLE ● SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT)

DRILLING FLUID: ● AIR MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ● ROTARY HAMMER CABLE TOOL OTHER – SPECIFY:

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	90	6.75	RISER	FJ	2	SCH 40	
90	120	6.75	SCREEN	FJ	2	SCH 40	.010

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
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2	85	6.75	BENTONITE SLURRY	1	POURED
85	120	6.75	SAND - 8/16	1	POURED

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES **(attach supplemental sheets to fully describe all units)**	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	2	2	TOPSOIL	Y N	
2	104	102	SILTY SAND	Y N	
102	120	18	SAND-TAN	Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

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KEN COOPER — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

11/07/2017 — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 2 OF 2

Appendix B
Certified Analytical Reports

Certificate of Analysis Summary 566771

GHD Services, INC- Midland, Midland, TX

Project Name: LPU-96

Project Id: 073816
Contact: Scott Foord
Project Location: Lovington, Lea Co, NM

Date Received in Lab: Thu Oct-26-17 03:30 pm
Report Date: 13-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566771-001		566771-002		566771-003		566771-004		566771-005		566771-006	
	Field Id:	SB-8-S-0.5-1-171026		SB-8-S-0.5-1-171026		SB-8-S-4-5-171026		SB-8-S-9-10-171026		SB-8-S-19-20-171026		SB-8-S-29-30-171026	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-26-17 10:21		Oct-26-17 10:21		Oct-26-17 10:24		Oct-26-17 10:27		Oct-26-17 10:30		Oct-26-17 10:54	
BTEX by SW 8260B SUB: TX104704215-17-23	Extracted:	Nov-02-17 15:30				Nov-01-17 19:00		Nov-01-17 19:00		Nov-01-17 19:00		Nov-01-17 19:00	
	Analyzed:	Nov-02-17 15:46				Nov-01-17 23:03		Nov-01-17 23:18		Nov-01-17 23:34		Nov-01-17 23:49	
	Units/RL:	mg/kg	RL			mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00100	0.00100			<0.000990	0.000990	<0.00101	0.00101	<0.000998	0.000998	<0.000992	0.000992
Toluene		<0.00100	0.00100			<0.000990	0.000990	<0.00101	0.00101	<0.000998	0.000998	<0.000992	0.000992
Ethylbenzene		<0.00100	0.00100			<0.000990	0.000990	<0.00101	0.00101	<0.000998	0.000998	<0.000992	0.000992
m,p-Xylenes		<0.00200	0.00200			<0.00198	0.00198	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198
o-Xylene		<0.00100	0.00100			<0.000990	0.000990	<0.00101	0.00101	<0.000998	0.000998	<0.000992	0.000992
Total Xylenes		<0.00100	0.00100			<0.000990	0.000990	<0.00101	0.00101	<0.000998	0.000998	<0.000992	0.000992
Total BTEX		<0.00100	0.00100			<0.000990	0.000990	<0.00101	0.00101	<0.000998	0.000998	<0.000992	0.000992
Chloride by EPA 300	Extracted:			Nov-03-17 18:30		Nov-03-17 18:30		Nov-03-17 18:30		Nov-03-17 18:30		Nov-03-17 18:30	
	Analyzed:			Nov-04-17 01:11		Nov-04-17 01:38		Nov-04-17 01:47		Nov-04-17 01:56		Nov-04-17 02:04	
	Units/RL:			mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride				25.5	4.97	95.3	4.97	39.5	4.99	87.1	4.99	60.9	4.95
Percent Moisture	Extracted:												
	Analyzed:	Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.61	1.00	8.71	1.00	15.4	1.00	2.28	1.00	7.49	1.00	7.81	1.00
TPH By SW8015 Mod	Extracted:	Oct-27-17 19:00				Oct-27-17 19:00		Oct-27-17 19:00		Oct-27-17 19:00		Oct-27-17 19:00	
	Analyzed:	Oct-28-17 17:06				Oct-27-17 22:52		Oct-27-17 23:15		Oct-28-17 00:15		Oct-28-17 00:35	
	Units/RL:	mg/kg	RL			mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.0	15.0			<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics		607	15.0			92.0	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566771

GHD Services, INC- Midland, Midland, TX

Project Name: LPU-96

Project Id: 073816
Contact: Scott Foord
Project Location: Lovington, Lea Co, NM

Date Received in Lab: Thu Oct-26-17 03:30 pm
Report Date: 13-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566771-007		566771-008		566771-009		566771-010		566771-011		566771-012	
	Field Id:	SB-8-S-39-40-171026		SB-8-S-49-50-171026		SB-8-S-59-60-171026		SB-8-S-69-70-171026		SB-8-S-79-80-171026		SB-8-S-79-80-171026	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-26-17 10:57		Oct-26-17 11:20		Oct-26-17 11:23		Oct-26-17 11:42		Oct-26-17 11:45		Oct-26-17 11:45	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-01-17 19:00		Nov-01-17 19:00		Nov-01-17 19:00		Nov-01-17 19:00		Nov-01-17 19:00			
	Analyzed:	Nov-01-17 22:32		Nov-02-17 00:05		Nov-02-17 00:20		Nov-02-17 00:36		Nov-02-17 00:51			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		<0.00101	0.00101	<0.000996	0.000996	<0.000994	0.000994	<0.000996	0.000996	<0.00101	0.00101		
Toluene		<0.00101	0.00101	<0.000996	0.000996	<0.000994	0.000994	<0.000996	0.000996	<0.00101	0.00101		
Ethylbenzene		<0.00101	0.00101	<0.000996	0.000996	<0.000994	0.000994	<0.000996	0.000996	<0.00101	0.00101		
m,p-Xylenes		<0.00202	0.00202	<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199	<0.00202	0.00202		
o-Xylene		<0.00101	0.00101	<0.000996	0.000996	<0.000994	0.000994	<0.000996	0.000996	<0.00101	0.00101		
Total Xylenes		<0.00101	0.00101	<0.000996	0.000996	<0.000994	0.000994	<0.000996	0.000996	<0.00101	0.00101		
Total BTEX		<0.00101	0.00101	<0.000996	0.000996	<0.000994	0.000994	<0.000996	0.000996	<0.00101	0.00101		
Chloride by EPA 300	***Extracted:***	Nov-03-17 18:30		Nov-03-17 18:30		Nov-03-17 18:30		Nov-03-17 18:30				Nov-09-17 10:00	
	Analyzed:	Nov-04-17 02:13		Nov-04-17 02:22		Nov-04-17 02:49		Nov-04-17 02:57				Nov-09-17 13:18	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL			mg/kg	RL
Chloride		82.0	4.96	56.1	4.90	43.1	4.99	25.6	5.00			6.62	4.94
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		8.94	1.00	5.92	1.00	6.99	1.00	8.73	1.00	1.89	1.00	2.19	1.00
TPH By SW8015 Mod	***Extracted:***	Oct-27-17 19:00		Oct-27-17 19:00		Oct-27-17 19:00		Oct-27-17 19:00		Oct-27-17 19:00			
	Analyzed:	Oct-28-17 00:55		Oct-28-17 01:16		Oct-28-17 01:37		Oct-28-17 01:56		Oct-28-17 02:16			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0		
Diesel Range Organics		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0		

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566771

GHD Services, INC- Midland, Midland, TX

Project Name: LPU-96

Project Id: 073816
Contact: Scott Foord
Project Location: Lovington, Lea Co, NM

Date Received in Lab: Thu Oct-26-17 03:30 pm
Report Date: 13-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566771-013		566771-014		566771-015		566771-016		566771-017		566771-018	
	Field Id:	SB-8-S-89-90-171026		SB-6-S-0.5-1-171026		SB-6-S-4-5-171026		SB-6-S-9-10-171026		SB-6-S-19-20-171026		SB-6-S-29-30-171026	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-26-17 12:00		Oct-26-17 12:50		Oct-26-17 12:53		Oct-26-17 12:56		Oct-26-17 12:59		Oct-26-17 13:26	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-01-17 19:00		Nov-01-17 19:00		Nov-02-17 15:30		Nov-02-17 15:30		Nov-02-17 15:30		Nov-01-17 19:00	
	Analyzed:	Nov-02-17 01:07		Nov-02-17 01:22		Nov-03-17 16:17		Nov-02-17 16:34		Nov-02-17 16:19		Nov-02-17 02:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000992	0.000992	<0.00101	0.00101	<0.0248	0.0248	<0.000992	0.000992	<0.00107	0.00107	<0.00100	0.00100
Toluene		<0.000992	0.000992	<0.00101	0.00101	<0.0248	0.0248	<0.000992	0.000992	<0.00107	0.00107	<0.00100	0.00100
Ethylbenzene		<0.000992	0.000992	<0.00101	0.00101	0.452	0.0248	<0.000992	0.000992	<0.00107	0.00107	<0.00100	0.00100
m,p-Xylenes		<0.00198	0.00198	<0.00202	0.00202	0.502	0.0495	<0.00198	0.00198	<0.00213	0.00213	<0.00201	0.00201
o-Xylene		<0.000992	0.000992	<0.00101	0.00101	0.222	0.0248	<0.000992	0.000992	<0.00107	0.00107	<0.00100	0.00100
Total Xylenes		<0.000992	0.000992	<0.00101	0.00101	0.724	0.0248	<0.000992	0.000992	<0.00107	0.00107	<0.00100	0.00100
Total BTEX		<0.000992	0.000992	<0.00101	0.00101	1.18	0.0248	<0.000992	0.000992	<0.00107	0.00107	<0.00100	0.00100
Chloride by EPA 300	***Extracted:***	Nov-03-17 18:30		Nov-03-17 18:30		Nov-03-17 18:30		Nov-03-17 18:30		Nov-03-17 18:30		Nov-03-17 18:30	
	Analyzed:	Nov-04-17 03:24		Nov-04-17 03:33		Nov-04-17 03:42		Nov-04-17 03:50		Nov-04-17 03:59		Nov-04-17 04:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		25.5	4.90	25.4	4.92	40.2	4.99	118	4.99	32.6	4.99	51.8	4.99
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		2.02	1.00	11.5	1.00	3.46	1.00	2.12	1.00	6.32	1.00	6.63	1.00
TPH By SW8015 Mod	***Extracted:***	Oct-27-17 19:00		Oct-27-17 19:00		Oct-27-17 19:00		Oct-27-17 19:00		Oct-27-17 19:00		Oct-27-17 19:00	
	Analyzed:	Oct-28-17 03:17		Oct-28-17 17:28		Oct-28-17 17:49		Oct-28-17 04:19		Oct-28-17 04:40		Oct-28-17 04:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.0	15.0	<14.9	14.9	310	15.0	<14.9	14.9	<15.0	15.0	<14.9	14.9
Diesel Range Organics		<15.0	15.0	693	14.9	2370	15.0	42.8	14.9	<15.0	15.0	<14.9	14.9

Certificate of Analysis Summary 566771

GHD Services, INC- Midland, Midland, TX

Project Name: LPU-96

Project Id: 073816
Contact: Scott Foord
Project Location: Lovington, Lea Co, NM

Date Received in Lab: Thu Oct-26-17 03:30 pm
Report Date: 13-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566771-019		566771-020		566771-021		566771-022		566771-023		566771-024	
	Field Id:	SB-6-S-39-40-171026		SB-6-S-49-50-171026		SB-6-S-59-60-171026		SB-6-S-59-60-171026		SB-6-S-69-70-171026		SB-6-S-79-80-171026	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-26-17 13:29		Oct-26-17 13:37		Oct-26-17 13:40		Oct-26-17 13:40		Oct-26-17 14:00		Oct-26-17 14:03	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-01-17 19:00		Nov-01-17 19:00		Nov-01-17 19:00				Nov-01-17 19:00			
	Analyzed:	Nov-02-17 02:40		Nov-02-17 02:55		Nov-02-17 03:11				Nov-02-17 03:26			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			mg/kg	RL		
Benzene		<0.000996	0.000996	<0.00100	0.00100	<0.000994	0.000994			<0.000994	0.000994		
Toluene		<0.000996	0.000996	<0.00100	0.00100	<0.000994	0.000994			<0.000994	0.000994		
Ethylbenzene		<0.000996	0.000996	<0.00100	0.00100	<0.000994	0.000994			<0.000994	0.000994		
m,p-Xylenes		<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199			<0.00199	0.00199		
o-Xylene		<0.000996	0.000996	<0.00100	0.00100	<0.000994	0.000994			<0.000994	0.000994		
Total Xylenes		<0.000996	0.000996	<0.00100	0.00100	<0.000994	0.000994			<0.000994	0.000994		
Total BTEX		<0.000996	0.000996	<0.00100	0.00100	<0.000994	0.000994			<0.000994	0.000994		
Chloride by EPA 300	***Extracted:***	Nov-03-17 18:30		Nov-03-17 18:40				Nov-09-17 10:00		Nov-03-17 18:40		Nov-03-17 18:40	
	Analyzed:	Nov-04-17 04:17		Nov-04-17 05:37				Nov-09-17 13:24		Nov-04-17 05:45		Nov-04-17 05:54	
	Units/RL:	mg/kg	RL	mg/kg	RL			mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		69.2	4.90	178	5.00			510	4.96	1290	24.7	1100	4.98
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00		Oct-30-17 11:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.58	1.00	4.75	1.00	6.97	1.00	4.70	1.00	4.65	1.00	3.71	1.00
TPH By SW8015 Mod	***Extracted:***	Oct-27-17 19:00		Oct-27-17 19:00		Oct-27-17 19:00				Oct-27-17 19:00			
	Analyzed:	Oct-28-17 05:19		Oct-28-17 05:40		Oct-28-17 06:02				Oct-28-17 06:22			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			mg/kg	RL		
Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0			<15.0	15.0		
Diesel Range Organics		<15.0	15.0	<15.0	15.0	<15.0	15.0			<15.0	15.0		

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566771

GHD Services, INC- Midland, Midland, TX

Project Name: LPU-96

Project Id: 073816
Contact: Scott Foord
Project Location: Lovington, Lea Co, NM

Date Received in Lab: Thu Oct-26-17 03:30 pm
Report Date: 13-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	566771-025					
	Field Id:	SB-6-S-89-90-171026					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Oct-26-17 14:15					
Chloride by EPA 300	***Extracted:***	Nov-03-17 18:40					
	Analyzed:	Nov-04-17 06:03					
	Units/RL:	mg/kg	RL				
Chloride		1010	4.90				

Mike Kimmel
Client Services Manager

Analytical Report 566771

for

GHD Services, INC- Midland

Project Manager: Scott Foord

LPU-96

073816

13-NOV-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

13-NOV-17

Project Manager: **Scott Foord**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **566771**
LPU-96
Project Address: Lovington, Lea Co, NM

Scott Foord:

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) 566771. 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. 566771 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,

Mike Kimmel
Client Services Manager

Sample Cross Reference 566771

GHD Services, INC- Midland, Midland, TX

LPU-96

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-8-S-0.5-1-171026	S	10-26-17 10:21		566771-001
SB-8-S-0.5-1-171026	S	10-26-17 10:21		566771-002
SB-8-S-4-5-171026	S	10-26-17 10:24		566771-003
SB-8-S-9-10-171026	S	10-26-17 10:27		566771-004
SB-8-S-19-20-171026	S	10-26-17 10:30		566771-005
SB-8-S-29-30-171026	S	10-26-17 10:54		566771-006
SB-8-S-39-40-171026	S	10-26-17 10:57		566771-007
SB-8-S-49-50-171026	S	10-26-17 11:20		566771-008
SB-8-S-59-60-171026	S	10-26-17 11:23		566771-009
SB-8-S-69-70-171026	S	10-26-17 11:42		566771-010
SB-8-S-79-80-171026	S	10-26-17 11:45		566771-011
SB-8-S-79-80-171026	S	10-26-17 11:45		566771-012
SB-8-S-89-90-171026	S	10-26-17 12:00		566771-013
SB-6-S-0.5-1-171026	S	10-26-17 12:50		566771-014
SB-6-S-4-5-171026	S	10-26-17 12:53		566771-015
SB-6-S-9-10-171026	S	10-26-17 12:56		566771-016
SB-6-S-19-20-171026	S	10-26-17 12:59		566771-017
SB-6-S-29-30-171026	S	10-26-17 13:26		566771-018
SB-6-S-39-40-171026	S	10-26-17 13:29		566771-019
SB-6-S-49-50-171026	S	10-26-17 13:37		566771-020
SB-6-S-59-60-171026	S	10-26-17 13:40		566771-021
SB-6-S-59-60-171026	S	10-26-17 13:40		566771-022
SB-6-S-69-70-171026	S	10-26-17 14:00		566771-023
SB-6-S-79-80-171026	S	10-26-17 14:03		566771-024
SB-6-S-89-90-171026	S	10-26-17 14:15		566771-025

Sample receipt non conformances and comments:

566771-024, -025- on hold for BTEX and TPH per Scott Foord e-mail 10/27/17-- KB

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3032137 BTEX by SW 8260B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3032220 BTEX by SW 8260B
Surrogate Toluene-D8 recovered below QC limits Data confirmed by re-analysis. Samples affected are: 7633696-1-BLK.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

GHD Services, INC- Midland, Midland, TX

LPU-96

Sample Id: **SB-8-S-0.5-1-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-001 Date Collected: 10.26.17 10.21

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 17.06	U	1
Diesel Range Organics	C10C28DRO	**607**	15.0	mg/kg	10.28.17 17.06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	10.28.17 17.06	
o-Terphenyl	84-15-1	100	%	70-135	10.28.17 17.06	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.02.17 15.30 Basis: Wet Weight

Seq Number: 3032220 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.02.17 15.46	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.02.17 15.46	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.02.17 15.46	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.02.17 15.46	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.02.17 15.46	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.02.17 15.46	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.02.17 15.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	120	%	74-126	11.02.17 15.46	
1,2-Dichloroethane-D4	17060-07-0	102	%	80-120	11.02.17 15.46	
Toluene-D8	2037-26-5	102	%	73-132	11.02.17 15.46	

Certificate of Analytical Results 566771

GHD Services, INC- Midland, Midland, TX

LPU-96

Sample Id:	**SB-8-S-0.5-1-171026**	Matrix:	Soil	Date Received:	10.26.17 15.30
Lab Sample Id:	566771-002	Date Collected:	10.26.17 10.21		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.03.17 18.30	Basis:	Wet Weight
Seq Number:	3032454				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**25.5**	4.97	mg/kg	11.04.17 01.11		1

Certificate of Analytical Results 566771

GHD Services, INC- Midland, Midland, TX

LPU-96

Sample Id: **SB-8-S-4-5-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-003 Date Collected: 10.26.17 10.24

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**95.3**	4.97	mg/kg	11.04.17 01.38		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	10.27.17 22.52	U	1
Diesel Range Organics	C10C28DRO	**92.0**	14.9	mg/kg	10.27.17 22.52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.27.17 22.52	
o-Terphenyl	84-15-1	96	%	70-135	10.27.17 22.52	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000990	0.000990	mg/kg	11.01.17 23.03	U	1
Toluene	108-88-3	<0.000990	0.000990	mg/kg	11.01.17 23.03	U	1
Ethylbenzene	100-41-4	<0.000990	0.000990	mg/kg	11.01.17 23.03	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.01.17 23.03	U	1
o-Xylene	95-47-6	<0.000990	0.000990	mg/kg	11.01.17 23.03	U	1
Total Xylenes	1330-20-7	<0.000990	0.000990	mg/kg	11.01.17 23.03	U	1
Total BTEX		<0.000990	0.000990	mg/kg	11.01.17 23.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	126	%	74-126	11.01.17 23.03	
1,2-Dichloroethane-D4	17060-07-0	118	%	80-120	11.01.17 23.03	
Toluene-D8	2037-26-5	99	%	73-132	11.01.17 23.03	

Certificate of Analytical Results 566771

GHD Services, INC- Midland, Midland, TX

LPU-96

Sample Id: **SB-8-S-9-10-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-004 Date Collected: 10.26.17 10.27

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**39.5**	4.99	mg/kg	11.04.17 01.47		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.27.17 23.15	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.27.17 23.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.27.17 23.15	
o-Terphenyl	84-15-1	97	%	70-135	10.27.17 23.15	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.01.17 23.18	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.01.17 23.18	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.01.17 23.18	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.01.17 23.18	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.01.17 23.18	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.01.17 23.18	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.01.17 23.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	122	%	74-126	11.01.17 23.18	
1,2-Dichloroethane-D4	17060-07-0	112	%	80-120	11.01.17 23.18	
Toluene-D8	2037-26-5	97	%	73-132	11.01.17 23.18	

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GHD Services, INC- Midland, Midland, TX

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Sample Id: **SB-8-S-19-20-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-005 Date Collected: 10.26.17 10.30

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**87.1**	4.99	mg/kg	11.04.17 01.56		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 00.15	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 00.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	10.28.17 00.15	
o-Terphenyl	84-15-1	94	%	70-135	10.28.17 00.15	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	11.01.17 23.34	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	11.01.17 23.34	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	mg/kg	11.01.17 23.34	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.01.17 23.34	U	1
o-Xylene	95-47-6	<0.000998	0.000998	mg/kg	11.01.17 23.34	U	1
Total Xylenes	1330-20-7	<0.000998	0.000998	mg/kg	11.01.17 23.34	U	1
Total BTEX		<0.000998	0.000998	mg/kg	11.01.17 23.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	119	%	74-126	11.01.17 23.34	
1,2-Dichloroethane-D4	17060-07-0	109	%	80-120	11.01.17 23.34	
Toluene-D8	2037-26-5	97	%	73-132	11.01.17 23.34	

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GHD Services, INC- Midland, Midland, TX

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Sample Id: **SB-8-S-29-30-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-006 Date Collected: 10.26.17 10.54

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**60.9**	4.95	mg/kg	11.04.17 02.04		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 00.35	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 00.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.28.17 00.35	
o-Terphenyl	84-15-1	98	%	70-135	10.28.17 00.35	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000992	0.000992	mg/kg	11.01.17 23.49	U	1
Toluene	108-88-3	<0.000992	0.000992	mg/kg	11.01.17 23.49	U	1
Ethylbenzene	100-41-4	<0.000992	0.000992	mg/kg	11.01.17 23.49	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.01.17 23.49	U	1
o-Xylene	95-47-6	<0.000992	0.000992	mg/kg	11.01.17 23.49	U	1
Total Xylenes	1330-20-7	<0.000992	0.000992	mg/kg	11.01.17 23.49	U	1
Total BTEX		<0.000992	0.000992	mg/kg	11.01.17 23.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	115	%	74-126	11.01.17 23.49	
1,2-Dichloroethane-D4	17060-07-0	100	%	80-120	11.01.17 23.49	
Toluene-D8	2037-26-5	100	%	73-132	11.01.17 23.49	

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GHD Services, INC- Midland, Midland, TX

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Sample Id: **SB-8-S-39-40-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-007 Date Collected: 10.26.17 10.57

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**82.0**	4.96	mg/kg	11.04.17 02.13		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 00.55	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 00.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	10.28.17 00.55	
o-Terphenyl	84-15-1	92	%	70-135	10.28.17 00.55	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.01.17 22.32	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.01.17 22.32	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.01.17 22.32	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.01.17 22.32	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.01.17 22.32	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.01.17 22.32	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.01.17 22.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	116	%	74-126	11.01.17 22.32	
1,2-Dichloroethane-D4	17060-07-0	105	%	80-120	11.01.17 22.32	
Toluene-D8	2037-26-5	90	%	73-132	11.01.17 22.32	

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GHD Services, INC- Midland, Midland, TX

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Sample Id: **SB-8-S-49-50-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-008 Date Collected: 10.26.17 11.20

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**56.1**	4.90	mg/kg	11.04.17 02.22		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 01.16	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 01.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	10.28.17 01.16	
o-Terphenyl	84-15-1	98	%	70-135	10.28.17 01.16	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	11.02.17 00.05	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	11.02.17 00.05	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	11.02.17 00.05	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.02.17 00.05	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	11.02.17 00.05	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	11.02.17 00.05	U	1
Total BTEX		<0.000996	0.000996	mg/kg	11.02.17 00.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	119	%	74-126	11.02.17 00.05	
1,2-Dichloroethane-D4	17060-07-0	107	%	80-120	11.02.17 00.05	
Toluene-D8	2037-26-5	93	%	73-132	11.02.17 00.05	

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Sample Id: **SB-8-S-59-60-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-009 Date Collected: 10.26.17 11.23

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.1**	4.99	mg/kg	11.04.17 02.49		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 01.37	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 01.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	10.28.17 01.37	
o-Terphenyl	84-15-1	91	%	70-135	10.28.17 01.37	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000994	0.000994	mg/kg	11.02.17 00.20	U	1
Toluene	108-88-3	<0.000994	0.000994	mg/kg	11.02.17 00.20	U	1
Ethylbenzene	100-41-4	<0.000994	0.000994	mg/kg	11.02.17 00.20	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.02.17 00.20	U	1
o-Xylene	95-47-6	<0.000994	0.000994	mg/kg	11.02.17 00.20	U	1
Total Xylenes	1330-20-7	<0.000994	0.000994	mg/kg	11.02.17 00.20	U	1
Total BTEX		<0.000994	0.000994	mg/kg	11.02.17 00.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	124	%	74-126	11.02.17 00.20	
1,2-Dichloroethane-D4	17060-07-0	106	%	80-120	11.02.17 00.20	
Toluene-D8	2037-26-5	93	%	73-132	11.02.17 00.20	

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Sample Id: **SB-8-S-69-70-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-010 Date Collected: 10.26.17 11.42

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**25.6**	5.00	mg/kg	11.04.17 02.57		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 01.56	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 01.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	10.28.17 01.56	
o-Terphenyl	84-15-1	97	%	70-135	10.28.17 01.56	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	11.02.17 00.36	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	11.02.17 00.36	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	11.02.17 00.36	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.02.17 00.36	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	11.02.17 00.36	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	11.02.17 00.36	U	1
Total BTEX		<0.000996	0.000996	mg/kg	11.02.17 00.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	121	%	74-126	11.02.17 00.36	
1,2-Dichloroethane-D4	17060-07-0	108	%	80-120	11.02.17 00.36	
Toluene-D8	2037-26-5	102	%	73-132	11.02.17 00.36	

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LPU-96

Sample Id: **SB-8-S-79-80-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-011 Date Collected: 10.26.17 11.45

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 02.16	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 02.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	10.28.17 02.16	
o-Terphenyl	84-15-1	93	%	70-135	10.28.17 02.16	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.02.17 00.51	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.02.17 00.51	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.02.17 00.51	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.02.17 00.51	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.02.17 00.51	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.02.17 00.51	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.02.17 00.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	120	%	74-126	11.02.17 00.51	
1,2-Dichloroethane-D4	17060-07-0	105	%	80-120	11.02.17 00.51	
Toluene-D8	2037-26-5	93	%	73-132	11.02.17 00.51	

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LPU-96

Sample Id:	**SB-8-S-79-80-171026**	Matrix:	Soil	Date Received:	10.26.17 15.30
Lab Sample Id:	566771-012	Date Collected:	10.26.17 11.45		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.09.17 10.00	Basis:	Wet Weight
Seq Number:	3032929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.62**	4.94	mg/kg	11.09.17 13.18		1

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Sample Id: **SB-8-S-89-90-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-013 Date Collected: 10.26.17 12.00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**25.5**	4.90	mg/kg	11.04.17 03.24		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 03.17	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 03.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.28.17 03.17	
o-Terphenyl	84-15-1	97	%	70-135	10.28.17 03.17	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000992	0.000992	mg/kg	11.02.17 01.07	U	1
Toluene	108-88-3	<0.000992	0.000992	mg/kg	11.02.17 01.07	U	1
Ethylbenzene	100-41-4	<0.000992	0.000992	mg/kg	11.02.17 01.07	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.02.17 01.07	U	1
o-Xylene	95-47-6	<0.000992	0.000992	mg/kg	11.02.17 01.07	U	1
Total Xylenes	1330-20-7	<0.000992	0.000992	mg/kg	11.02.17 01.07	U	1
Total BTEX		<0.000992	0.000992	mg/kg	11.02.17 01.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	118	%	74-126	11.02.17 01.07	
1,2-Dichloroethane-D4	17060-07-0	102	%	80-120	11.02.17 01.07	
Toluene-D8	2037-26-5	96	%	73-132	11.02.17 01.07	

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GHD Services, INC- Midland, Midland, TX

LPU-96

Sample Id: **SB-6-S-0.5-1-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-014 Date Collected: 10.26.17 12.50

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**25.4**	4.92	mg/kg	11.04.17 03.33		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	10.28.17 17.28	U	1
Diesel Range Organics	C10C28DRO	**693**	14.9	mg/kg	10.28.17 17.28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	10.28.17 17.28	
o-Terphenyl	84-15-1	90	%	70-135	10.28.17 17.28	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.02.17 01.22	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.02.17 01.22	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.02.17 01.22	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.02.17 01.22	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.02.17 01.22	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.02.17 01.22	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.02.17 01.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	123	%	74-126	11.02.17 01.22	
1,2-Dichloroethane-D4	17060-07-0	91	%	80-120	11.02.17 01.22	
Toluene-D8	2037-26-5	105	%	73-132	11.02.17 01.22	

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Sample Id: **SB-6-S-4-5-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-015 Date Collected: 10.26.17 12.53

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**40.2**	4.99	mg/kg	11.04.17 03.42		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	**310**	15.0	mg/kg	10.28.17 17.49		1
Diesel Range Organics	C10C28DRO	**2370**	15.0	mg/kg	10.28.17 17.49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	10.28.17 17.49	
o-Terphenyl	84-15-1	92	%	70-135	10.28.17 17.49	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.02.17 15.30 Basis: Wet Weight

Seq Number: 3032220 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0248	0.0248	mg/kg	11.03.17 16.17	U	25
Toluene	108-88-3	<0.0248	0.0248	mg/kg	11.03.17 16.17	U	25
Ethylbenzene	100-41-4	**0.452**	0.0248	mg/kg	11.03.17 16.17		25
m,p-Xylenes	179601-23-1	**0.502**	0.0495	mg/kg	11.03.17 16.17		25
o-Xylene	95-47-6	**0.222**	0.0248	mg/kg	11.03.17 16.17		25
Total Xylenes	1330-20-7	**0.724**	0.0248	mg/kg	11.03.17 16.17		25
Total BTEX		**1.18**	0.0248	mg/kg	11.03.17 16.17		25

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	115	%	74-126	11.03.17 16.17	
1,2-Dichloroethane-D4	17060-07-0	102	%	80-120	11.03.17 16.17	
Toluene-D8	2037-26-5	96	%	73-132	11.03.17 16.17	

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Sample Id: **SB-6-S-9-10-171026** Matrix: Soil Date Received:10.26.17 15.30
Lab Sample Id: 566771-016 Date Collected: 10.26.17 12.56

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MNV % Moisture:
Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight
Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**118**	4.99	mg/kg	11.04.17 03.50		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
Tech: ARM % Moisture:
Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight
Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	10.28.17 04.19	U	1
Diesel Range Organics	C10C28DRO	**42.8**	14.9	mg/kg	10.28.17 04.19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	10.28.17 04.19	
o-Terphenyl	84-15-1	84	%	70-135	10.28.17 04.19	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B
Tech: JTR % Moisture:
Analyst: JTR Date Prep: 11.02.17 15.30 Basis: Wet Weight
Seq Number: 3032220 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000992	0.000992	mg/kg	11.02.17 16.34	U	1
Toluene	108-88-3	<0.000992	0.000992	mg/kg	11.02.17 16.34	U	1
Ethylbenzene	100-41-4	<0.000992	0.000992	mg/kg	11.02.17 16.34	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.02.17 16.34	U	1
o-Xylene	95-47-6	<0.000992	0.000992	mg/kg	11.02.17 16.34	U	1
Total Xylenes	1330-20-7	<0.000992	0.000992	mg/kg	11.02.17 16.34	U	1
Total BTEX		<0.000992	0.000992	mg/kg	11.02.17 16.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	120	%	74-126	11.02.17 16.34	
1,2-Dichloroethane-D4	17060-07-0	110	%	80-120	11.02.17 16.34	
Toluene-D8	2037-26-5	109	%	73-132	11.02.17 16.34	

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Sample Id: **SB-6-S-19-20-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-017 Date Collected: 10.26.17 12.59

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**32.6**	4.99	mg/kg	11.04.17 03.59		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 04.40	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 04.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	10.28.17 04.40	
o-Terphenyl	84-15-1	94	%	70-135	10.28.17 04.40	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.02.17 15.30 Basis: Wet Weight

Seq Number: 3032220 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00107	0.00107	mg/kg	11.02.17 16.19	U	1
Toluene	108-88-3	<0.00107	0.00107	mg/kg	11.02.17 16.19	U	1
Ethylbenzene	100-41-4	<0.00107	0.00107	mg/kg	11.02.17 16.19	U	1
m,p-Xylenes	179601-23-1	<0.00213	0.00213	mg/kg	11.02.17 16.19	U	1
o-Xylene	95-47-6	<0.00107	0.00107	mg/kg	11.02.17 16.19	U	1
Total Xylenes	1330-20-7	<0.00107	0.00107	mg/kg	11.02.17 16.19	U	1
Total BTEX		<0.00107	0.00107	mg/kg	11.02.17 16.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	120	%	74-126	11.02.17 16.19	
1,2-Dichloroethane-D4	17060-07-0	113	%	80-120	11.02.17 16.19	
Toluene-D8	2037-26-5	106	%	73-132	11.02.17 16.19	

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Sample Id: **SB-6-S-29-30-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-018 Date Collected: 10.26.17 13.26

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**51.8**	4.99	mg/kg	11.04.17 04.08		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	10.28.17 04.59	U	1
Diesel Range Organics	C10C28DRO	<14.9	14.9	mg/kg	10.28.17 04.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	10.28.17 04.59	
o-Terphenyl	84-15-1	97	%	70-135	10.28.17 04.59	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.02.17 02.24	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.02.17 02.24	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.02.17 02.24	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	11.02.17 02.24	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.02.17 02.24	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.02.17 02.24	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.02.17 02.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	119	%	74-126	11.02.17 02.24	
1,2-Dichloroethane-D4	17060-07-0	101	%	80-120	11.02.17 02.24	
Toluene-D8	2037-26-5	102	%	73-132	11.02.17 02.24	

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Sample Id: **SB-6-S-39-40-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-019 Date Collected: 10.26.17 13.29

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.30 Basis: Wet Weight

Seq Number: 3032454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**69.2**	4.90	mg/kg	11.04.17 04.17		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 05.19	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 05.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	10.28.17 05.19	
o-Terphenyl	84-15-1	101	%	70-135	10.28.17 05.19	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	11.02.17 02.40	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	11.02.17 02.40	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	11.02.17 02.40	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.02.17 02.40	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	11.02.17 02.40	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	11.02.17 02.40	U	1
Total BTEX		<0.000996	0.000996	mg/kg	11.02.17 02.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	116	%	74-126	11.02.17 02.40	
1,2-Dichloroethane-D4	17060-07-0	104	%	80-120	11.02.17 02.40	
Toluene-D8	2037-26-5	109	%	73-132	11.02.17 02.40	

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Sample Id: **SB-6-S-49-50-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-020 Date Collected: 10.26.17 13.37

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.40 Basis: Wet Weight

Seq Number: 3032480

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**178**	5.00	mg/kg	11.04.17 05.37		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 05.40	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 05.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	10.28.17 05.40	
o-Terphenyl	84-15-1	92	%	70-135	10.28.17 05.40	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.02.17 02.55	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.02.17 02.55	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.02.17 02.55	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	11.02.17 02.55	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.02.17 02.55	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.02.17 02.55	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.02.17 02.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	111	%	74-126	11.02.17 02.55	
1,2-Dichloroethane-D4	17060-07-0	99	%	80-120	11.02.17 02.55	
Toluene-D8	2037-26-5	109	%	73-132	11.02.17 02.55	

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Sample Id: **SB-6-S-59-60-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-021 Date Collected: 10.26.17 13.40

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 06.02	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 06.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	10.28.17 06.02	
o-Terphenyl	84-15-1	92	%	70-135	10.28.17 06.02	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000994	0.000994	mg/kg	11.02.17 03.11	U	1
Toluene	108-88-3	<0.000994	0.000994	mg/kg	11.02.17 03.11	U	1
Ethylbenzene	100-41-4	<0.000994	0.000994	mg/kg	11.02.17 03.11	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.02.17 03.11	U	1
o-Xylene	95-47-6	<0.000994	0.000994	mg/kg	11.02.17 03.11	U	1
Total Xylenes	1330-20-7	<0.000994	0.000994	mg/kg	11.02.17 03.11	U	1
Total BTEX		<0.000994	0.000994	mg/kg	11.02.17 03.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	113	%	74-126	11.02.17 03.11	
1,2-Dichloroethane-D4	17060-07-0	100	%	80-120	11.02.17 03.11	
Toluene-D8	2037-26-5	100	%	73-132	11.02.17 03.11	

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Sample Id:	**SB-6-S-59-60-171026**	Matrix:	Soil	Date Received:	10.26.17 15.30
Lab Sample Id:	566771-022	Date Collected:	10.26.17 13.40		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.09.17 10.00	Basis:	Wet Weight
Seq Number:	3032929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**510**	4.96	mg/kg	11.09.17 13.24		1

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Sample Id: **SB-6-S-69-70-171026** Matrix: Soil Date Received:10.26.17 15.30

Lab Sample Id: 566771-023 Date Collected: 10.26.17 14.00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.03.17 18.40 Basis: Wet Weight

Seq Number: 3032480

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1290**	24.7	mg/kg	11.04.17 05.45		5

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.27.17 19.00 Basis: Wet Weight

Seq Number: 3031737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.28.17 06.22	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.28.17 06.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	10.28.17 06.22	
o-Terphenyl	84-15-1	94	%	70-135	10.28.17 06.22	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.01.17 19.00 Basis: Wet Weight

Seq Number: 3032137 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000994	0.000994	mg/kg	11.02.17 03.26	U	1
Toluene	108-88-3	<0.000994	0.000994	mg/kg	11.02.17 03.26	U	1
Ethylbenzene	100-41-4	<0.000994	0.000994	mg/kg	11.02.17 03.26	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.02.17 03.26	U	1
o-Xylene	95-47-6	<0.000994	0.000994	mg/kg	11.02.17 03.26	U	1
Total Xylenes	1330-20-7	<0.000994	0.000994	mg/kg	11.02.17 03.26	U	1
Total BTEX		<0.000994	0.000994	mg/kg	11.02.17 03.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	124	%	74-126	11.02.17 03.26	
1,2-Dichloroethane-D4	17060-07-0	104	%	80-120	11.02.17 03.26	
Toluene-D8	2037-26-5	98	%	73-132	11.02.17 03.26	

Certificate of Analytical Results 566771

GHD Services, INC- Midland, Midland, TX

LPU-96

Sample Id:	**SB-6-S-79-80-171026**	Matrix:	Soil	Date Received:	10.26.17 15.30
Lab Sample Id:	566771-024	Date Collected:	10.26.17 14.03		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.03.17 18.40	Basis:	Wet Weight
Seq Number:	3032480				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1100**	4.98	mg/kg	11.04.17 05.54		1

Certificate of Analytical Results 566771

GHD Services, INC- Midland, Midland, TX

LPU-96

Sample Id:	**SB-6-S-89-90-171026**	Matrix:	Soil	Date Received:	10.26.17 15.30
Lab Sample Id:	566771-025	Date Collected:	10.26.17 14.15		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.03.17 18.40	Basis:	Wet Weight
Seq Number:	3032480				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1010**	4.90	mg/kg	11.04.17 06.03		1

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

QC Summary 566771

GHD Services, INC- Midland

LPU-96

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032454 Matrix: Solid Date Prep: 11.03.17
MB Sample Id: 7633801-1-BLK LCS Sample Id: 7633801-1-BKS LCSD Sample Id: 7633801-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	246	98	245	98	90-110	0	20	mg/kg	11.04.17 00:01	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032480 Matrix: Solid Date Prep: 11.03.17
MB Sample Id: 7633802-1-BLK LCS Sample Id: 7633802-1-BKS LCSD Sample Id: 7633802-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	252	101	252	101	90-110	0	20	mg/kg	11.04.17 04:52	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032929 Matrix: Solid Date Prep: 11.09.17
MB Sample Id: 7634115-1-BLK LCS Sample Id: 7634115-1-BKS LCSD Sample Id: 7634115-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	255	102	256	102	90-110	0	20	mg/kg	11.09.17 11:55	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032454 Matrix: Soil Date Prep: 11.03.17
Parent Sample Id: 566583-005 MS Sample Id: 566583-005 S MSD Sample Id: 566583-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	390	248	640	101	640	101	90-110	0	20	mg/kg	11.04.17 00:27	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032454 Matrix: Soil Date Prep: 11.03.17
Parent Sample Id: 566771-008 MS Sample Id: 566771-008 S MSD Sample Id: 566771-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	56.1	245	292	96	290	95	90-110	1	20	mg/kg	11.04.17 02:31	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032480 Matrix: Soil Date Prep: 11.03.17
Parent Sample Id: 566503-041 MS Sample Id: 566503-041 S MSD Sample Id: 566503-041 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	766	261	1020	97	1020	97	90-110	0	20	mg/kg	11.04.17 07:23	

QC Summary 566771

GHD Services, INC- Midland

LPU-96

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032480 Matrix: Soil Date Prep: 11.03.17
Parent Sample Id: 566503-066 MS Sample Id: 566503-066 S MSD Sample Id: 566503-066 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	398	261	667	103	676	107	90-110	1	20	mg/kg	11.04.17 05:19	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032929 Matrix: Soil Date Prep: 11.09.17
Parent Sample Id: 566621-008 MS Sample Id: 566621-008 S MSD Sample Id: 566621-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	297	247	538	98	536	97	90-110	0	20	mg/kg	11.09.17 12:14	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032929 Matrix: Soil Date Prep: 11.09.17
Parent Sample Id: 566990-004 MS Sample Id: 566990-004 S MSD Sample Id: 566990-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	759	249	966	83	965	83	90-110	0	20	mg/kg	11.09.17 13:43	X

Analytical Method: **Percent Moisture**
Seq Number: 3031778 Matrix: Solid
MB Sample Id: 3031778-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<1.00	%	10.30.17 11:00	

Analytical Method: **Percent Moisture**
Seq Number: 3031780 Matrix: Solid
MB Sample Id: 3031780-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<1.00	%	10.30.17 11:00	

Analytical Method: **Percent Moisture**
Seq Number: 3031782 Matrix: Solid
MB Sample Id: 3031782-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<1.00	%	10.30.17 11:00	

QC Summary 566771

GHD Services, INC- Midland

LPU-96

Analytical Method: **Percent Moisture**
Seq Number: 3031778 Matrix: Soil
Parent Sample Id: 566621-017 MD Sample Id: 566621-017 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	32.2	30.2	6	20	%	10.30.17 11:00	

Analytical Method: **Percent Moisture**
Seq Number: 3031778 Matrix: Soil
Parent Sample Id: 566771-002 MD Sample Id: 566771-002 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	8.71	9.49	9	20	%	10.30.17 11:00	

Analytical Method: **Percent Moisture**
Seq Number: 3031780 Matrix: Soil
Parent Sample Id: 566771-003 MD Sample Id: 566771-003 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	15.4	14.9	3	20	%	10.30.17 11:00	

Analytical Method: **Percent Moisture**
Seq Number: 3031780 Matrix: Soil
Parent Sample Id: 566771-020 MD Sample Id: 566771-020 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	4.75	5.00	5	20	%	10.30.17 11:00	

Analytical Method: **Percent Moisture**
Seq Number: 3031782 Matrix: Soil
Parent Sample Id: 566771-021 MD Sample Id: 566771-021 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	6.97	7.02	1	20	%	10.30.17 11:00	

QC Summary 566771

GHD Services, INC- Midland

LPU-96

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3031737 Matrix: Solid Date Prep: 10.27.17
MB Sample Id: 7633393-1-BLK LCS Sample Id: 7633393-1-BKS LCSD Sample Id: 7633393-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	1050	105	1100	110	70-135	5	35	mg/kg	10.27.17 21:54	
Diesel Range Organics	<15.0	1000	1130	113	1130	113	70-135	0	35	mg/kg	10.27.17 21:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		114		120		70-135	%	10.27.17 21:54
o-Terphenyl	114		103		107		70-135	%	10.27.17 21:54

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3031737 Matrix: Soil Date Prep: 10.27.17
Parent Sample Id: 566771-004 MS Sample Id: 566771-004 S MSD Sample Id: 566771-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	999	1120	112	1020	102	70-135	9	35	mg/kg	10.27.17 23:34	
Diesel Range Organics	<15.0	999	1120	112	1070	107	70-135	5	35	mg/kg	10.27.17 23:34	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		105		70-135	%	10.27.17 23:34
o-Terphenyl	97		93		70-135	%	10.27.17 23:34

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B
Seq Number: 3032137 Matrix: Solid Date Prep: 11.01.17
MB Sample Id: 7633650-1-BLK LCS Sample Id: 7633650-1-BKS LCSD Sample Id: 7633650-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.106	106	0.0983	98	62-132	8	25	mg/kg	11.01.17 20:12	
Toluene	<0.00100	0.100	0.109	109	0.100	100	66-124	9	25	mg/kg	11.01.17 20:12	
Ethylbenzene	<0.00100	0.100	0.105	105	0.0967	97	71-134	8	25	mg/kg	11.01.17 20:12	
m,p-Xylenes	<0.00200	0.200	0.217	109	0.196	98	69-128	10	25	mg/kg	11.01.17 20:12	
o-Xylene	<0.00100	0.100	0.116	116	0.0966	97	72-131	18	25	mg/kg	11.01.17 20:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	115		107		103		74-126	%	11.01.17 20:12
1,2-Dichloroethane-D4	108		116		113		80-120	%	11.01.17 20:12
Toluene-D8	91		109		105		73-132	%	11.01.17 20:12

QC Summary 566771

GHD Services, INC- Midland

LPU-96

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032220 Matrix: Solid Date Prep: 11.02.17

MB Sample Id: 7633696-1-BLK LCS Sample Id: 7633696-1-BKS LCSD Sample Id: 7633696-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.103	103	0.0976	98	62-132	5	25	mg/kg	11.02.17 10:57	
Toluene	<0.00100	0.100	0.101	101	0.0906	91	66-124	11	25	mg/kg	11.02.17 10:57	
Ethylbenzene	<0.00100	0.100	0.0964	96	0.0928	93	71-134	4	25	mg/kg	11.02.17 10:57	
m,p-Xylenes	<0.00200	0.200	0.197	99	0.188	94	69-128	5	25	mg/kg	11.02.17 10:57	
o-Xylene	<0.00100	0.100	0.102	102	0.0923	92	72-131	10	25	mg/kg	11.02.17 10:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	121		103		105		74-126	%	11.02.17 10:57
1,2-Dichloroethane-D4	97		104		109		80-120	%	11.02.17 10:57
Toluene-D8	0	**	109		96		73-132	%	11.02.17 10:57

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032137 Matrix: Soil Date Prep: 11.01.17

Parent Sample Id: 566771-007 MS Sample Id: 566771-007 S MSD Sample Id: 566771-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0832	83	0.0922	92	62-132	10	25	mg/kg	11.01.17 20:59	
Toluene	<0.00100	0.100	0.0810	81	0.0969	97	66-124	18	25	mg/kg	11.01.17 20:59	
Ethylbenzene	<0.00100	0.100	0.0770	77	0.0894	89	71-134	15	25	mg/kg	11.01.17 20:59	
m,p-Xylenes	<0.00200	0.200	0.159	80	0.181	91	69-128	13	25	mg/kg	11.01.17 20:59	
o-Xylene	<0.00100	0.100	0.0790	79	0.0909	91	72-131	14	25	mg/kg	11.01.17 20:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	114		100		74-126	%	11.01.17 20:59
1,2-Dichloroethane-D4	116		106		80-120	%	11.01.17 20:59
Toluene-D8	103		108		73-132	%	11.01.17 20:59

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Chain of Custody Form

COC ID: 168841

ALS Project Manager: | ALS Work Order #: 566771

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	073816 LPU-96	A	8260_S (BTEX)
Work Order		Project Number	073816	B	8015_GRO_S (TPH-GRO)
Company Name	GHD	Bill To Company	GHD	C	8015M_S_LL (TPH-DRO)
Send Report To	Scott Foord	Invoice Attn		D	300_S (300 Chloride)
Address	6320 Rothway, Suite 100	Address	13091 Pond Springs Road, Suite	E	SW3550 (Moist%)
				F	
City/State/Zip	Houston, TX 77040	City/State/Zip	Austin TX 78729	G	
Phone	(713) 734-3090	Phone	(512) 506-8803	H	
Fax	(713) 734-3391	Fax		I	
e-Mail Address	William.Foord@ghd.com	e-Mail Address		J	

Temp: 3.2 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 3

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	SB-8-S-0.5-1-171025	10/26/17	1021	Soil	8	2	X	X	X		X						
2	SB-8-S-0.5-1-171026		1021	Soil	8	1				X	X						
3	SB-8-S-4-5-171026		1024			3											
4	SB-8-S-9-10-171025		1027														
5	SB-8-S-19-20-171025		1030														
6	SB-8-S-29-30-171025		1054														
7	SB-8-S-39-40-171025		1057														
8	SB-8-S-49-50-171026		1120														
9	SB-8-S-59-60-171026		1123														
10	SB-8-S-69-70-171026		1142														

Sampler(s) Please Print & Sign: Rebecca Jones Rebecca Jones

Shipment Method:

Required Turnaround Time: (Check Box) [X] STD 10 Wk Days [ ] 5 Wk Days [ ] 2 Wk Days [ ] 24 Hour [ ] Other

Results Due Date:

Relinquished by: Rebecca Jones	Date: 10/26/17	Time: 1530	Received by: Shearer	
Relinquished by:	Date:	Time:	Received by (Laboratory):	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Notes: [GHD CEMC New Mexico]

Cooler ID	Cooler Temp.
1	2.9

QC Package: (Check One Box Below)
[X] Level II Std QC
[ ] Level III Std QC/Raw Date
[ ] Level IV SW846/CLP
[ ] Other
[ ] TRRP Checklist
[ ] TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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Chain of Custody Form

COC ID: 168840

ALS Project Manager: | ALS Work Order #: 566771

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	073816 LPU-96	A	8260_S (BTEX)
Work Order		Project Number	073816	B	8015_GRO_S (TPH-GRO)
Company Name	GHD	Bill To Company	GHD	C	8015M_S_LL (TPH-DRO)
Send Report To	Scott Foord	Invoice Attn		D	300_S (300 Chloride)
Address	6320 Rothway, Suite 100	Address	13091 Pond Springs Road, Suite	E	SW3550 (Moist%)
				F	
City/State/Zip	Houston, TX 77040	City/State/Zip	Austin TX 78729	G	Temp: 3.2 IR ID:R-8
Phone	(713) 734-3090	Phone	(512) 506-8803	H	CF:(0-6: -0.2°C) (6-23: +0.2°C)
Fax	(713) 734-3391	Fax		I	Corrected Temp: 3
e-Mail Address	William.Foord@ghd.com	e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	SB-8-S-79-80-171026	10/26/17	1145	Soil	8	2	X	X	X		X						
2	SB-8-S-79-80-171026		1145	Soil	8	1				X	X						
3	SB-8-S-89-90-171026		1200			3											
4	SB-6-S-0.5-1-171026		1250														
5	SB-6-S-4-5-171026		1253														
6	SB-6-S-9-10-171026		1256														
7	SB-6-S-19-20-171026		1259														
8	SB-6-S-29-30-171026		1326														
9	SB-6-S-39-40-171026		1329														
10	SB-6-S-49-50-171026		1337														

Sampler(s) Please Print & Sign: Rebecca Sones Rebecca Sones

Shipment Method:

Required Turnaround Time: (Check Box) [X] STD 10 Wk Days [ ] 5 Wk Days [ ] 2 Wk Days [ ] 24 Hour [ ] Other

Results Due Date:

Relinquished by: Rebecca Sones	Date: 10/26/17	Time: 1530	Received by: J Shepard	Notes: [GHD CEMC New Mexico]
Relinquished by:	Date:	Time:	Received by (Laboratory):	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Cooler ID	Cooler Temp.
1	2.9

QC Package: (Check One Box Below)
[X] Level II Std QC
[ ] Level III Std QC/Raw Data
[ ] Level IV SW846/CLP
[ ] Other
[ ] TRRP Checklist
[ ] TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note:
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3. The Chain of Custody is a legal document. All information must be completed accurately.

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Chain of Custody Form

COC ID: 168839

ALS Project Manager: | ALS Work Order #: 566771

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	073816 LPU-96	A	8260_S (BTEX)
Work Order		Project Number	073816	B	8015_GRO_S (TPH-GRO)
Company Name	GHD	Bill To Company	GHD	C	8015M_S_LL (TPH-DRO)
Send Report To	Scott Foord	Invoice Attn		D	300_S (300 Chloride)
Address	6320 Rothway, Suite 100	Address	13091 Pond Springs Road, Suite	E	SW3550 (Moist%)
				F	
City/State/Zip	Houston, TX 77040	City/State/Zip	Austin TX 78729	G	
Phone	(713) 734-3090	Phone	(512) 506-8803	H	
Fax	(713) 734-3391	Fax		I	
e-Mail Address	William.Foord@ghd.com	e-Mail Address		J	

Temp: 3.2 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 3

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	SB-6-S-59-60-171026	10/26/17	1340	Soil	8	2	X	X	X		X						
2	SB-6-S-59-60-171026		1340	Soil	8	1				X	X						
3	SB-6-S-69-70-171026		1400			3	\	\	\	\	\						
4	SB-6-S-79-80-171026		1403				\	\	\	\	\						
5	SB-6-S-89-90-171026		1415				\	\	\	\	\						
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Rebecca Jones Rebecca Jones

Shipment Method:

Required Turnaround Time: (Check Box) [X] STD 10 Wk Days [ ] 5 Wk Days [ ] 2 Wk Days [ ] 24 Hour [ ] Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:
Rebecca Jones	10/26/17	1530	
Relinquished by:	Date:	Time:	Received by (Laboratory):
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):

Notes: [GHD CEMC New Mexico]

Cooler ID	Cooler Temp.
1	2.9

QC Package: (Check One Box Below)
[X] Level II Std QC
[ ] Level III Std QC/Raw Data
[ ] Level IV SW846/CLP
[ ] Other
[ ] TRRP Checklist
[ ] TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

Inter-Office Shipment

IOS Number **1051057**

Date/Time: 10/30/17 09:57
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Shawnee Smith
Delivery Priority:
Air Bill No.:

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
566771-001	S	SB-8-S-0.5-1-171026	10/26/17 10:21	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-003	S	SB-8-S-4-5-171026	10/26/17 10:24	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-004	S	SB-8-S-9-10-171026	10/26/17 10:27	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-005	S	SB-8-S-19-20-171026	10/26/17 10:30	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-006	S	SB-8-S-29-30-171026	10/26/17 10:54	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-007	S	SB-8-S-39-40-171026	10/26/17 10:57	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-008	S	SB-8-S-49-50-171026	10/26/17 11:20	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-009	S	SB-8-S-59-60-171026	10/26/17 11:23	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-010	S	SB-8-S-69-70-171026	10/26/17 11:42	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-011	S	SB-8-S-79-80-171026	10/26/17 11:45	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-013	S	SB-8-S-89-90-171026	10/26/17 12:00	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-014	S	SB-6-S-0.5-1-171026	10/26/17 12:50	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-015	S	SB-6-S-4-5-171026	10/26/17 12:53	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-016	S	SB-6-S-9-10-171026	10/26/17 12:56	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-017	S	SB-6-S-19-20-171026	10/26/17 12:59	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-018	S	SB-6-S-29-30-171026	10/26/17 13:26	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-019	S	SB-6-S-39-40-171026	10/26/17 13:29	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-020	S	SB-6-S-49-50-171026	10/26/17 13:37	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-021	S	SB-6-S-59-60-171026	10/26/17 13:40	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-023	S	SB-6-S-69-70-171026	10/26/17 14:00	SW8260BTX	BTEX by SW 8260B	11/01/17	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-024	S	SB-6-S-79-80-171026	10/26/17 14:03	SW8260BTX	BTEX by SW 8260B	HOLD	11/09/17	KEB	BZ BZME EBZ XYLENES	
566771-025	S	SB-6-S-89-90-171026	10/26/17 14:15	SW8260BTX	BTEX by SW 8260B	HOLD	11/09/17	KEB	BZ BZME EBZ XYLENES	

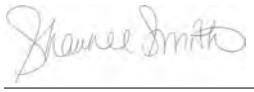
Inter-Office Shipment

IOS Number **1051057**

Date/Time:	10/30/17 09:57	Created by:	Shawnee Smith
Lab# From:	**Midland**	Delivery Priority:	
Lab# To:	**Houston**	Air Bill No.:	

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Inter Office Shipment or Sample Comments:

Relinquished By  Shawnee Smith

Date Relinquished: 10/30/2017

Received By: _____

Date Received: _____

Cooler Temperature: _____

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 10/26/2017 03:30:00 PM

Work Order #: 566771

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.9
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**Yes**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Connie Hernandez Date: 10/27/2017

Checklist reviewed by: Kelsey Brooks Date: 10/27/2017

Certificate of Analysis Summary 566877

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County, NM

Date Received in Lab: Fri Oct-27-17 02:28 pm
Report Date: 08-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566877-001		566877-002		566877-003		566877-004		566877-005		566877-006	
	Field Id:	SB-7-S-0.5-1-171027		SB-7-S-4-5-171027		SB-7-S-9-10-171027		SB-7-S-19-20-171027		SB-7-S-29-30-171027		SB-7-S-39-40-171027	
	Depth:	1-		5-		10-		20-		30-		40-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-27-17 08:35		Oct-27-17 08:38		Oct-27-17 08:41		Oct-27-17 08:44		Oct-27-17 09:05		Oct-27-17 09:08	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-06-17 19:40		Nov-06-17 19:40		Nov-06-17 19:40		Nov-06-17 19:40		Nov-06-17 19:40		Nov-06-17 19:40	
	Analyzed:	Nov-07-17 01:57		Nov-06-17 21:48		Nov-06-17 22:04		Nov-06-17 22:19		Nov-06-17 22:35		Nov-06-17 22:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000990	0.000990	<0.00101	0.00101	<0.000998	0.000998	<0.000990	0.000990	<0.00101	0.00101	<0.00101	0.00101
Toluene		<0.000990	0.000990	<0.00101	0.00101	<0.000998	0.000998	<0.000990	0.000990	<0.00101	0.00101	<0.00101	0.00101
Ethylbenzene		<0.000990	0.000990	<0.00101	0.00101	<0.000998	0.000998	<0.000990	0.000990	<0.00101	0.00101	<0.00101	0.00101
m,p-Xylenes		<0.00198	0.00198	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00202	0.00202	<0.00202	0.00202
o-Xylene		<0.000990	0.000990	<0.00101	0.00101	<0.000998	0.000998	<0.000990	0.000990	<0.00101	0.00101	<0.00101	0.00101
Total Xylenes		<0.000990	0.000990	<0.00101	0.00101	<0.000998	0.000998	<0.000990	0.000990	<0.00101	0.00101	<0.00101	0.00101
Total BTEX		<0.000990	0.000990	<0.00101	0.00101	<0.000998	0.000998	<0.000990	0.000990	<0.00101	0.00101	<0.00101	0.00101
Chloride by EPA 300	***Extracted:***	Nov-04-17 08:50		Nov-04-17 08:50		Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 08:40	
	Analyzed:	Nov-04-17 15:01		Nov-04-17 15:07		Nov-06-17 10:08		Nov-06-17 10:27		Nov-06-17 10:34		Nov-06-17 10:40	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		21.4	4.91	90.0	4.90	597	4.99	187	4.94	44.9	4.93	54.3	4.98
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		14.0	1.00	6.95	1.00	6.91	1.00	25.3	1.00	21.9	1.00	27.4	1.00
TPH By SW8015 Mod	***Extracted:***	Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 10:00	
	Analyzed:	Oct-31-17 14:53		Oct-31-17 15:13		Oct-31-17 15:32		Oct-31-17 15:52		Oct-31-17 16:12		Oct-31-17 16:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Diesel Range Organics		<15.0	15.0	74.3	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566877

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County, NM

Date Received in Lab: Fri Oct-27-17 02:28 pm
Report Date: 08-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566877-007		566877-008		566877-009		566877-010		566877-011		566877-012	
	Field Id:	SB-7-S-49-50-171027		SB-7-S-59-60-171027		SB-7-S-69-70-171027		SB-7-S-79-80-171027		SB-7-S-89-90-171027		SB-9-S-0.5-1-171027	
	Depth:	50-		60-		70-		80-		90-		1-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-27-17 09:20		Oct-27-17 09:23		Oct-27-17 09:40		Oct-27-17 09:57		Oct-27-17 09:57		Oct-27-17 10:33	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-06-17 19:40		Nov-06-17 19:40		Nov-06-17 19:40		Nov-06-17 19:40		Nov-06-17 19:40		Nov-07-17 16:00	
	Analyzed:	Nov-06-17 23:06		Nov-06-17 23:21		Nov-06-17 23:37		Nov-06-17 23:53		Nov-07-17 00:08		Nov-07-17 16:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000996	0.000996	<0.000990	0.000990	<0.000998	0.000998	<0.00100	0.00100	<0.00101	0.00101	<0.00500	0.00500
Toluene		<0.000996	0.000996	<0.000990	0.000990	<0.000998	0.000998	<0.00100	0.00100	<0.00101	0.00101	<0.00500	0.00500
Ethylbenzene		<0.000996	0.000996	<0.000990	0.000990	<0.000998	0.000998	<0.00100	0.00100	<0.00101	0.00101	<0.00500	0.00500
m,p-Xylenes		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.0100	0.0100
o-Xylene		<0.000996	0.000996	<0.000990	0.000990	<0.000998	0.000998	<0.00100	0.00100	<0.00101	0.00101	<0.00500	0.00500
Total Xylenes		<0.000996	0.000996	<0.000990	0.000990	<0.000998	0.000998	<0.00100	0.00100	<0.00101	0.00101	<0.00500	0.00500
Total BTEX		<0.000996	0.000996	<0.000990	0.000990	<0.000998	0.000998	<0.00100	0.00100	<0.00101	0.00101	<0.00500	0.00500
Chloride by EPA 300	***Extracted:***	Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 08:40	
	Analyzed:	Nov-06-17 10:47		Nov-06-17 11:06		Nov-06-17 11:12		Nov-06-17 11:19		Nov-06-17 11:25		Nov-06-17 11:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		47.9	4.92	17.3	4.92	28.9	4.92	14.4	4.94	10.5	4.97	7.86	4.99
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		23.6	1.00	4.80	1.00	14.2	1.00	7.53	1.00	2.96	1.00	9.31	1.00
TPH By SW8015 Mod	***Extracted:***	Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 10:00	
	Analyzed:	Oct-31-17 16:51		Oct-31-17 17:11		Oct-31-17 17:30		Oct-31-17 17:50		Oct-31-17 21:53		Nov-01-17 08:45	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	884	15.0

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566877

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County, NM

Date Received in Lab: Fri Oct-27-17 02:28 pm
Report Date: 08-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566877-013		566877-014		566877-015		566877-016		566877-017		566877-018	
	Field Id:	SB-9-S-4-5-171027		SB-9-S-9-10-171027		SB-9-S-19-20-171027		SB-9-S-29-30-171027		SB-9-S-39-40-171027		SB-9-S-49-50-171027	
	Depth:	5-		10-		20-		30-		40-		50-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-27-17 10:36		Oct-27-17 10:39		Oct-27-17 10:42		Oct-27-17 10:50		Oct-27-17 10:53		Oct-27-17 11:10	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-06-17 19:40		Nov-06-17 19:40		Nov-06-17 19:40		Nov-06-17 19:40		Nov-06-17 19:40		Nov-06-17 19:40	
	Analyzed:	Nov-07-17 02:28		Nov-07-17 01:41		Nov-07-17 00:24		Nov-07-17 00:39		Nov-06-17 21:33		Nov-07-17 00:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00100	0.00100	<0.00100	0.00100	<0.000990	0.000990	<0.00101	0.00101	<0.000996	0.000996	<0.000990	0.000990
Toluene		<0.00100	0.00100	<0.00100	0.00100	<0.000990	0.000990	<0.00101	0.00101	<0.000996	0.000996	<0.000990	0.000990
Ethylbenzene		<0.00100	0.00100	<0.00100	0.00100	<0.000990	0.000990	<0.00101	0.00101	<0.000996	0.000996	<0.000990	0.000990
m,p-Xylenes		<0.00201	0.00201	<0.00201	0.00201	<0.00198	0.00198	<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198
o-Xylene		<0.00100	0.00100	<0.00100	0.00100	<0.000990	0.000990	<0.00101	0.00101	<0.000996	0.000996	<0.000990	0.000990
Total Xylenes		<0.00100	0.00100	<0.00100	0.00100	<0.000990	0.000990	<0.00101	0.00101	<0.000996	0.000996	<0.000990	0.000990
Total BTEX		<0.00100	0.00100	<0.00100	0.00100	<0.000990	0.000990	<0.00101	0.00101	<0.000996	0.000996	<0.000990	0.000990
Chloride by EPA 300	***Extracted:***	Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 08:40	
	Analyzed:	Nov-06-17 11:38		Nov-06-17 11:57		Nov-06-17 12:03		Nov-06-17 12:22		Nov-06-17 12:29		Nov-06-17 12:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		8.44	5.00	34.5	4.91	31.5	5.00	36.6	4.92	41.1	4.99	24.4	4.97
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.45	1.00	14.0	1.00	8.24	1.00	7.75	1.00	7.44	1.00	15.1	1.00
TPH By SW8015 Mod	***Extracted:***	Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 10:00	
	Analyzed:	Nov-01-17 09:07		Oct-31-17 20:49		Oct-31-17 20:29		Oct-31-17 20:09		Oct-31-17 19:49		Oct-31-17 19:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		25.8	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Diesel Range Organics		875	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566877

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County, NM

Date Received in Lab: Fri Oct-27-17 02:28 pm
Report Date: 08-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566877-019		566877-020		566877-021		566877-022		566877-023		566877-024	
	Field Id:	SB-9-S-59-60-171027		SB-9-S-69-70-171027		SB-9-S-79-80-171027		SB-9-S-89-90-171027		SB-10-S-0.5-1-171027		SB-10-S-4-5-171027	
	Depth:	60-		70-		80-		90-		1-		5-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-27-17 11:13		Oct-27-17 11:30		Oct-27-17 11:33		Oct-27-17 11:50		Oct-27-17 12:30		Oct-27-17 12:33	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-06-17 19:40		Nov-06-17 19:40		Nov-07-17 10:01		Nov-07-17 11:25		Nov-07-17 16:00		Nov-07-17 16:00	
	Analyzed:	Nov-07-17 01:10		Nov-07-17 01:26		Nov-07-17 10:52		Nov-07-17 11:57		Nov-07-17 17:00		Nov-07-17 17:28	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00100	0.00100	<0.000996	0.000996	<0.000990	0.000990	<0.00100	0.00100	<0.00500	0.00500	<0.00500	0.00500
Toluene		<0.00100	0.00100	<0.000996	0.000996	<0.000990	0.000990	<0.00100	0.00100	<0.00500	0.00500	<0.00500	0.00500
Ethylbenzene		<0.00100	0.00100	<0.000996	0.000996	<0.000990	0.000990	<0.00100	0.00100	<0.00500	0.00500	<0.00500	0.00500
m,p-Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00201	0.00201	<0.0100	0.0100	<0.0100	0.0100
o-Xylene		<0.00100	0.00100	<0.000996	0.000996	<0.000990	0.000990	<0.00100	0.00100	<0.00500	0.00500	<0.00500	0.00500
Total Xylenes		<0.00100	0.00100	<0.000996	0.000996	<0.000990	0.000990	<0.00100	0.00100	<0.00500	0.00500	<0.00500	0.00500
Total BTEX		<0.00100	0.00100	<0.000996	0.000996	<0.000990	0.000990	<0.00100	0.00100	<0.00500	0.00500	<0.00500	0.00500
Chloride by EPA 300	***Extracted:***	Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 08:40		Nov-06-17 10:00		Nov-06-17 10:00	
	Analyzed:	Nov-06-17 12:41		Nov-06-17 12:48		Nov-06-17 12:54		Nov-06-17 13:01		Nov-06-17 16:48		Nov-06-17 17:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		48.2	4.92	50.9	4.97	67.2	4.92	50.1	4.91	762	4.91	119	4.93
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		32.0	1.00	6.07	1.00	4.81	1.00	2.85	1.00	6.94	1.00	2.83	1.00
TPH By SW8015 Mod	***Extracted:***	Oct-31-17 10:00		Oct-31-17 10:00		Oct-31-17 14:00		Oct-31-17 14:00		Oct-31-17 14:00		Oct-31-17 14:00	
	Analyzed:	Oct-31-17 22:32		Oct-31-17 22:12		** ** ** **		Nov-01-17 01:12		Nov-01-17 09:26		Nov-01-17 01:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0
Diesel Range Organics		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	729	14.9	29.6	15.0

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566877

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County, NM

Date Received in Lab: Fri Oct-27-17 02:28 pm
Report Date: 08-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566877-025		566877-026		566877-027		566877-028		566877-029		566877-030	
	Field Id:	SB-10-S-9-10-171027		SB-10-S-19-20-171027		SB-10-S-29-30-171027		SB-10-S-39-40-171027		SB-10-S-49-50-171027		SB-10-S-59-60-171027	
	Depth:	10-		20-		30-		40-		50-		60-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-27-17 12:36		Oct-27-17 12:39		Oct-27-17 12:50		Oct-27-17 12:53		Oct-27-17 13:03		Oct-27-17 13:06	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-07-17 10:00		Nov-07-17 11:25		Nov-07-17 11:25		Nov-07-17 11:25		Nov-07-17 11:25		Nov-07-17 11:25	
	Analyzed:	Nov-07-17 10:32		Nov-07-17 12:39		Nov-07-17 12:59		Nov-07-17 13:20		Nov-07-17 13:41		Nov-07-17 14:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000996	0.000996	<0.000996	0.000996	<0.00101	0.00101	<0.000996	0.000996	<0.00100	0.00100	<0.00100	0.00100
Toluene		<0.000996	0.000996	<0.000996	0.000996	<0.00101	0.00101	<0.000996	0.000996	<0.00100	0.00100	<0.00100	0.00100
Ethylbenzene		<0.000996	0.000996	<0.000996	0.000996	<0.00101	0.00101	<0.000996	0.000996	<0.00100	0.00100	<0.00100	0.00100
m,p-Xylenes		<0.00199	0.00199	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
o-Xylene		<0.000996	0.000996	<0.000996	0.000996	<0.00101	0.00101	<0.000996	0.000996	<0.00100	0.00100	<0.00100	0.00100
Total Xylenes		<0.000996	0.000996	<0.000996	0.000996	<0.00101	0.00101	<0.000996	0.000996	<0.00100	0.00100	<0.00100	0.00100
Total BTEX		<0.000996	0.000996	<0.000996	0.000996	<0.00101	0.00101	<0.000996	0.000996	<0.00100	0.00100	<0.00100	0.00100
Chloride by EPA 300	***Extracted:***	Nov-06-17 10:00		Nov-06-17 10:00		Nov-06-17 10:00		Nov-06-17 10:00		Nov-06-17 10:00		Nov-06-17 10:00	
	Analyzed:	Nov-06-17 17:14		Nov-06-17 17:20		Nov-06-17 17:27		Nov-06-17 17:46		Nov-06-17 17:52		Nov-06-17 17:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		421	4.98	335	4.97	70.4	4.90	60.6	5.00	40.3	4.90	61.9	5.00
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.03	1.00	6.67	1.00	9.19	1.00	7.57	1.00	19.3	1.00	19.2	1.00
TPH By SW8015 Mod	***Extracted:***	Oct-31-17 14:00		Oct-31-17 14:00		Oct-31-17 14:00		Oct-31-17 14:00		Oct-31-17 14:00		Oct-31-17 14:00	
	Analyzed:	Nov-01-17 02:15		Nov-01-17 02:36		Nov-01-17 02:56		Nov-01-17 03:16		Nov-01-17 03:36		Nov-01-17 03:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0
Diesel Range Organics		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566877

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County, NM

Date Received in Lab: Fri Oct-27-17 02:28 pm
Report Date: 08-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566877-031		566877-032		566877-033		566877-034					
	Field Id:	SB-10-S-69-70-171027		SB-10-S-79-80-171027		SB-10-S-89-90-171027		DUP-1-171027					
	Depth:	70-		80-		90-							
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Oct-27-17 13:25		Oct-27-17 13:28		Oct-27-17 13:45		Oct-27-17 00:00					
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-07-17 11:25		Nov-07-17 11:25		Nov-07-17 11:25		Nov-06-17 16:00					
	Analyzed:	Nov-07-17 14:22		Nov-07-17 14:43		Nov-07-17 15:04		Nov-06-17 20:25					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00100	0.00100	<0.000996	0.000996	<0.000990	0.000990	<0.00101	0.00101				
Toluene		<0.00100	0.00100	<0.000996	0.000996	<0.000990	0.000990	<0.00101	0.00101				
Ethylbenzene		<0.00100	0.00100	<0.000996	0.000996	<0.000990	0.000990	<0.00101	0.00101				
m,p-Xylenes		<0.00201	0.00201	<0.00199	0.00199	<0.00198	0.00198	<0.00202	0.00202				
o-Xylene		<0.00100	0.00100	<0.000996	0.000996	<0.000990	0.000990	<0.00101	0.00101				
Total Xylenes		<0.00100	0.00100	<0.000996	0.000996	<0.000990	0.000990	<0.00101	0.00101				
Total BTEX		<0.00100	0.00100	<0.000996	0.000996	<0.000990	0.000990	<0.00101	0.00101				
Chloride by EPA 300	***Extracted:***	Nov-06-17 10:00		Nov-06-17 10:00		Nov-06-17 10:00		Nov-06-17 10:00					
	Analyzed:	Nov-06-17 18:05		Nov-06-17 18:11		Nov-06-17 18:18		Nov-06-17 18:37					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		49.4	4.97	30.7	4.99	10.2	4.95	247	4.90				
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30		Oct-30-17 17:30					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		31.7	1.00	14.7	1.00	3.20	1.00	23.2	1.00				
TPH By SW8015 Mod	***Extracted:***	Oct-31-17 14:00		Oct-31-17 14:00		Oct-31-17 14:00		Oct-31-17 14:00					
	Analyzed:	Nov-01-17 04:59		Nov-01-17 05:20		Nov-01-17 05:42		Nov-01-17 06:03					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Diesel Range Organics		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				

Mike Kimmel
Client Services Manager

Analytical Report 566877

for

GHD Services, INC- Midland

Project Manager: Scott Foord

LPU #96

073816

08-NOV-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

08-NOV-17

Project Manager: **Scott Foord**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **566877**
LPU #96
Project Address: Lea County, NM

Scott Foord:

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) 566877. 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. 566877 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,

Mike Kimmel
Client Services Manager

Sample Cross Reference 566877

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-7-S-0.5-1-171027	S	10-27-17 08:35	1	566877-001
SB-7-S-4-5-171027	S	10-27-17 08:38	5	566877-002
SB-7-S-9-10-171027	S	10-27-17 08:41	10	566877-003
SB-7-S-19-20-171027	S	10-27-17 08:44	20	566877-004
SB-7-S-29-30-171027	S	10-27-17 09:05	30	566877-005
SB-7-S-39-40-171027	S	10-27-17 09:08	40	566877-006
SB-7-S-49-50-171027	S	10-27-17 09:20	50	566877-007
SB-7-S-59-60-171027	S	10-27-17 09:23	60	566877-008
SB-7-S-69-70-171027	S	10-27-17 09:40	70	566877-009
SB-7-S-79-80-171027	S	10-27-17 09:57	80	566877-010
SB-7-S-89-90-171027	S	10-27-17 09:57	90	566877-011
SB-9-S-0.5-1-171027	S	10-27-17 10:33	1	566877-012
SB-9-S-4-5-171027	S	10-27-17 10:36	5	566877-013
SB-9-S-9-10-171027	S	10-27-17 10:39	10	566877-014
SB-9-S-19-20-171027	S	10-27-17 10:42	20	566877-015
SB-9-S-29-30-171027	S	10-27-17 10:50	30	566877-016
SB-9-S-39-40-171027	S	10-27-17 10:53	40	566877-017
SB-9-S-49-50-171027	S	10-27-17 11:10	50	566877-018
SB-9-S-59-60-171027	S	10-27-17 11:13	60	566877-019
SB-9-S-69-70-171027	S	10-27-17 11:30	70	566877-020
SB-9-S-79-80-171027	S	10-27-17 11:33	80	566877-021
SB-9-S-89-90-171027	S	10-27-17 11:50	90	566877-022
SB-10-S-0.5-1-171027	S	10-27-17 12:30	1	566877-023
SB-10-S-4-5-171027	S	10-27-17 12:33	5	566877-024
SB-10-S-9-10-171027	S	10-27-17 12:36	10	566877-025
SB-10-S-19-20-171027	S	10-27-17 12:39	20	566877-026
SB-10-S-29-30-171027	S	10-27-17 12:50	30	566877-027
SB-10-S-39-40-171027	S	10-27-17 12:53	40	566877-028
SB-10-S-49-50-171027	S	10-27-17 13:03	50	566877-029
SB-10-S-59-60-171027	S	10-27-17 13:06	60	566877-030
SB-10-S-69-70-171027	S	10-27-17 13:25	70	566877-031
SB-10-S-79-80-171027	S	10-27-17 13:28	80	566877-032
SB-10-S-89-90-171027	S	10-27-17 13:45	90	566877-033
DUP-1-171027	S	10-27-17 00:00		566877-034

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3032505 BTEX by SW 8260B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3032510 BTEX by SW 8260B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3032547 Chloride by EPA 300
Lab Sample ID 566877-003 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 566877-003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3032548 Chloride by EPA 300
Lab Sample ID 566877-023 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 566877-023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3032610 BTEX by SW 8260B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Surrogate 1,2-Dichloroethane-D4 recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 566877-024.

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-7-S-0.5-1-171027** Matrix: Soil Date Received:10.27.17 14.28
Lab Sample Id: 566877-001 Date Collected: 10.27.17 08.35 Sample Depth: 1

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MNV % Moisture:
Analyst: MNV Date Prep: 11.04.17 08.50 Basis: Wet Weight
Seq Number: 3032464

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**21.4**	4.91	mg/kg	11.04.17 15.01		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
Tech: ARM % Moisture:
Analyst: ARM Date Prep: 10.31.17 10.00 Basis: Wet Weight
Seq Number: 3032129

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 14.53	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 14.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	10.31.17 14.53	
o-Terphenyl	84-15-1	96	%	70-135	10.31.17 14.53	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B
Tech: JTR % Moisture:
Analyst: JTR Date Prep: 11.06.17 19.40 Basis: Wet Weight
Seq Number: 3032510 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000990	0.000990	mg/kg	11.07.17 01.57	U	1
Toluene	108-88-3	<0.000990	0.000990	mg/kg	11.07.17 01.57	U	1
Ethylbenzene	100-41-4	<0.000990	0.000990	mg/kg	11.07.17 01.57	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.07.17 01.57	U	1
o-Xylene	95-47-6	<0.000990	0.000990	mg/kg	11.07.17 01.57	U	1
Total Xylenes	1330-20-7	<0.000990	0.000990	mg/kg	11.07.17 01.57	U	1
Total BTEX		<0.000990	0.000990	mg/kg	11.07.17 01.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	119	%	74-126	11.07.17 01.57	
1,2-Dichloroethane-D4	17060-07-0	102	%	80-120	11.07.17 01.57	
Toluene-D8	2037-26-5	100	%	73-132	11.07.17 01.57	

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LPU #96

Sample Id: **SB-7-S-4-5-171027** Matrix: Soil Date Received:10.27.17 14.28

Lab Sample Id: 566877-002 Date Collected: 10.27.17 08.38 Sample Depth: 5

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.04.17 08.50 Basis: Wet Weight

Seq Number: 3032464

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**90.0**	4.90	mg/kg	11.04.17 15.07		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.31.17 10.00 Basis: Wet Weight

Seq Number: 3032129

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 15.13	U	1
Diesel Range Organics	C10C28DRO	**74.3**	15.0	mg/kg	10.31.17 15.13		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	10.31.17 15.13	
o-Terphenyl	84-15-1	112	%	70-135	10.31.17 15.13	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.06.17 19.40 Basis: Wet Weight

Seq Number: 3032510 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.06.17 21.48	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.06.17 21.48	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.06.17 21.48	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.06.17 21.48	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.06.17 21.48	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.06.17 21.48	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.06.17 21.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	74-126	11.06.17 21.48	
1,2-Dichloroethane-D4	17060-07-0	97	%	80-120	11.06.17 21.48	
Toluene-D8	2037-26-5	102	%	73-132	11.06.17 21.48	

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LPU #96

Sample Id:	**SB-7-S-9-10-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-003	Date Collected:	10.27.17 08.41	Sample Depth:	10

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 08.40	Basis:	Wet Weight
Seq Number:	3032547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**597**	4.99	mg/kg	11.06.17 10.08		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 10.00	Basis:	Wet Weight
Seq Number:	3032129				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 15.32	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 15.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	10.31.17 15.32	
o-Terphenyl	84-15-1	112	%	70-135	10.31.17 15.32	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.06.17 19.40	Basis:	Wet Weight
Seq Number:	3032510			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	11.06.17 22.04	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	11.06.17 22.04	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	mg/kg	11.06.17 22.04	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.06.17 22.04	U	1
o-Xylene	95-47-6	<0.000998	0.000998	mg/kg	11.06.17 22.04	U	1
Total Xylenes	1330-20-7	<0.000998	0.000998	mg/kg	11.06.17 22.04	U	1
Total BTEX		<0.000998	0.000998	mg/kg	11.06.17 22.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	74-126	11.06.17 22.04	
1,2-Dichloroethane-D4	17060-07-0	101	%	80-120	11.06.17 22.04	
Toluene-D8	2037-26-5	94	%	73-132	11.06.17 22.04	

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LPU #96

Sample Id:	**SB-7-S-19-20-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-004	Date Collected:	10.27.17 08.44	Sample Depth:	20

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 08.40	Basis:	Wet Weight
Seq Number:	3032547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**187**	4.94	mg/kg	11.06.17 10.27		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 10.00	Basis:	Wet Weight
Seq Number:	3032129				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 15.52	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 15.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	10.31.17 15.52	
o-Terphenyl	84-15-1	108	%	70-135	10.31.17 15.52	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.06.17 19.40	Basis:	Wet Weight
Seq Number:	3032510			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000990	0.000990	mg/kg	11.06.17 22.19	U	1
Toluene	108-88-3	<0.000990	0.000990	mg/kg	11.06.17 22.19	U	1
Ethylbenzene	100-41-4	<0.000990	0.000990	mg/kg	11.06.17 22.19	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.06.17 22.19	U	1
o-Xylene	95-47-6	<0.000990	0.000990	mg/kg	11.06.17 22.19	U	1
Total Xylenes	1330-20-7	<0.000990	0.000990	mg/kg	11.06.17 22.19	U	1
Total BTEX		<0.000990	0.000990	mg/kg	11.06.17 22.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	74-126	11.06.17 22.19	
1,2-Dichloroethane-D4	17060-07-0	101	%	80-120	11.06.17 22.19	
Toluene-D8	2037-26-5	98	%	73-132	11.06.17 22.19	

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LPU #96

Sample Id:	**SB-7-S-29-30-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-005	Date Collected:	10.27.17 09.05	Sample Depth:	30

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 08.40	Basis:	Wet Weight
Seq Number:	3032547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**44.9**	4.93	mg/kg	11.06.17 10.34		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 10.00	Basis:	Wet Weight
Seq Number:	3032129				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 16.12	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 16.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	10.31.17 16.12	
o-Terphenyl	84-15-1	103	%	70-135	10.31.17 16.12	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.06.17 19.40	Basis:	Wet Weight
Seq Number:	3032510			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.06.17 22.35	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.06.17 22.35	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.06.17 22.35	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.06.17 22.35	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.06.17 22.35	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.06.17 22.35	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.06.17 22.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	74-126	11.06.17 22.35	
1,2-Dichloroethane-D4	17060-07-0	96	%	80-120	11.06.17 22.35	
Toluene-D8	2037-26-5	89	%	73-132	11.06.17 22.35	

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LPU #96

Sample Id: **SB-7-S-39-40-171027** Matrix: Soil Date Received:10.27.17 14.28

Lab Sample Id: 566877-006 Date Collected: 10.27.17 09.08 Sample Depth: 40

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.06.17 08.40 Basis: Wet Weight

Seq Number: 3032547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**54.3**	4.98	mg/kg	11.06.17 10.40		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.31.17 10.00 Basis: Wet Weight

Seq Number: 3032129

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	10.31.17 16.31	U	1
Diesel Range Organics	C10C28DRO	<14.9	14.9	mg/kg	10.31.17 16.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	10.31.17 16.31	
o-Terphenyl	84-15-1	110	%	70-135	10.31.17 16.31	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.06.17 19.40 Basis: Wet Weight

Seq Number: 3032510 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.06.17 22.50	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.06.17 22.50	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.06.17 22.50	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.06.17 22.50	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.06.17 22.50	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.06.17 22.50	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.06.17 22.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	74-126	11.06.17 22.50	
1,2-Dichloroethane-D4	17060-07-0	108	%	80-120	11.06.17 22.50	
Toluene-D8	2037-26-5	106	%	73-132	11.06.17 22.50	

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LPU #96

Sample Id:	**SB-7-S-49-50-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-007	Date Collected:	10.27.17 09.20	Sample Depth:	50

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 08.40	Basis:	Wet Weight
Seq Number:	3032547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**47.9**	4.92	mg/kg	11.06.17 10.47		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 10.00	Basis:	Wet Weight
Seq Number:	3032129				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 16.51	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 16.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	10.31.17 16.51	
o-Terphenyl	84-15-1	101	%	70-135	10.31.17 16.51	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.06.17 19.40	Basis:	Wet Weight
Seq Number:	3032510			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	11.06.17 23.06	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	11.06.17 23.06	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	11.06.17 23.06	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.06.17 23.06	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	11.06.17 23.06	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	11.06.17 23.06	U	1
Total BTEX		<0.000996	0.000996	mg/kg	11.06.17 23.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	111	%	74-126	11.06.17 23.06	
1,2-Dichloroethane-D4	17060-07-0	111	%	80-120	11.06.17 23.06	
Toluene-D8	2037-26-5	103	%	73-132	11.06.17 23.06	

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LPU #96

Sample Id:	**SB-7-S-59-60-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-008	Date Collected:	10.27.17 09.23	Sample Depth:	60

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 08.40	Basis:	Wet Weight
Seq Number:	3032547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**17.3**	4.92	mg/kg	11.06.17 11.06		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 10.00	Basis:	Wet Weight
Seq Number:	3032129				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	10.31.17 17.11	U	1
Diesel Range Organics	C10C28DRO	<14.9	14.9	mg/kg	10.31.17 17.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	10.31.17 17.11	
o-Terphenyl	84-15-1	99	%	70-135	10.31.17 17.11	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.06.17 19.40	Basis:	Wet Weight
Seq Number:	3032510			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000990	0.000990	mg/kg	11.06.17 23.21	U	1
Toluene	108-88-3	<0.000990	0.000990	mg/kg	11.06.17 23.21	U	1
Ethylbenzene	100-41-4	<0.000990	0.000990	mg/kg	11.06.17 23.21	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.06.17 23.21	U	1
o-Xylene	95-47-6	<0.000990	0.000990	mg/kg	11.06.17 23.21	U	1
Total Xylenes	1330-20-7	<0.000990	0.000990	mg/kg	11.06.17 23.21	U	1
Total BTEX		<0.000990	0.000990	mg/kg	11.06.17 23.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	107	%	74-126	11.06.17 23.21	
1,2-Dichloroethane-D4	17060-07-0	100	%	80-120	11.06.17 23.21	
Toluene-D8	2037-26-5	102	%	73-132	11.06.17 23.21	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-7-S-69-70-171027** Matrix: Soil Date Received:10.27.17 14.28

Lab Sample Id: 566877-009 Date Collected: 10.27.17 09.40 Sample Depth: 70

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.06.17 08.40 Basis: Wet Weight

Seq Number: 3032547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28.9**	4.92	mg/kg	11.06.17 11.12		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.31.17 10.00 Basis: Wet Weight

Seq Number: 3032129

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 17.30	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 17.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.31.17 17.30	
o-Terphenyl	84-15-1	103	%	70-135	10.31.17 17.30	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.06.17 19.40 Basis: Wet Weight

Seq Number: 3032510 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	11.06.17 23.37	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	11.06.17 23.37	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	mg/kg	11.06.17 23.37	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.06.17 23.37	U	1
o-Xylene	95-47-6	<0.000998	0.000998	mg/kg	11.06.17 23.37	U	1
Total Xylenes	1330-20-7	<0.000998	0.000998	mg/kg	11.06.17 23.37	U	1
Total BTEX		<0.000998	0.000998	mg/kg	11.06.17 23.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	74-126	11.06.17 23.37	
1,2-Dichloroethane-D4	17060-07-0	101	%	80-120	11.06.17 23.37	
Toluene-D8	2037-26-5	90	%	73-132	11.06.17 23.37	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-7-S-79-80-171027** Matrix: Soil Date Received:10.27.17 14.28
Lab Sample Id: 566877-010 Date Collected: 10.27.17 09.57 Sample Depth: 80

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MNV % Moisture:
Analyst: MNV Date Prep: 11.06.17 08.40 Basis: Wet Weight
Seq Number: 3032547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.4**	4.94	mg/kg	11.06.17 11.19		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
Tech: ARM % Moisture:
Analyst: ARM Date Prep: 10.31.17 10.00 Basis: Wet Weight
Seq Number: 3032129

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 17.50	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 17.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	10.31.17 17.50	
o-Terphenyl	84-15-1	102	%	70-135	10.31.17 17.50	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B
Tech: JTR % Moisture:
Analyst: JTR Date Prep: 11.06.17 19.40 Basis: Wet Weight
Seq Number: 3032510 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.06.17 23.53	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.06.17 23.53	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.06.17 23.53	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.06.17 23.53	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.06.17 23.53	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.06.17 23.53	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.06.17 23.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	74-126	11.06.17 23.53	
1,2-Dichloroethane-D4	17060-07-0	98	%	80-120	11.06.17 23.53	
Toluene-D8	2037-26-5	98	%	73-132	11.06.17 23.53	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-7-S-89-90-171027** Matrix: Soil Date Received:10.27.17 14.28
Lab Sample Id: 566877-011 Date Collected: 10.27.17 09.57 Sample Depth: 90

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MNV % Moisture:
Analyst: MNV Date Prep: 11.06.17 08.40 Basis: Wet Weight
Seq Number: 3032547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.5**	4.97	mg/kg	11.06.17 11.25		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
Tech: ARM % Moisture:
Analyst: ARM Date Prep: 10.31.17 10.00 Basis: Wet Weight
Seq Number: 3032129

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 21.53	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 21.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	10.31.17 21.53	
o-Terphenyl	84-15-1	92	%	70-135	10.31.17 21.53	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B
Tech: JTR % Moisture:
Analyst: JTR Date Prep: 11.06.17 19.40 Basis: Wet Weight
Seq Number: 3032510 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.07.17 00.08	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.07.17 00.08	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.07.17 00.08	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.07.17 00.08	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.07.17 00.08	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.07.17 00.08	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.07.17 00.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	110	%	74-126	11.07.17 00.08	
1,2-Dichloroethane-D4	17060-07-0	108	%	80-120	11.07.17 00.08	
Toluene-D8	2037-26-5	107	%	73-132	11.07.17 00.08	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-9-S-0.5-1-171027** Matrix: Soil Date Received:10.27.17 14.28

Lab Sample Id: 566877-012 Date Collected: 10.27.17 10.33 Sample Depth: 1

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.06.17 08.40 Basis: Wet Weight

Seq Number: 3032547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.86**	4.99	mg/kg	11.06.17 11.31		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.31.17 10.00 Basis: Wet Weight

Seq Number: 3032129

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	11.01.17 08.45	U	1
Diesel Range Organics	C10C28DRO	**884**	15.0	mg/kg	11.01.17 08.45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	11.01.17 08.45	
o-Terphenyl	84-15-1	108	%	70-135	11.01.17 08.45	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.07.17 16.00 Basis: Wet Weight

Seq Number: 3032610 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00500	0.00500	mg/kg	11.07.17 16.39	U	1
Toluene	108-88-3	<0.00500	0.00500	mg/kg	11.07.17 16.39	U	1
Ethylbenzene	100-41-4	<0.00500	0.00500	mg/kg	11.07.17 16.39	U	1
m,p-Xylenes	179601-23-1	<0.0100	0.0100	mg/kg	11.07.17 16.39	U	1
o-Xylene	95-47-6	<0.00500	0.00500	mg/kg	11.07.17 16.39	U	1
Total Xylenes	1330-20-7	<0.00500	0.00500	mg/kg	11.07.17 16.39	U	1
Total BTEX		<0.00500	0.00500	mg/kg	11.07.17 16.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	117	%	74-126	11.07.17 16.39	
1,2-Dichloroethane-D4	17060-07-0	118	%	80-120	11.07.17 16.39	
Toluene-D8	2037-26-5	96	%	73-132	11.07.17 16.39	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-9-S-4-5-171027** Matrix: Soil Date Received:10.27.17 14.28

Lab Sample Id: 566877-013 Date Collected: 10.27.17 10.36 Sample Depth: 5

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.06.17 08.40 Basis: Wet Weight

Seq Number: 3032547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.44**	5.00	mg/kg	11.06.17 11.38		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.31.17 10.00 Basis: Wet Weight

Seq Number: 3032129

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	**25.8**	15.0	mg/kg	11.01.17 09.07		1
Diesel Range Organics	C10C28DRO	**875**	15.0	mg/kg	11.01.17 09.07		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	11.01.17 09.07	
o-Terphenyl	84-15-1	111	%	70-135	11.01.17 09.07	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.06.17 19.40 Basis: Wet Weight

Seq Number: 3032510 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.07.17 02.28	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.07.17 02.28	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.07.17 02.28	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	11.07.17 02.28	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.07.17 02.28	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.07.17 02.28	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.07.17 02.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	74-126	11.07.17 02.28	
1,2-Dichloroethane-D4	17060-07-0	100	%	80-120	11.07.17 02.28	
Toluene-D8	2037-26-5	103	%	73-132	11.07.17 02.28	

Certificate of Analytical Results 566877

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**SB-9-S-9-10-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-014	Date Collected:	10.27.17 10.39	Sample Depth:	10

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 08.40	Basis:	Wet Weight
Seq Number:	3032547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**34.5**	4.91	mg/kg	11.06.17 11.57		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 10.00	Basis:	Wet Weight
Seq Number:	3032129				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 20.49	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 20.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	10.31.17 20.49	
o-Terphenyl	84-15-1	104	%	70-135	10.31.17 20.49	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.06.17 19.40	Basis:	Wet Weight
Seq Number:	3032510			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.07.17 01.41	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.07.17 01.41	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.07.17 01.41	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	11.07.17 01.41	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.07.17 01.41	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.07.17 01.41	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.07.17 01.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	119	%	74-126	11.07.17 01.41	
1,2-Dichloroethane-D4	17060-07-0	105	%	80-120	11.07.17 01.41	
Toluene-D8	2037-26-5	94	%	73-132	11.07.17 01.41	

Certificate of Analytical Results 566877

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**SB-9-S-19-20-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-015	Date Collected:	10.27.17 10.42	Sample Depth:	20

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 08.40	Basis:	Wet Weight
Seq Number:	3032547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**31.5**	5.00	mg/kg	11.06.17 12.03		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 10.00	Basis:	Wet Weight
Seq Number:	3032129				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 20.29	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 20.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	10.31.17 20.29	
o-Terphenyl	84-15-1	108	%	70-135	10.31.17 20.29	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.06.17 19.40	Basis:	Wet Weight
Seq Number:	3032510			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000990	0.000990	mg/kg	11.07.17 00.24	U	1
Toluene	108-88-3	<0.000990	0.000990	mg/kg	11.07.17 00.24	U	1
Ethylbenzene	100-41-4	<0.000990	0.000990	mg/kg	11.07.17 00.24	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.07.17 00.24	U	1
o-Xylene	95-47-6	<0.000990	0.000990	mg/kg	11.07.17 00.24	U	1
Total Xylenes	1330-20-7	<0.000990	0.000990	mg/kg	11.07.17 00.24	U	1
Total BTEX		<0.000990	0.000990	mg/kg	11.07.17 00.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	113	%	74-126	11.07.17 00.24	
1,2-Dichloroethane-D4	17060-07-0	109	%	80-120	11.07.17 00.24	
Toluene-D8	2037-26-5	103	%	73-132	11.07.17 00.24	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-9-S-29-30-171027** Matrix: Soil Date Received:10.27.17 14.28

Lab Sample Id: 566877-016 Date Collected: 10.27.17 10.50 Sample Depth: 30

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.06.17 08.40 Basis: Wet Weight

Seq Number: 3032547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**36.6**	4.92	mg/kg	11.06.17 12.22		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.31.17 10.00 Basis: Wet Weight

Seq Number: 3032129

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	10.31.17 20.09	U	1
Diesel Range Organics	C10C28DRO	<14.9	14.9	mg/kg	10.31.17 20.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	10.31.17 20.09	
o-Terphenyl	84-15-1	107	%	70-135	10.31.17 20.09	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.06.17 19.40 Basis: Wet Weight

Seq Number: 3032510 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.07.17 00.39	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.07.17 00.39	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.07.17 00.39	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.07.17 00.39	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.07.17 00.39	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.07.17 00.39	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.07.17 00.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	115	%	74-126	11.07.17 00.39	
1,2-Dichloroethane-D4	17060-07-0	108	%	80-120	11.07.17 00.39	
Toluene-D8	2037-26-5	103	%	73-132	11.07.17 00.39	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-9-S-39-40-171027** Matrix: Soil Date Received:10.27.17 14.28

Lab Sample Id: 566877-017 Date Collected: 10.27.17 10.53 Sample Depth: 40

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.06.17 08.40 Basis: Wet Weight

Seq Number: 3032547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**41.1**	4.99	mg/kg	11.06.17 12.29		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.31.17 10.00 Basis: Wet Weight

Seq Number: 3032129

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 19.49	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 19.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	10.31.17 19.49	
o-Terphenyl	84-15-1	105	%	70-135	10.31.17 19.49	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.06.17 19.40 Basis: Wet Weight

Seq Number: 3032510 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	11.06.17 21.33	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	11.06.17 21.33	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	11.06.17 21.33	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.06.17 21.33	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	11.06.17 21.33	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	11.06.17 21.33	U	1
Total BTEX		<0.000996	0.000996	mg/kg	11.06.17 21.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	108	%	74-126	11.06.17 21.33	
1,2-Dichloroethane-D4	17060-07-0	105	%	80-120	11.06.17 21.33	
Toluene-D8	2037-26-5	93	%	73-132	11.06.17 21.33	

Certificate of Analytical Results 566877

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**SB-9-S-49-50-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-018	Date Collected:	10.27.17 11.10	Sample Depth:	50

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 08.40	Basis:	Wet Weight
Seq Number:	3032547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**24.4**	4.97	mg/kg	11.06.17 12.35		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 10.00	Basis:	Wet Weight
Seq Number:	3032129				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 19.29	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 19.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	10.31.17 19.29	
o-Terphenyl	84-15-1	102	%	70-135	10.31.17 19.29	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.06.17 19.40	Basis:	Wet Weight
Seq Number:	3032510			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000990	0.000990	mg/kg	11.07.17 00.55	U	1
Toluene	108-88-3	<0.000990	0.000990	mg/kg	11.07.17 00.55	U	1
Ethylbenzene	100-41-4	<0.000990	0.000990	mg/kg	11.07.17 00.55	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.07.17 00.55	U	1
o-Xylene	95-47-6	<0.000990	0.000990	mg/kg	11.07.17 00.55	U	1
Total Xylenes	1330-20-7	<0.000990	0.000990	mg/kg	11.07.17 00.55	U	1
Total BTEX		<0.000990	0.000990	mg/kg	11.07.17 00.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	114	%	74-126	11.07.17 00.55	
1,2-Dichloroethane-D4	17060-07-0	105	%	80-120	11.07.17 00.55	
Toluene-D8	2037-26-5	96	%	73-132	11.07.17 00.55	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-9-S-59-60-171027** Matrix: Soil Date Received:10.27.17 14.28

Lab Sample Id: 566877-019 Date Collected: 10.27.17 11.13 Sample Depth: 60

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.06.17 08.40 Basis: Wet Weight

Seq Number: 3032547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**48.2**	4.92	mg/kg	11.06.17 12.41		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.31.17 10.00 Basis: Wet Weight

Seq Number: 3032129

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 22.32	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 22.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	10.31.17 22.32	
o-Terphenyl	84-15-1	106	%	70-135	10.31.17 22.32	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.06.17 19.40 Basis: Wet Weight

Seq Number: 3032510 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.07.17 01.10	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.07.17 01.10	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.07.17 01.10	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.07.17 01.10	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.07.17 01.10	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.07.17 01.10	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.07.17 01.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	110	%	74-126	11.07.17 01.10	
1,2-Dichloroethane-D4	17060-07-0	107	%	80-120	11.07.17 01.10	
Toluene-D8	2037-26-5	109	%	73-132	11.07.17 01.10	

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LPU #96

Sample Id: **SB-9-S-69-70-171027** Matrix: Soil Date Received:10.27.17 14.28

Lab Sample Id: 566877-020 Date Collected: 10.27.17 11.30 Sample Depth: 70

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.06.17 08.40 Basis: Wet Weight

Seq Number: 3032547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**50.9**	4.97	mg/kg	11.06.17 12.48		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.31.17 10.00 Basis: Wet Weight

Seq Number: 3032129

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 22.12	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 22.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	10.31.17 22.12	
o-Terphenyl	84-15-1	107	%	70-135	10.31.17 22.12	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.06.17 19.40 Basis: Wet Weight

Seq Number: 3032510 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	11.07.17 01.26	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	11.07.17 01.26	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	11.07.17 01.26	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.07.17 01.26	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	11.07.17 01.26	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	11.07.17 01.26	U	1
Total BTEX		<0.000996	0.000996	mg/kg	11.07.17 01.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	113	%	74-126	11.07.17 01.26	
1,2-Dichloroethane-D4	17060-07-0	100	%	80-120	11.07.17 01.26	
Toluene-D8	2037-26-5	97	%	73-132	11.07.17 01.26	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**SB-9-S-79-80-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-021	Date Collected:	10.27.17 11.33	Sample Depth:	80

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 08.40	Basis:	Wet Weight
Seq Number:	3032547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**67.2**	4.92	mg/kg	11.06.17 12.54		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 14.00	Basis:	Wet Weight
Seq Number:	3032132				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	10.31.17 00.12	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	10.31.17 00.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.31.17 00.12	
o-Terphenyl	84-15-1	99	%	70-135	10.31.17 00.12	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.07.17 10.01	Basis:	Wet Weight
Seq Number:	3032610			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000990	0.000990	mg/kg	11.07.17 10.52	U	1
Toluene	108-88-3	<0.000990	0.000990	mg/kg	11.07.17 10.52	U	1
Ethylbenzene	100-41-4	<0.000990	0.000990	mg/kg	11.07.17 10.52	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.07.17 10.52	U	1
o-Xylene	95-47-6	<0.000990	0.000990	mg/kg	11.07.17 10.52	U	1
Total Xylenes	1330-20-7	<0.000990	0.000990	mg/kg	11.07.17 10.52	U	1
Total BTEX		<0.000990	0.000990	mg/kg	11.07.17 10.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	74-126	11.07.17 10.52	
1,2-Dichloroethane-D4	17060-07-0	113	%	80-120	11.07.17 10.52	
Toluene-D8	2037-26-5	90	%	73-132	11.07.17 10.52	

Certificate of Analytical Results 566877

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**SB-9-S-89-90-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-022	Date Collected:	10.27.17 11.50	Sample Depth:	90

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 08.40	Basis:	Wet Weight
Seq Number:	3032547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**50.1**	4.91	mg/kg	11.06.17 13.01		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 14.00	Basis:	Wet Weight
Seq Number:	3032132				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	11.01.17 01.12	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	11.01.17 01.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	11.01.17 01.12	
o-Terphenyl	84-15-1	101	%	70-135	11.01.17 01.12	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.07.17 11.25	Basis:	Wet Weight
Seq Number:	3032610			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.07.17 11.57	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.07.17 11.57	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.07.17 11.57	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	11.07.17 11.57	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.07.17 11.57	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.07.17 11.57	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.07.17 11.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	74-126	11.07.17 11.57	
1,2-Dichloroethane-D4	17060-07-0	117	%	80-120	11.07.17 11.57	
Toluene-D8	2037-26-5	84	%	73-132	11.07.17 11.57	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-10-S-0.5-1-171027** Matrix: Soil Date Received:10.27.17 14.28

Lab Sample Id: 566877-023 Date Collected: 10.27.17 12.30 Sample Depth: 1

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.06.17 10.00 Basis: Wet Weight

Seq Number: 3032548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**762**	4.91	mg/kg	11.06.17 16.48		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.31.17 14.00 Basis: Wet Weight

Seq Number: 3032132

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	11.01.17 09.26	U	1
Diesel Range Organics	C10C28DRO	**729**	14.9	mg/kg	11.01.17 09.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	11.01.17 09.26	
o-Terphenyl	84-15-1	110	%	70-135	11.01.17 09.26	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.07.17 16.00 Basis: Wet Weight

Seq Number: 3032610 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00500	0.00500	mg/kg	11.07.17 17.00	U	1
Toluene	108-88-3	<0.00500	0.00500	mg/kg	11.07.17 17.00	U	1
Ethylbenzene	100-41-4	<0.00500	0.00500	mg/kg	11.07.17 17.00	U	1
m,p-Xylenes	179601-23-1	<0.0100	0.0100	mg/kg	11.07.17 17.00	U	1
o-Xylene	95-47-6	<0.00500	0.00500	mg/kg	11.07.17 17.00	U	1
Total Xylenes	1330-20-7	<0.00500	0.00500	mg/kg	11.07.17 17.00	U	1
Total BTEX		<0.00500	0.00500	mg/kg	11.07.17 17.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	116	%	74-126	11.07.17 17.00	
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	11.07.17 17.00	
Toluene-D8	2037-26-5	94	%	73-132	11.07.17 17.00	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**SB-10-S-4-5-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-024	Date Collected:	10.27.17 12.33	Sample Depth:	5

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 10.00	Basis:	Wet Weight
Seq Number:	3032548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**119**	4.93	mg/kg	11.06.17 17.08		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 14.00	Basis:	Wet Weight
Seq Number:	3032132				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	11.01.17 01.55	U	1
Diesel Range Organics	C10C28DRO	**29.6**	15.0	mg/kg	11.01.17 01.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	11.01.17 01.55	
o-Terphenyl	84-15-1	94	%	70-135	11.01.17 01.55	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.07.17 16.00	Basis:	Wet Weight
Seq Number:	3032610			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00500	0.00500	mg/kg	11.07.17 17.28	U	1
Toluene	108-88-3	<0.00500	0.00500	mg/kg	11.07.17 17.28	U	1
Ethylbenzene	100-41-4	<0.00500	0.00500	mg/kg	11.07.17 17.28	U	1
m,p-Xylenes	179601-23-1	<0.0100	0.0100	mg/kg	11.07.17 17.28	U	1
o-Xylene	95-47-6	<0.00500	0.00500	mg/kg	11.07.17 17.28	U	1
Total Xylenes	1330-20-7	<0.00500	0.00500	mg/kg	11.07.17 17.28	U	1
Total BTEX		<0.00500	0.00500	mg/kg	11.07.17 17.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	74-126	11.07.17 17.28	
1,2-Dichloroethane-D4	17060-07-0	125	%	80-120	11.07.17 17.28	**
Toluene-D8	2037-26-5	80	%	73-132	11.07.17 17.28	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-10-S-9-10-171027** Matrix: Soil Date Received:10.27.17 14.28
Lab Sample Id: 566877-025 Date Collected: 10.27.17 12.36 Sample Depth: 10

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MNV % Moisture:
Analyst: MNV Date Prep: 11.06.17 10.00 Basis: Wet Weight
Seq Number: 3032548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**421**	4.98	mg/kg	11.06.17 17.14		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
Tech: ARM % Moisture:
Analyst: ARM Date Prep: 10.31.17 14.00 Basis: Wet Weight
Seq Number: 3032132

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	11.01.17 02.15	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	11.01.17 02.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	11.01.17 02.15	
o-Terphenyl	84-15-1	94	%	70-135	11.01.17 02.15	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B
Tech: JTR % Moisture:
Analyst: JTR Date Prep: 11.07.17 10.00 Basis: Wet Weight
Seq Number: 3032610 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	11.07.17 10.32	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	11.07.17 10.32	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	11.07.17 10.32	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.07.17 10.32	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	11.07.17 10.32	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	11.07.17 10.32	U	1
Total BTEX		<0.000996	0.000996	mg/kg	11.07.17 10.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	74-126	11.07.17 10.32	
1,2-Dichloroethane-D4	17060-07-0	112	%	80-120	11.07.17 10.32	
Toluene-D8	2037-26-5	88	%	73-132	11.07.17 10.32	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-10-S-19-20-171027** Matrix: Soil Date Received:10.27.17 14.28
Lab Sample Id: 566877-026 Date Collected: 10.27.17 12.39 Sample Depth: 20

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MNV % Moisture:
Analyst: MNV Date Prep: 11.06.17 10.00 Basis: Wet Weight
Seq Number: 3032548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**335**	4.97	mg/kg	11.06.17 17.20		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
Tech: ARM % Moisture:
Analyst: ARM Date Prep: 10.31.17 14.00 Basis: Wet Weight
Seq Number: 3032132

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	11.01.17 02.36	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	11.01.17 02.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	11.01.17 02.36	
o-Terphenyl	84-15-1	92	%	70-135	11.01.17 02.36	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B
Tech: JTR % Moisture:
Analyst: JTR Date Prep: 11.07.17 11.25 Basis: Wet Weight
Seq Number: 3032610 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	11.07.17 12.39	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	11.07.17 12.39	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	11.07.17 12.39	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.07.17 12.39	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	11.07.17 12.39	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	11.07.17 12.39	U	1
Total BTEX		<0.000996	0.000996	mg/kg	11.07.17 12.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	113	%	74-126	11.07.17 12.39	
1,2-Dichloroethane-D4	17060-07-0	117	%	80-120	11.07.17 12.39	
Toluene-D8	2037-26-5	90	%	73-132	11.07.17 12.39	

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LPU #96

Sample Id: **SB-10-S-29-30-171027** Matrix: Soil Date Received:10.27.17 14.28
Lab Sample Id: 566877-027 Date Collected: 10.27.17 12.50 Sample Depth: 30

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MNV % Moisture:
Analyst: MNV Date Prep: 11.06.17 10.00 Basis: Wet Weight
Seq Number: 3032548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**70.4**	4.90	mg/kg	11.06.17 17.27		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
Tech: ARM % Moisture:
Analyst: ARM Date Prep: 10.31.17 14.00 Basis: Wet Weight
Seq Number: 3032132

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	11.01.17 02.56	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	11.01.17 02.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	11.01.17 02.56	
o-Terphenyl	84-15-1	99	%	70-135	11.01.17 02.56	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B
Tech: JTR % Moisture:
Analyst: JTR Date Prep: 11.07.17 11.25 Basis: Wet Weight
Seq Number: 3032610 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.07.17 12.59	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.07.17 12.59	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.07.17 12.59	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.07.17 12.59	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.07.17 12.59	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.07.17 12.59	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.07.17 12.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	119	%	74-126	11.07.17 12.59	
1,2-Dichloroethane-D4	17060-07-0	107	%	80-120	11.07.17 12.59	
Toluene-D8	2037-26-5	85	%	73-132	11.07.17 12.59	

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LPU #96

Sample Id:	**SB-10-S-39-40-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-028	Date Collected:	10.27.17 12.53	Sample Depth:	40

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 10.00	Basis:	Wet Weight
Seq Number:	3032548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**60.6**	5.00	mg/kg	11.06.17 17.46		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 14.00	Basis:	Wet Weight
Seq Number:	3032132				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	11.01.17 03.16	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	11.01.17 03.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	11.01.17 03.16	
o-Terphenyl	84-15-1	102	%	70-135	11.01.17 03.16	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.07.17 11.25	Basis:	Wet Weight
Seq Number:	3032610			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	11.07.17 13.20	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	11.07.17 13.20	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	11.07.17 13.20	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.07.17 13.20	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	11.07.17 13.20	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	11.07.17 13.20	U	1
Total BTEX		<0.000996	0.000996	mg/kg	11.07.17 13.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	74-126	11.07.17 13.20	
1,2-Dichloroethane-D4	17060-07-0	110	%	80-120	11.07.17 13.20	
Toluene-D8	2037-26-5	85	%	73-132	11.07.17 13.20	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**SB-10-S-49-50-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-029	Date Collected:	10.27.17 13.03	Sample Depth:	50

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 10.00	Basis:	Wet Weight
Seq Number:	3032548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**40.3**	4.90	mg/kg	11.06.17 17.52		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 14.00	Basis:	Wet Weight
Seq Number:	3032132				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	11.01.17 03.36	U	1
Diesel Range Organics	C10C28DRO	<14.9	14.9	mg/kg	11.01.17 03.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	11.01.17 03.36	
o-Terphenyl	84-15-1	101	%	70-135	11.01.17 03.36	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.07.17 11.25	Basis:	Wet Weight
Seq Number:	3032610			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.07.17 13.41	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.07.17 13.41	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.07.17 13.41	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.07.17 13.41	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.07.17 13.41	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.07.17 13.41	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.07.17 13.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	115	%	74-126	11.07.17 13.41	
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	11.07.17 13.41	
Toluene-D8	2037-26-5	86	%	73-132	11.07.17 13.41	

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LPU #96

Sample Id: **SB-10-S-59-60-171027** Matrix: Soil Date Received:10.27.17 14.28
Lab Sample Id: 566877-030 Date Collected: 10.27.17 13.06 Sample Depth: 60

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MNV % Moisture:
Analyst: MNV Date Prep: 11.06.17 10.00 Basis: Wet Weight
Seq Number: 3032548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**61.9**	5.00	mg/kg	11.06.17 17.59		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
Tech: ARM % Moisture:
Analyst: ARM Date Prep: 10.31.17 14.00 Basis: Wet Weight
Seq Number: 3032132

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	11.01.17 03.57	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	11.01.17 03.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	11.01.17 03.57	
o-Terphenyl	84-15-1	99	%	70-135	11.01.17 03.57	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B
Tech: JTR % Moisture:
Analyst: JTR Date Prep: 11.07.17 11.25 Basis: Wet Weight
Seq Number: 3032610 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.07.17 14.01	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.07.17 14.01	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.07.17 14.01	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.07.17 14.01	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.07.17 14.01	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.07.17 14.01	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.07.17 14.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	114	%	74-126	11.07.17 14.01	
1,2-Dichloroethane-D4	17060-07-0	117	%	80-120	11.07.17 14.01	
Toluene-D8	2037-26-5	84	%	73-132	11.07.17 14.01	

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LPU #96

Sample Id: **SB-10-S-69-70-171027** Matrix: Soil Date Received:10.27.17 14.28
Lab Sample Id: 566877-031 Date Collected: 10.27.17 13.25 Sample Depth: 70

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MNV % Moisture:
Analyst: MNV Date Prep: 11.06.17 10.00 Basis: Wet Weight
Seq Number: 3032548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.4**	4.97	mg/kg	11.06.17 18.05		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
Tech: ARM % Moisture:
Analyst: ARM Date Prep: 10.31.17 14.00 Basis: Wet Weight
Seq Number: 3032132

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	11.01.17 04.59	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	11.01.17 04.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	11.01.17 04.59	
o-Terphenyl	84-15-1	102	%	70-135	11.01.17 04.59	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B
Tech: JTR % Moisture:
Analyst: JTR Date Prep: 11.07.17 11.25 Basis: Wet Weight
Seq Number: 3032610 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.07.17 14.22	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.07.17 14.22	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.07.17 14.22	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	11.07.17 14.22	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.07.17 14.22	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.07.17 14.22	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.07.17 14.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	74-126	11.07.17 14.22	
1,2-Dichloroethane-D4	17060-07-0	116	%	80-120	11.07.17 14.22	
Toluene-D8	2037-26-5	84	%	73-132	11.07.17 14.22	

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LPU #96

Sample Id:	**SB-10-S-79-80-171027**	Matrix:	Soil	Date Received:	10.27.17 14.28
Lab Sample Id:	566877-032	Date Collected:	10.27.17 13.28	Sample Depth:	80

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 10.00	Basis:	Wet Weight
Seq Number:	3032548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**30.7**	4.99	mg/kg	11.06.17 18.11		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.31.17 14.00	Basis:	Wet Weight
Seq Number:	3032132				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	11.01.17 05.20	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	11.01.17 05.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	11.01.17 05.20	
o-Terphenyl	84-15-1	99	%	70-135	11.01.17 05.20	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	
Analyst:	JTR	Date Prep:	11.07.17 11.25	Basis:	Wet Weight
Seq Number:	3032610			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	11.07.17 14.43	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	11.07.17 14.43	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	11.07.17 14.43	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.07.17 14.43	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	11.07.17 14.43	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	11.07.17 14.43	U	1
Total BTEX		<0.000996	0.000996	mg/kg	11.07.17 14.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	110	%	74-126	11.07.17 14.43	
1,2-Dichloroethane-D4	17060-07-0	117	%	80-120	11.07.17 14.43	
Toluene-D8	2037-26-5	84	%	73-132	11.07.17 14.43	

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **SB-10-S-89-90-171027** Matrix: Soil Date Received:10.27.17 14.28
Lab Sample Id: 566877-033 Date Collected: 10.27.17 13.45 Sample Depth: 90

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MNV % Moisture:
Analyst: MNV Date Prep: 11.06.17 10.00 Basis: Wet Weight
Seq Number: 3032548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.2**	4.95	mg/kg	11.06.17 18.18		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
Tech: ARM % Moisture:
Analyst: ARM Date Prep: 10.31.17 14.00 Basis: Wet Weight
Seq Number: 3032132

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	11.01.17 05.42	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	11.01.17 05.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	11.01.17 05.42	
o-Terphenyl	84-15-1	89	%	70-135	11.01.17 05.42	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B
Tech: JTR % Moisture:
Analyst: JTR Date Prep: 11.07.17 11.25 Basis: Wet Weight
Seq Number: 3032610 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000990	0.000990	mg/kg	11.07.17 15.04	U	1
Toluene	108-88-3	<0.000990	0.000990	mg/kg	11.07.17 15.04	U	1
Ethylbenzene	100-41-4	<0.000990	0.000990	mg/kg	11.07.17 15.04	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.07.17 15.04	U	1
o-Xylene	95-47-6	<0.000990	0.000990	mg/kg	11.07.17 15.04	U	1
Total Xylenes	1330-20-7	<0.000990	0.000990	mg/kg	11.07.17 15.04	U	1
Total BTEX		<0.000990	0.000990	mg/kg	11.07.17 15.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	114	%	74-126	11.07.17 15.04	
1,2-Dichloroethane-D4	17060-07-0	112	%	80-120	11.07.17 15.04	
Toluene-D8	2037-26-5	81	%	73-132	11.07.17 15.04	

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LPU #96

Sample Id: **DUP-1-171027** Matrix: Soil Date Received:10.27.17 14.28

Lab Sample Id: 566877-034 Date Collected: 10.27.17 00.00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture:

Analyst: MNV Date Prep: 11.06.17 10.00 Basis: Wet Weight

Seq Number: 3032548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**247**	4.90	mg/kg	11.06.17 18.37		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 10.31.17 14.00 Basis: Wet Weight

Seq Number: 3032132

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	11.01.17 06.03	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	11.01.17 06.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	11.01.17 06.03	
o-Terphenyl	84-15-1	96	%	70-135	11.01.17 06.03	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture:

Analyst: JTR Date Prep: 11.06.17 16.00 Basis: Wet Weight

Seq Number: 3032505 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.06.17 20.25	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.06.17 20.25	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.06.17 20.25	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.06.17 20.25	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.06.17 20.25	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.06.17 20.25	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.06.17 20.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	74-126	11.06.17 20.25	
1,2-Dichloroethane-D4	17060-07-0	120	%	80-120	11.06.17 20.25	
Toluene-D8	2037-26-5	86	%	73-132	11.06.17 20.25	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

QC Summary 566877

GHD Services, INC- Midland

LPU #96

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032464 Matrix: Solid Date Prep: 11.04.17
MB Sample Id: 7633803-1-BLK LCS Sample Id: 7633803-1-BKS LCSD Sample Id: 7633803-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	243	97	249	100	90-110	2	20	mg/kg	11.04.17 12:02	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032547 Matrix: Solid Date Prep: 11.06.17
MB Sample Id: 7633891-1-BLK LCS Sample Id: 7633891-1-BKS LCSD Sample Id: 7633891-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	249	100	251	100	90-110	1	20	mg/kg	11.06.17 09:56	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032548 Matrix: Solid Date Prep: 11.06.17
MB Sample Id: 7633896-1-BLK LCS Sample Id: 7633896-1-BKS LCSD Sample Id: 7633896-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	261	104	263	105	90-110	1	20	mg/kg	11.06.17 16:36	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032464 Matrix: Soil Date Prep: 11.04.17
Parent Sample Id: 566503-059 MS Sample Id: 566503-059 S MSD Sample Id: 566503-059 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6.90	292	306	102	309	103	90-110	1	20	mg/kg	11.04.17 13:50	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032464 Matrix: Soil Date Prep: 11.04.17
Parent Sample Id: 567440-001 MS Sample Id: 567440-001 S MSD Sample Id: 567440-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.95	248	261	105	260	105	90-110	0	20	mg/kg	11.04.17 12:21	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032547 Matrix: Soil Date Prep: 11.06.17
Parent Sample Id: 566877-003 MS Sample Id: 566877-003 S MSD Sample Id: 566877-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	597	250	810	85	815	87	90-110	1	20	mg/kg	11.06.17 10:15	X

QC Summary 566877

GHD Services, INC- Midland

LPU #96

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032547 Matrix: Soil Date Prep: 11.06.17
Parent Sample Id: 566877-013 MS Sample Id: 566877-013 S MSD Sample Id: 566877-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8.44	250	265	103	264	102	90-110	0	20	mg/kg	11.06.17 11:44	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032548 Matrix: Soil Date Prep: 11.06.17
Parent Sample Id: 566877-023 MS Sample Id: 566877-023 S MSD Sample Id: 566877-023 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	762	246	969	84	976	87	90-110	1	20	mg/kg	11.06.17 16:55	X

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032548 Matrix: Soil Date Prep: 11.06.17
Parent Sample Id: 566877-033 MS Sample Id: 566877-033 S MSD Sample Id: 566877-033 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.2	248	264	102	266	103	90-110	1	20	mg/kg	11.06.17 18:24	

Analytical Method: **Percent Moisture**
Seq Number: 3031933 Matrix: Solid
MB Sample Id: 3031933-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<1.00	%	10.30.17 17:30	

Analytical Method: **Percent Moisture**
Seq Number: 3031934 Matrix: Solid
MB Sample Id: 3031934-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<1.00	%	10.30.17 17:30	

Analytical Method: **Percent Moisture**
Seq Number: 3031933 Matrix: Soil
Parent Sample Id: 566877-001 MD Sample Id: 566877-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	14.0	13.1	7	20	%	10.30.17 17:30	

QC Summary 566877

GHD Services, INC- Midland

LPU #96

Analytical Method: **Percent Moisture**
Seq Number: 3031933 Matrix: Soil
Parent Sample Id: 566877-018 MD Sample Id: 566877-018 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	15.1	15.1	0	20	%	10.30.17 17:30	

Analytical Method: **Percent Moisture**
Seq Number: 3031934 Matrix: Soil
Parent Sample Id: 566877-019 MD Sample Id: 566877-019 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	32.0	32.5	2	20	%	10.30.17 17:30	

Analytical Method: **Percent Moisture**
Seq Number: 3031934 Matrix: Soil
Parent Sample Id: 566877-034 MD Sample Id: 566877-034 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	23.2	23.2	0	20	%	10.30.17 17:30	

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3032129 Matrix: Solid Date Prep: 10.31.17
MB Sample Id: 7633538-1-BLK LCS Sample Id: 7633538-1-BKS LCSD Sample Id: 7633538-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	1120	112	1090	109	70-135	3	35	mg/kg	10.31.17 14:14	
Diesel Range Organics	<15.0	1000	1140	114	1140	114	70-135	0	35	mg/kg	10.31.17 14:14	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	110		97		104		70-135	%	10.31.17 14:14
o-Terphenyl	108		93		100		70-135	%	10.31.17 14:14

QC Summary 566877

GHD Services, INC- Midland

LPU #96

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3032132 Matrix: Solid Date Prep: 10.31.17
MB Sample Id: 7633539-1-BLK LCS Sample Id: 7633539-1-BKS LCSD Sample Id: 7633539-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	1040	104	1040	104	70-135	0	35	mg/kg	10.31.17 23:33	
Diesel Range Organics	<15.0	1000	1150	115	1140	114	70-135	1	35	mg/kg	10.31.17 23:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		118		102		70-135	%	10.31.17 23:33
o-Terphenyl	98		101		86		70-135	%	10.31.17 23:33

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3032129 Matrix: Soil Date Prep: 10.31.17
Parent Sample Id: 566877-010 MS Sample Id: 566877-010 S MSD Sample Id: 566877-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	1020	102	1020	102	70-135	0	35	mg/kg	10.31.17 18:09	
Diesel Range Organics	<15.0	1000	1060	106	1080	108	70-135	2	35	mg/kg	10.31.17 18:09	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	103		102		70-135	%	10.31.17 18:09
o-Terphenyl	96		98		70-135	%	10.31.17 18:09

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3032132 Matrix: Soil Date Prep: 10.31.17
Parent Sample Id: 566877-021 MS Sample Id: 566877-021 S MSD Sample Id: 566877-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	998	923	92	1010	101	70-135	9	35	mg/kg	10.31.17 00:32	
Diesel Range Organics	<15.0	998	1040	104	1110	111	70-135	7	35	mg/kg	10.31.17 00:32	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		115		70-135	%	10.31.17 00:32
o-Terphenyl	91		97		70-135	%	10.31.17 00:32

QC Summary 566877

GHD Services, INC- Midland

LPU #96

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032505 Matrix: Solid Date Prep: 11.06.17

MB Sample Id: 7633888-1-BLK LCS Sample Id: 7633888-1-BKS LCSD Sample Id: 7633888-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.102	102	0.0995	100	62-132	2	25	mg/kg	11.06.17 14:58	
Toluene	<0.00100	0.100	0.0901	90	0.100	100	66-124	10	25	mg/kg	11.06.17 14:58	
Ethylbenzene	<0.00100	0.100	0.0985	99	0.0986	99	71-134	0	25	mg/kg	11.06.17 14:58	
m,p-Xylenes	<0.00200	0.200	0.209	105	0.208	104	69-128	0	25	mg/kg	11.06.17 14:58	
o-Xylene	<0.00100	0.100	0.103	103	0.103	103	72-131	0	25	mg/kg	11.06.17 14:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	101		104		97		74-126	%	11.06.17 14:58
1,2-Dichloroethane-D4	99		108		106		80-120	%	11.06.17 14:58
Toluene-D8	102		97		106		73-132	%	11.06.17 14:58

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032510 Matrix: Solid Date Prep: 11.06.17

MB Sample Id: 7633893-1-BLK LCS Sample Id: 7633893-1-BKS LCSD Sample Id: 7633893-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.104	104	0.109	109	62-132	5	25	mg/kg	11.06.17 18:43	
Toluene	<0.00100	0.100	0.115	115	0.104	104	66-124	10	25	mg/kg	11.06.17 18:43	
Ethylbenzene	<0.00100	0.100	0.106	106	0.111	111	71-134	5	25	mg/kg	11.06.17 18:43	
m,p-Xylenes	<0.00200	0.200	0.215	108	0.219	110	69-128	2	25	mg/kg	11.06.17 18:43	
o-Xylene	<0.00100	0.100	0.114	114	0.111	111	72-131	3	25	mg/kg	11.06.17 18:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	113		104		106		74-126	%	11.06.17 18:43
1,2-Dichloroethane-D4	95		113		108		80-120	%	11.06.17 18:43
Toluene-D8	94		115		101		73-132	%	11.06.17 18:43

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032610 Matrix: Solid Date Prep: 11.07.17

MB Sample Id: 7633954-1-BLK LCS Sample Id: 7633954-1-BKS LCSD Sample Id: 7633954-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.112	112	0.113	113	62-132	1	25	mg/kg	11.07.17 07:39	
Toluene	<0.00100	0.100	0.0880	88	0.0895	90	66-124	2	25	mg/kg	11.07.17 07:39	
Ethylbenzene	<0.00100	0.100	0.104	104	0.104	104	71-134	0	25	mg/kg	11.07.17 07:39	
m,p-Xylenes	<0.00200	0.200	0.226	113	0.224	112	69-128	1	25	mg/kg	11.07.17 07:39	
o-Xylene	<0.00100	0.100	0.113	113	0.111	111	72-131	2	25	mg/kg	11.07.17 07:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	102		105		98		74-126	%	11.07.17 07:39
1,2-Dichloroethane-D4	107		106		108		80-120	%	11.07.17 07:39
Toluene-D8	89		88		92		73-132	%	11.07.17 07:39

QC Summary 566877

GHD Services, INC- Midland

LPU #96

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B
Seq Number: 3032505 Matrix: Soil Date Prep: 11.06.17
Parent Sample Id: 566877-034 MS Sample Id: 566877-034 S MSD Sample Id: 566877-034 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000996	0.0996	0.113	113	0.110	110	62-132	3	25	mg/kg	11.06.17 22:09	
Toluene	<0.000996	0.0996	0.0845	85	0.0867	87	66-124	3	25	mg/kg	11.06.17 22:09	
Ethylbenzene	<0.000996	0.0996	0.105	105	0.101	101	71-134	4	25	mg/kg	11.06.17 22:09	
m,p-Xylenes	<0.00199	0.199	0.221	111	0.212	107	69-128	4	25	mg/kg	11.06.17 22:09	
o-Xylene	<0.000996	0.0996	0.111	111	0.111	111	72-131	0	25	mg/kg	11.06.17 22:09	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	109		110		74-126	%	11.06.17 22:09
1,2-Dichloroethane-D4	118		113		80-120	%	11.06.17 22:09
Toluene-D8	86		87		73-132	%	11.06.17 22:09

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B
Seq Number: 3032510 Matrix: Soil Date Prep: 11.06.17
Parent Sample Id: 566877-017 MS Sample Id: 566877-017 S MSD Sample Id: 566877-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000998	0.0998	0.106	106	0.102	102	62-132	4	25	mg/kg	11.06.17 19:59	
Toluene	<0.000998	0.0998	0.109	109	0.0936	94	66-124	15	25	mg/kg	11.06.17 19:59	
Ethylbenzene	<0.000998	0.0998	0.104	104	0.0973	97	71-134	7	25	mg/kg	11.06.17 19:59	
m,p-Xylenes	<0.00200	0.200	0.217	109	0.205	103	69-128	6	25	mg/kg	11.06.17 19:59	
o-Xylene	<0.000998	0.0998	0.107	107	0.0951	95	72-131	12	25	mg/kg	11.06.17 19:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	104		104		74-126	%	11.06.17 19:59
1,2-Dichloroethane-D4	106		109		80-120	%	11.06.17 19:59
Toluene-D8	112		95		73-132	%	11.06.17 19:59

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B
Seq Number: 3032610 Matrix: Soil Date Prep: 11.07.17
Parent Sample Id: 566877-025 MS Sample Id: 566877-025 S MSD Sample Id: 566877-025 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000996	0.0996	0.113	113	0.111	111	62-132	2	25	mg/kg	11.07.17 08:23	
Toluene	<0.000996	0.0996	0.0903	91	0.0881	88	66-124	2	25	mg/kg	11.07.17 08:23	
Ethylbenzene	<0.000996	0.0996	0.109	109	0.102	102	71-134	7	25	mg/kg	11.07.17 08:23	
m,p-Xylenes	<0.00199	0.199	0.231	116	0.220	110	69-128	5	25	mg/kg	11.07.17 08:23	
o-Xylene	<0.000996	0.0996	0.113	113	0.109	109	72-131	4	25	mg/kg	11.07.17 08:23	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	103		103		74-126	%	11.07.17 08:23
1,2-Dichloroethane-D4	101		111		80-120	%	11.07.17 08:23
Toluene-D8	92		90		73-132	%	11.07.17 08:23

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330944 Page 1 of 4

Company-City GHD - Houston **Phone** 713-734-3090

Lab Only: 566877

Project Name-Location LPU #96 - Lea County, NM ☐ Previously done at XENCO **Project ID** 0738160

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM **Proj. Manager (PM)** Scott Foord

E-mail Results to ☒ PM and Chris.Knight@ghd.com **Fax No:**

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Rebecca Jones **Signature** Rebecca Jones

	Sample ID	Sampling Date	Time	Depth (ft)/in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
1	SB-7-S-05-1-171027	10/27/17	0835	1	S		✓	2	2,4	C	C
2	SB-7-S-4-5-171027		0838	5			✓	2			
3	SB-7-S-9-10-171027		0841	10			✓	2			
4	SB-7-S-19-20-171027		0844	20			✓	2			
5	SB-7-S-29-30-171027		0905	30			✓	2			
6	SB-7-S-39-40-171027		0908	40			✓	2			
7	SB-7-S-49-50-171027		0920	50			✓	2			
8	SB-7-S-59-60-171027		0923	60			✓	2			
9	SB-7-S-69-70-171027		0940	70			✓	2			
10	SB-7-S-79-80-171027		0957	80			✓	2			

VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs
VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:
PAHs SIM 8310 8270
TX-1005 DRO GRO MA EPH MA VPH
SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL
OC Pesticides PCBs Herbicides OP Pesticides
Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2
SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)
EDB / DBCP

BTEX ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
TPH-GRO ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
TPH-DRO ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Chloride ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Moisture ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d
Addn: PAH above mg/L W, mg/Kg S Highest Hit
Hold Samples (Surcharges will apply and are pre-approved)

Remarks
Sample Clean-ups are pre-approved as needed
Addn: Date Rcv. by: From:

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) Rebecca Jones	10/27-1415	2) Shearer	10-27 2:28
2	3)		4)	
3	5)		6)	

Total Containers per COC: Cooler Temp: 4.1 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other 2,1oz **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330963 Page 2 of 4

Company-City: GHD-Houston **Phone:** 713-734-3090

Project Name-Location: LPH #96 - Lea County, NM ☐ Previously done at XENCO **Project ID:** 073810

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM **Proj. Manager (PM):**

E-mail Results to ☐ PM and **Fax No:**

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name: Rebecca Jones **Signature:** Rebecca Jones

Lab Only: 560877

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

	Sample ID	Sampling Date	Time	Depth (ft" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	BTEX	TPH - GRO	TPH - DRO	Chloride	Moisture					TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed				Addn: Date Rcv. by: From:	
1	SB-9-S-89-90-171027	10/27/17	0957	90	S		X	2	2oz	C	C										X	X	X	X	X														1
2	SB-9-S-0.5-1-171027		1033	1			X	2													X	X	X	X	X														2
3	SB-9-S-4-5-171027		1036	5			X	2													X	X	X	X	X														3
4	SB-9-S-9-10-171027		1039	10			X	2													X	X	X	X	X														4
5	SB-9-S-19-20-171027		1042	20			X	2													X	X	X	X	X														5
6	SB-9-S-29-30-171027		1050	30			X	2													X	X	X	X	X														6
7	SB-9-S-39-40-171027		1053	40			X	2													X	X	X	X	X														7
8	SB-9-S-49-50-171027		1110	50			X	2													X	X	X	X	X														8
9	SB-9-S-59-60-171027		1113	60			X	2													X	X	X	X	X														9
10	SB-9-S-69-70-171027		1130	70			X	2													X	X	X	X	X														10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) Rebecca Jones	10/27 - 1415	2) Breaux	10-27 2:28
3)		4)	
5)		6)	

Total Containers per COC: Cooler Temp: 4.1 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

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☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330962 Page 3 of 4

Company-City: GHD Houston **Phone:** 713-734-3090

Project Name-Location: LPM#96-Lea County, NM ☐ Previously done at XENCO **Project ID:** 0738116

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM **Proj. Manager (PM):**

E-mail Results to ☐ PM and **Fax No:**

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Rebecca Jones **Signature** Rebecca Jones

Lab Only: 566877

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

	Sample ID	Sampling Date	Time	Depth (ft" In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	BTEX	TPH-GRO	TPH-DRO	Chloride	Moisture	TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed	Addn: Date Rcv. by: From:
1	SB-9-S-79-80-171027	10/27/17	1133	80	S		X	2	2,4	C	C										X	X	X	X	X					
2	SB-9-S-89-90-171027		1150	90			X	2																						
3	SB-10-S-0.5-171027		1230	1			X	2																						
4	SB-10-S-4.5-171027		1233	5			X	2																						
5	SB-10-S-9-10-171027		1236	10			X	2																						
6	SB-10-S-19-20-171027		1239	20			X	2																						
7	SB-10-S-29-30-171027		1250	30			X	2																						
8	SB-10-S-39-40-171027		1253	40			X	2																						
9	SB-10-S-49-50-171027		1303	50			X	2																						
10	SB-10-S-59-60-171027		1306	60			X	2																						

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) Rebecca Jones	10/27-1415	2) [signature]	10-27 2:28
3)		4)	
5)		6)	

Total Containers per COC: Cooler Temp: 4.1 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

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☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330948 Page 4 of 4

Company-City: GHD-Houston **Phone:** 713-734-3090

Lab Only: 566877

Project Name-Location: LDH#96 - Lea County, NM ☐ Previously done at XENCO **Project ID:** 073816

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM **Proj. Manager (PM):**

E-mail Results to ☐ PM and **Fax No:**

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Rebecca Jones **Signature** Rebecca Jones

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
1	SB-10-S-09-70-171027	10/27/17	1325	70	S		/	2	2,4	C	C
2	SB-10-S-79-80-171027		1328	80			/	2			
3	SB-10-S-8990-171027		1345	90			/	2			
4	DUP-1-171027	↓	—	—	↓		/	2	↓	↓	↓
5											
6											
7											
8											
9											
10											

	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	BTEX	TPH - GRO	TPH - DRO	Chloride	Moisture
1										/	/	/	/	/
2										/	/	/	/	/
3										/	/	/	/	/
4										/	/	/	/	/
5														
6														
7														
8														
9														
10														

	TAT ASAP	5h	12h	24h	48h	3d	5d	7d	10d	21d

Addn: PAH above mg/L W, mg/Kg S Highest Hit

Hold Samples (Surcharges will apply and are pre-approved)

Remarks

Sample Clean-ups are pre-approved as needed

Addn: Date Rcv. by: From:

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) Rebecca Jones	10/27-1415	2) GHeaume	10-27 2:28
3)		4)	
5)		6)	

Total Containers per COC: Cooler Temp: 4.1 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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Inter-Office Shipment

IOS Number **1051065**

Date/Time: 10/30/17 11:49
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Shawnee Smith
Delivery Priority:
Air Bill No.:

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
566877-001	S	SB-7-S-0.5-1-171027	10/27/17 08:35	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-002	S	SB-7-S-4-5-171027	10/27/17 08:38	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-003	S	SB-7-S-9-10-171027	10/27/17 08:41	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-004	S	SB-7-S-19-20-171027	10/27/17 08:44	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-005	S	SB-7-S-29-30-171027	10/27/17 09:05	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-006	S	SB-7-S-39-40-171027	10/27/17 09:08	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-007	S	SB-7-S-49-50-171027	10/27/17 09:20	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-008	S	SB-7-S-59-60-171027	10/27/17 09:23	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-009	S	SB-7-S-69-70-171027	10/27/17 09:40	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-010	S	SB-7-S-79-80-171027	10/27/17 09:57	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-011	S	SB-7-S-89-90-171027	10/27/17 09:57	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-012	S	SB-9-S-0.5-1-171027	10/27/17 10:33	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-013	S	SB-9-S-4-5-171027	10/27/17 10:36	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-014	S	SB-9-S-9-10-171027	10/27/17 10:39	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-015	S	SB-9-S-19-20-171027	10/27/17 10:42	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-016	S	SB-9-S-29-30-171027	10/27/17 10:50	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-017	S	SB-9-S-39-40-171027	10/27/17 10:53	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-018	S	SB-9-S-49-50-171027	10/27/17 11:10	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-019	S	SB-9-S-59-60-171027	10/27/17 11:13	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-020	S	SB-9-S-69-70-171027	10/27/17 11:30	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-021	S	SB-9-S-79-80-171027	10/27/17 11:33	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-022	S	SB-9-S-89-90-171027	10/27/17 11:50	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-023	S	SB-10-S-0.5-1-171027	10/27/17 12:30	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-024	S	SB-10-S-4-5-171027	10/27/17 12:33	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-025	S	SB-10-S-9-10-171027	10/27/17 12:36	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	

Inter-Office Shipment

IOS Number **1051065**

Date/Time: 10/30/17 11:49
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Shawnee Smith
Delivery Priority:
Air Bill No.:

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
566877-026	S	SB-10-S-19-20-171027	10/27/17 12:39	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-027	S	SB-10-S-29-30-171027	10/27/17 12:50	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-028	S	SB-10-S-39-40-171027	10/27/17 12:53	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-029	S	SB-10-S-49-50-171027	10/27/17 13:03	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-030	S	SB-10-S-59-60-171027	10/27/17 13:06	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-031	S	SB-10-S-69-70-171027	10/27/17 13:25	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-032	S	SB-10-S-79-80-171027	10/27/17 13:28	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-033	S	SB-10-S-89-90-171027	10/27/17 13:45	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	
566877-034	S	DUP-1-171027	10/27/17 00:00	SW8260BTX	BTEX by SW 8260B	11/02/17	11/10/17	KEB	BZ BZME EBZ XYLENES	

Inter Office Shipment or Sample Comments:

Relinquished By Shawnee Smith

Shawnee Smith

Date Relinquished: 10/30/2017

Received By: _____

Date Received: _____

Cooler Temperature: _____

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 10/27/2017 02:28:00 PM

Work Order #: 566877

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

Temperature Measuring device used : R8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	4.1	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	Houston
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Shawnee Smith Date: 10/30/2017
Shawnee Smith

Checklist reviewed by: Kelsey Brooks Date: 10/30/2017
Kelsey Brooks

Certificate of Analysis Summary 566983

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County,NM

Date Received in Lab: Mon Oct-30-17 09:30 am
Report Date: 10-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566983-001		566983-002		566983-003		566983-004		566983-005		566983-006	
	Field Id:	MW-3-S-0.5-1-171028		MW-3-S-4-5-171028		MW-3-S-9-10-171028		MW-3-S-19-20-171028		MW-3-S-29-30-171028		MW-3-S-39-40-171028	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-28-17 08:36		Oct-28-17 08:39		Oct-28-17 08:42		Oct-28-17 08:45		Oct-28-17 08:52		Oct-28-17 08:55	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-08-17 20:00		Nov-08-17 20:00		Nov-08-17 20:00		Nov-08-17 20:00		Nov-08-17 15:30		Nov-08-17 20:00	
	Analyzed:	Nov-09-17 03:03		Nov-08-17 21:40		Nov-08-17 22:01		Nov-09-17 03:23		Nov-08-17 17:16		Nov-09-17 02:22	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00105	0.00105	<0.00106	0.00106	<0.00105	0.00105	0.00685	0.00104	<0.00106	0.00106	<0.00105	0.00105
Toluene		<0.00105	0.00105	<0.00106	0.00106	<0.00105	0.00105	<0.00104	0.00104	<0.00106	0.00106	<0.00105	0.00105
Ethylbenzene		<0.00105	0.00105	<0.00106	0.00106	<0.00105	0.00105	0.166	0.00104	<0.00106	0.00106	<0.00105	0.00105
m,p-Xylenes		<0.00211	0.00211	<0.00212	0.00212	<0.00210	0.00210	<0.00209	0.00209	0.00305	0.00211	<0.00209	0.00209
o-Xylene		<0.00105	0.00105	<0.00106	0.00106	<0.00105	0.00105	0.00105	0.00104	0.00180	0.00106	<0.00105	0.00105
Total Xylenes		<0.00105	0.00105	<0.00106	0.00106	<0.00105	0.00105	0.00105	0.00104	0.00485	0.00106	<0.00105	0.00105
Total BTEX		<0.00105	0.00105	<0.00106	0.00106	<0.00105	0.00105	0.174	0.00104	0.00485	0.00106	<0.00105	0.00105
Chloride by EPA 300	***Extracted:***	Nov-07-17 11:00		Nov-07-17 11:00		Nov-07-17 11:00		Nov-07-17 11:00		Nov-07-17 11:00		Nov-07-17 11:00	
	Analyzed:	Nov-07-17 15:42		Nov-07-17 15:49		Nov-07-17 15:55		Nov-07-17 16:02		Nov-07-17 16:08		Nov-07-17 16:14	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		40.7	5.17	327	5.22	54.5	5.16	10.5	5.19	12.0	5.25	7.72	5.19
Percent Moisture	***Extracted:***												
	Analyzed:	Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.86	1.00	5.69	1.00	4.41	1.00	4.86	1.00	6.10	1.00	4.90	1.00
TPH By SW8015 Mod	***Extracted:***	Nov-01-17 09:00		Nov-01-17 09:00		Nov-01-17 09:00		Nov-01-17 09:00		Nov-01-17 09:00		Nov-01-17 09:00	
	Analyzed:	Nov-01-17 11:54		Nov-01-17 12:14		Nov-01-17 12:35		Nov-01-17 12:55		Nov-01-17 13:15		Nov-01-17 13:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.7	15.7	<15.9	15.9	18.9	15.7	364	15.7	20.6	16.0	<15.8	15.8
Diesel Range Organics		411	15.7	796	15.9	2590	15.7	4450	15.7	713	16.0	37.9	15.8

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566983

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County,NM

Date Received in Lab: Mon Oct-30-17 09:30 am
Report Date: 10-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566983-007		566983-008		566983-009		566983-010		566983-011		566983-012	
	Field Id:	MW-3-S-49-50-171028		MW-3-S-59-60-171028		MW-3-S-69-70-171028		MW-3-S-79-80-171028		MW-3-S-89-90-171028		MW-5-S-0.5-1-171028	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-28-17 09:20		Oct-28-17 09:23		Oct-28-17 09:40		Oct-28-17 09:43		Oct-28-17 09:48		Oct-28-17 11:20	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-08-17 15:30		Nov-08-17 15:30		Nov-08-17 20:00		Nov-08-17 20:00		Nov-09-17 11:00		Nov-08-17 20:00	
	Analyzed:	Nov-08-17 17:55		Nov-08-17 17:35		Nov-09-17 00:41		Nov-09-17 00:22		Nov-09-17 12:35		Nov-09-17 02:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00104	0.00104	<0.00106	0.00106	<0.00105	0.00105	<0.00104	0.00104	<0.00515	0.00515	<0.00111	0.00111
Toluene		<0.00104	0.00104	<0.00106	0.00106	<0.00105	0.00105	<0.00104	0.00104	<0.00515	0.00515	<0.00111	0.00111
Ethylbenzene		<0.00104	0.00104	<0.00106	0.00106	<0.00105	0.00105	<0.00104	0.00104	<0.00515	0.00515	<0.00111	0.00111
m,p-Xylenes		<0.00209	0.00209	<0.00212	0.00212	<0.00210	0.00210	<0.00209	0.00209	<0.0103	0.0103	<0.00222	0.00222
o-Xylene		<0.00104	0.00104	<0.00106	0.00106	<0.00105	0.00105	<0.00104	0.00104	<0.00515	0.00515	<0.00111	0.00111
Total Xylenes		<0.00104	0.00104	<0.00106	0.00106	<0.00105	0.00105	<0.00104	0.00104	<0.00515	0.00515	<0.00111	0.00111
Total BTEX		<0.00104	0.00104	<0.00106	0.00106	<0.00105	0.00105	<0.00104	0.00104	<0.00515	0.00515	<0.00111	0.00111
Chloride by EPA 300	***Extracted:***	Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 12:05	
	Analyzed:	Nov-07-17 15:55		Nov-07-17 16:21		Nov-07-17 16:30		Nov-07-17 16:39		Nov-07-17 16:48		Nov-07-17 17:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		30.8	5.13	32.9	5.19	30.2	5.16	26.7	5.12	24.5	5.08	31.4	5.51
Percent Moisture	***Extracted:***												
	Analyzed:	Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.81	1.00	4.91	1.00	4.39	1.00	3.73	1.00	2.92	1.00	9.66	1.00
TPH By SW8015 Mod	***Extracted:***	Nov-01-17 09:00		Nov-01-17 09:00		Nov-01-17 09:00		Nov-01-17 09:00		Nov-01-17 09:00		Nov-01-17 09:00	
	Analyzed:	Nov-01-17 13:55		Nov-01-17 14:16		Nov-01-17 14:36		Nov-01-17 14:56		Nov-01-17 16:36		Nov-01-17 16:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.5	15.5	<15.7	15.7	<15.7	15.7	<15.6	15.6	<15.4	15.4	<16.6	16.6
Diesel Range Organics		29.1	15.5	94.7	15.7	<15.7	15.7	<15.6	15.6	<15.4	15.4	150	16.6

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566983

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County,NM

Date Received in Lab: Mon Oct-30-17 09:30 am
Report Date: 10-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566983-013		566983-014		566983-015		566983-016		566983-017		566983-018	
	Field Id:	MW-5-S-4-5-171028		MW-5-S-9-10-171028		MW-5-S-19-20-171028		MW-5-S-29-30-171028		MW-5-S-39-40-171028		MW-5-S-49-50-171028	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-28-17 11:23		Oct-28-17 11:26		Oct-28-17 11:29		Oct-28-17 11:40		Oct-28-17 11:43		Oct-28-17 12:00	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-08-17 20:00		Nov-09-17 11:00		Nov-08-17 20:00		Nov-08-17 20:00		Nov-08-17 20:00		Nov-08-17 20:00	
	Analyzed:	Nov-08-17 23:21		Nov-09-17 12:15		Nov-08-17 23:01		Nov-08-17 22:41		Nov-08-17 22:21		Nov-09-17 01:02	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00102	0.00102	<0.00558	0.00558	<0.00105	0.00105	<0.00104	0.00104	<0.00106	0.00106	<0.00103	0.00103
Toluene		<0.00102	0.00102	<0.00558	0.00558	<0.00105	0.00105	<0.00104	0.00104	<0.00106	0.00106	<0.00103	0.00103
Ethylbenzene		<0.00102	0.00102	<0.00558	0.00558	<0.00105	0.00105	<0.00104	0.00104	<0.00106	0.00106	<0.00103	0.00103
m,p-Xylenes		<0.00205	0.00205	<0.0112	0.0112	<0.00210	0.00210	<0.00209	0.00209	<0.00211	0.00211	<0.00207	0.00207
o-Xylene		<0.00102	0.00102	<0.00558	0.00558	<0.00105	0.00105	<0.00104	0.00104	<0.00106	0.00106	<0.00103	0.00103
Total Xylenes		<0.00102	0.00102	<0.00558	0.00558	<0.00105	0.00105	<0.00104	0.00104	<0.00106	0.00106	<0.00103	0.00103
Total BTEX		<0.00102	0.00102	<0.00558	0.00558	<0.00105	0.00105	<0.00104	0.00104	<0.00106	0.00106	<0.00103	0.00103
Chloride by EPA 300	***Extracted:***	Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 12:05	
	Analyzed:	Nov-07-17 17:23		Nov-07-17 17:32		Nov-07-17 17:41		Nov-07-17 17:50		Nov-07-17 17:59		Nov-07-17 18:25	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		28.5	5.06	46.3	5.56	31.8	5.23	59.2	5.25	40.1	5.23	35.8	5.20
Percent Moisture	***Extracted:***												
	Analyzed:	Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		2.24	1.00	10.5	1.00	4.75	1.00	5.02	1.00	4.99	1.00	4.31	1.00
TPH By SW8015 Mod	***Extracted:***	Nov-01-17 09:00		Nov-01-17 09:00		Nov-01-17 09:00		Nov-01-17 09:00		Nov-01-17 09:00		Nov-01-17 09:00	
	Analyzed:	Nov-01-17 17:15		Nov-01-17 17:35		Nov-01-17 17:55		Nov-01-17 18:16		Nov-01-17 18:37		Nov-01-17 18:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.3	15.3	<16.7	16.7	<15.7	15.7	<15.8	15.8	<15.8	15.8	<15.7	15.7
Diesel Range Organics		33.5	15.3	<16.7	16.7	<15.7	15.7	<15.8	15.8	<15.8	15.8	<15.7	15.7

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566983

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County,NM

Date Received in Lab: Mon Oct-30-17 09:30 am
Report Date: 10-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566983-019		566983-020		566983-021		566983-022					
	Field Id:	MW-5-S-59-60-171028		MW-5-S-69-70-171028		MW-5-S-79-80-171028		MW-5-S-89-90-171028					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Oct-28-17 12:03		Oct-28-17 12:20		Oct-28-17 12:23		Oct-28-17 12:36					
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-08-17 20:00		Nov-08-17 20:00		Nov-08-17 20:00		Nov-08-17 20:00					
	Analyzed:	Nov-08-17 23:41		Nov-09-17 01:23		Nov-09-17 01:43		Nov-09-17 02:03					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00105	0.00105	<0.00104	0.00104	<0.00105	0.00105	<0.00101	0.00101				
Toluene		<0.00105	0.00105	<0.00104	0.00104	<0.00105	0.00105	<0.00101	0.00101				
Ethylbenzene		<0.00105	0.00105	<0.00104	0.00104	<0.00105	0.00105	<0.00101	0.00101				
m,p-Xylenes		<0.00211	0.00211	<0.00208	0.00208	<0.00210	0.00210	<0.00203	0.00203				
o-Xylene		<0.00105	0.00105	<0.00104	0.00104	<0.00105	0.00105	<0.00101	0.00101				
Total Xylenes		<0.00105	0.00105	<0.00104	0.00104	<0.00105	0.00105	<0.00101	0.00101				
Total BTEX		<0.00105	0.00105	<0.00104	0.00104	<0.00105	0.00105	<0.00101	0.00101				
Chloride by EPA 300	***Extracted:***	Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 12:05					
	Analyzed:	Nov-07-17 18:34		Nov-07-17 19:01		Nov-07-17 19:10		Nov-07-17 19:18					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		49.1	5.25	99.2	5.23	106	5.13	66.3	5.05				
Percent Moisture	***Extracted:***												
	Analyzed:	Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		5.09	1.00	4.70	1.00	3.62	1.00	2.33	1.00				
TPH By SW8015 Mod	***Extracted:***	Nov-01-17 09:00		Nov-01-17 09:00		Nov-02-17 07:00		Nov-02-17 07:00					
	Analyzed:	Nov-01-17 19:18		Nov-01-17 19:39		Nov-02-17 08:33		Nov-02-17 09:32					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons		<15.8	15.8	<15.7	15.7	<15.5	15.5	<15.3	15.3				
Diesel Range Organics		<15.8	15.8	<15.7	15.7	<15.5	15.5	<15.3	15.3				

Mike Kimmel
Client Services Manager

Analytical Report 566983

for

GHD Services, INC- Midland

Project Manager: Scott Foord

LPU #96

073816

10-NOV-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

10-NOV-17

Project Manager: **Scott Foord**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **566983**
LPU #96
Project Address: Lea County,NM

Scott Foord:

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) 566983. 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. 566983 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,

Mike Kimmel
Client Services Manager

Sample Cross Reference 566983

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-3-S-0.5-1-171028	S	10-28-17 08:36		566983-001
MW-3-S-4-5-171028	S	10-28-17 08:39		566983-002
MW-3-S-9-10-171028	S	10-28-17 08:42		566983-003
MW-3-S-19-20-171028	S	10-28-17 08:45		566983-004
MW-3-S-29-30-171028	S	10-28-17 08:52		566983-005
MW-3-S-39-40-171028	S	10-28-17 08:55		566983-006
MW-3-S-49-50-171028	S	10-28-17 09:20		566983-007
MW-3-S-59-60-171028	S	10-28-17 09:23		566983-008
MW-3-S-69-70-171028	S	10-28-17 09:40		566983-009
MW-3-S-79-80-171028	S	10-28-17 09:43		566983-010
MW-3-S-89-90-171028	S	10-28-17 09:48		566983-011
MW-5-S-0.5-1-171028	S	10-28-17 11:20		566983-012
MW-5-S-4-5-171028	S	10-28-17 11:23		566983-013
MW-5-S-9-10-171028	S	10-28-17 11:26		566983-014
MW-5-S-19-20-171028	S	10-28-17 11:29		566983-015
MW-5-S-29-30-171028	S	10-28-17 11:40		566983-016
MW-5-S-39-40-171028	S	10-28-17 11:43		566983-017
MW-5-S-49-50-171028	S	10-28-17 12:00		566983-018
MW-5-S-59-60-171028	S	10-28-17 12:03		566983-019
MW-5-S-69-70-171028	S	10-28-17 12:20		566983-020
MW-5-S-79-80-171028	S	10-28-17 12:23		566983-021
MW-5-S-89-90-171028	S	10-28-17 12:36		566983-022

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3032780 BTEX by SW 8260B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3032785 BTEX by SW 8260B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3032921 BTEX by SW 8260B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 566983

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-3-S-0.5-1-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-001 Date Collected: 10.28.17 08.36

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 4.86

Analyst: MNV Date Prep: 11.07.17 11.00 Basis: Dry Weight

Seq Number: 3032690

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**40.7**	5.17	mg/kg	11.07.17 15.42		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 4.86

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.7	15.7	mg/kg	11.01.17 11.54	U	1
Diesel Range Organics	C10C28DRO	**411**	15.7	mg/kg	11.01.17 11.54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	11.01.17 11.54	
o-Terphenyl	84-15-1	106	%	70-135	11.01.17 11.54	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 4.86

Analyst: JTR Date Prep: 11.08.17 20.00 Basis: Dry Weight

Seq Number: 3032785 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00105	0.00105	mg/kg	11.09.17 03.03	U	1
Toluene	108-88-3	<0.00105	0.00105	mg/kg	11.09.17 03.03	U	1
Ethylbenzene	100-41-4	<0.00105	0.00105	mg/kg	11.09.17 03.03	U	1
m,p-Xylenes	179601-23-1	<0.00211	0.00211	mg/kg	11.09.17 03.03	U	1
o-Xylene	95-47-6	<0.00105	0.00105	mg/kg	11.09.17 03.03	U	1
Total Xylenes	1330-20-7	<0.00105	0.00105	mg/kg	11.09.17 03.03	U	1
Total BTEX		<0.00105	0.00105	mg/kg	11.09.17 03.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	123	%	74-126	11.09.17 03.03	
1,2-Dichloroethane-D4	17060-07-0	120	%	80-120	11.09.17 03.03	
Toluene-D8	2037-26-5	95	%	73-132	11.09.17 03.03	

Certificate of Analytical Results 566983

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-3-S-4-5-171028**	Matrix:	Soil	Date Received:	10.30.17 09.30
Lab Sample Id:	566983-002	Date Collected:	10.28.17 08.39		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	5.69
Analyst:	MNV	Date Prep:	11.07.17 11.00	Basis:	Dry Weight
Seq Number:	3032690				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**327**	5.22	mg/kg	11.07.17 15.49		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	5.69
Analyst:	ARM	Date Prep:	11.01.17 09.00	Basis:	Dry Weight
Seq Number:	3032136				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.9	15.9	mg/kg	11.01.17 12.14	U	1
Diesel Range Organics	C10C28DRO	**796**	15.9	mg/kg	11.01.17 12.14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	11.01.17 12.14	
o-Terphenyl	84-15-1	105	%	70-135	11.01.17 12.14	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	5.69
Analyst:	JTR	Date Prep:	11.08.17 20.00	Basis:	Dry Weight
Seq Number:	3032785			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00106	0.00106	mg/kg	11.08.17 21.40	U	1
Toluene	108-88-3	<0.00106	0.00106	mg/kg	11.08.17 21.40	U	1
Ethylbenzene	100-41-4	<0.00106	0.00106	mg/kg	11.08.17 21.40	U	1
m,p-Xylenes	179601-23-1	<0.00212	0.00212	mg/kg	11.08.17 21.40	U	1
o-Xylene	95-47-6	<0.00106	0.00106	mg/kg	11.08.17 21.40	U	1
Total Xylenes	1330-20-7	<0.00106	0.00106	mg/kg	11.08.17 21.40	U	1
Total BTEX		<0.00106	0.00106	mg/kg	11.08.17 21.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	115	%	74-126	11.08.17 21.40	
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	11.08.17 21.40	
Toluene-D8	2037-26-5	82	%	73-132	11.08.17 21.40	

Certificate of Analytical Results 566983

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-3-S-9-10-171028**	Matrix:	Soil	Date Received:	10.30.17 09.30
Lab Sample Id:	566983-003	Date Collected:	10.28.17 08.42		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	4.41
Analyst:	MNV	Date Prep:	11.07.17 11.00	Basis:	Dry Weight
Seq Number:	3032690				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**54.5**	5.16	mg/kg	11.07.17 15.55		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	4.41
Analyst:	ARM	Date Prep:	11.01.17 09.00	Basis:	Dry Weight
Seq Number:	3032136				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	**18.9**	15.7	mg/kg	11.01.17 12.35		1
Diesel Range Organics	C10C28DRO	**2590**	15.7	mg/kg	11.01.17 12.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	11.01.17 12.35	
o-Terphenyl	84-15-1	123	%	70-135	11.01.17 12.35	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	4.41
Analyst:	JTR	Date Prep:	11.08.17 20.00	Basis:	Dry Weight
Seq Number:	3032785			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00105	0.00105	mg/kg	11.08.17 22.01	U	1
Toluene	108-88-3	<0.00105	0.00105	mg/kg	11.08.17 22.01	U	1
Ethylbenzene	100-41-4	<0.00105	0.00105	mg/kg	11.08.17 22.01	U	1
m,p-Xylenes	179601-23-1	<0.00210	0.00210	mg/kg	11.08.17 22.01	U	1
o-Xylene	95-47-6	<0.00105	0.00105	mg/kg	11.08.17 22.01	U	1
Total Xylenes	1330-20-7	<0.00105	0.00105	mg/kg	11.08.17 22.01	U	1
Total BTEX		<0.00105	0.00105	mg/kg	11.08.17 22.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	120	%	74-126	11.08.17 22.01	
1,2-Dichloroethane-D4	17060-07-0	115	%	80-120	11.08.17 22.01	
Toluene-D8	2037-26-5	92	%	73-132	11.08.17 22.01	

Certificate of Analytical Results 566983

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-3-S-19-20-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-004 Date Collected: 10.28.17 08.45

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 4.86

Analyst: MNV Date Prep: 11.07.17 11.00 Basis: Dry Weight

Seq Number: 3032690

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.5**	5.19	mg/kg	11.07.17 16.02		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 4.86

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	**364**	15.7	mg/kg	11.01.17 12.55		1
Diesel Range Organics	C10C28DRO	**4450**	15.7	mg/kg	11.01.17 12.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	11.01.17 12.55	
o-Terphenyl	84-15-1	90	%	70-135	11.01.17 12.55	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 4.86

Analyst: JTR Date Prep: 11.08.17 20.00 Basis: Dry Weight

Seq Number: 3032785 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.00685**	0.00104	mg/kg	11.09.17 03.23		1
Toluene	108-88-3	<0.00104	0.00104	mg/kg	11.09.17 03.23	U	1
Ethylbenzene	100-41-4	**0.166**	0.00104	mg/kg	11.09.17 03.23		1
m,p-Xylenes	179601-23-1	<0.00209	0.00209	mg/kg	11.09.17 03.23	U	1
o-Xylene	95-47-6	**0.00105**	0.00104	mg/kg	11.09.17 03.23		1
Total Xylenes	1330-20-7	**0.00105**	0.00104	mg/kg	11.09.17 03.23		1
Total BTEX		**0.174**	0.00104	mg/kg	11.09.17 03.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	74-126	11.09.17 03.23	
1,2-Dichloroethane-D4	17060-07-0	107	%	80-120	11.09.17 03.23	
Toluene-D8	2037-26-5	100	%	73-132	11.09.17 03.23	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-3-S-29-30-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-005 Date Collected: 10.28.17 08.52

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 6.1

Analyst: MNV Date Prep: 11.07.17 11.00 Basis: Dry Weight

Seq Number: 3032690

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.0**	5.25	mg/kg	11.07.17 16.08		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 6.1

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	**20.6**	16.0	mg/kg	11.01.17 13.15		1
Diesel Range Organics	C10C28DRO	**713**	16.0	mg/kg	11.01.17 13.15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	11.01.17 13.15	
o-Terphenyl	84-15-1	130	%	70-135	11.01.17 13.15	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 6.1

Analyst: JTR Date Prep: 11.08.17 15.30 Basis: Dry Weight

Seq Number: 3032780 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00106	0.00106	mg/kg	11.08.17 17.16	U	1
Toluene	108-88-3	<0.00106	0.00106	mg/kg	11.08.17 17.16	U	1
Ethylbenzene	100-41-4	<0.00106	0.00106	mg/kg	11.08.17 17.16	U	1
m,p-Xylenes	179601-23-1	**0.00305**	0.00211	mg/kg	11.08.17 17.16		1
o-Xylene	95-47-6	**0.00180**	0.00106	mg/kg	11.08.17 17.16		1
Total Xylenes	1330-20-7	**0.00485**	0.00106	mg/kg	11.08.17 17.16		1
Total BTEX		**0.00485**	0.00106	mg/kg	11.08.17 17.16		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	74-126	11.08.17 17.16	
1,2-Dichloroethane-D4	17060-07-0	118	%	80-120	11.08.17 17.16	
Toluene-D8	2037-26-5	86	%	73-132	11.08.17 17.16	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-3-S-39-40-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-006 Date Collected: 10.28.17 08.55

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 4.9

Analyst: MNV Date Prep: 11.07.17 11.00 Basis: Dry Weight

Seq Number: 3032690

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.72**	5.19	mg/kg	11.07.17 16.14		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 4.9

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.8	15.8	mg/kg	11.01.17 13.35	U	1
Diesel Range Organics	C10C28DRO	**37.9**	15.8	mg/kg	11.01.17 13.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	11.01.17 13.35	
o-Terphenyl	84-15-1	101	%	70-135	11.01.17 13.35	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 4.9

Analyst: JTR Date Prep: 11.08.17 20.00 Basis: Dry Weight

Seq Number: 3032785 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00105	0.00105	mg/kg	11.09.17 02.22	U	1
Toluene	108-88-3	<0.00105	0.00105	mg/kg	11.09.17 02.22	U	1
Ethylbenzene	100-41-4	<0.00105	0.00105	mg/kg	11.09.17 02.22	U	1
m,p-Xylenes	179601-23-1	<0.00209	0.00209	mg/kg	11.09.17 02.22	U	1
o-Xylene	95-47-6	<0.00105	0.00105	mg/kg	11.09.17 02.22	U	1
Total Xylenes	1330-20-7	<0.00105	0.00105	mg/kg	11.09.17 02.22	U	1
Total BTEX		<0.00105	0.00105	mg/kg	11.09.17 02.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	74-126	11.09.17 02.22	
1,2-Dichloroethane-D4	17060-07-0	106	%	80-120	11.09.17 02.22	
Toluene-D8	2037-26-5	93	%	73-132	11.09.17 02.22	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-3-S-49-50-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-007 Date Collected: 10.28.17 09.20

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 3.81

Analyst: MNV Date Prep: 11.07.17 12.05 Basis: Dry Weight

Seq Number: 3032701

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**30.8**	5.13	mg/kg	11.07.17 15.55		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 3.81

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.5	15.5	mg/kg	11.01.17 13.55	U	1
Diesel Range Organics	C10C28DRO	**29.1**	15.5	mg/kg	11.01.17 13.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	11.01.17 13.55	
o-Terphenyl	84-15-1	104	%	70-135	11.01.17 13.55	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 3.81

Analyst: JTR Date Prep: 11.08.17 15.30 Basis: Dry Weight

Seq Number: 3032780 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00104	0.00104	mg/kg	11.08.17 17.55	U	1
Toluene	108-88-3	<0.00104	0.00104	mg/kg	11.08.17 17.55	U	1
Ethylbenzene	100-41-4	<0.00104	0.00104	mg/kg	11.08.17 17.55	U	1
m,p-Xylenes	179601-23-1	<0.00209	0.00209	mg/kg	11.08.17 17.55	U	1
o-Xylene	95-47-6	<0.00104	0.00104	mg/kg	11.08.17 17.55	U	1
Total Xylenes	1330-20-7	<0.00104	0.00104	mg/kg	11.08.17 17.55	U	1
Total BTEX		<0.00104	0.00104	mg/kg	11.08.17 17.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	115	%	74-126	11.08.17 17.55	
1,2-Dichloroethane-D4	17060-07-0	120	%	80-120	11.08.17 17.55	
Toluene-D8	2037-26-5	75	%	73-132	11.08.17 17.55	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-3-S-59-60-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-008 Date Collected: 10.28.17 09.23

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 4.91

Analyst: MNV Date Prep: 11.07.17 12.05 Basis: Dry Weight

Seq Number: 3032701

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**32.9**	5.19	mg/kg	11.07.17 16.21		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 4.91

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.7	15.7	mg/kg	11.01.17 14.16	U	1
Diesel Range Organics	C10C28DRO	**94.7**	15.7	mg/kg	11.01.17 14.16		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	11.01.17 14.16	
o-Terphenyl	84-15-1	106	%	70-135	11.01.17 14.16	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 4.91

Analyst: JTR Date Prep: 11.08.17 15.30 Basis: Dry Weight

Seq Number: 3032780 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00106	0.00106	mg/kg	11.08.17 17.35	U	1
Toluene	108-88-3	<0.00106	0.00106	mg/kg	11.08.17 17.35	U	1
Ethylbenzene	100-41-4	<0.00106	0.00106	mg/kg	11.08.17 17.35	U	1
m,p-Xylenes	179601-23-1	<0.00212	0.00212	mg/kg	11.08.17 17.35	U	1
o-Xylene	95-47-6	<0.00106	0.00106	mg/kg	11.08.17 17.35	U	1
Total Xylenes	1330-20-7	<0.00106	0.00106	mg/kg	11.08.17 17.35	U	1
Total BTEX		<0.00106	0.00106	mg/kg	11.08.17 17.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	107	%	74-126	11.08.17 17.35	
1,2-Dichloroethane-D4	17060-07-0	114	%	80-120	11.08.17 17.35	
Toluene-D8	2037-26-5	89	%	73-132	11.08.17 17.35	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-3-S-69-70-171028**	Matrix:	Soil	Date Received:	10.30.17 09.30
Lab Sample Id:	566983-009	Date Collected:	10.28.17 09.40		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	4.39
Analyst:	MNV	Date Prep:	11.07.17 12.05	Basis:	Dry Weight
Seq Number:	3032701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**30.2**	5.16	mg/kg	11.07.17 16.30		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	4.39
Analyst:	ARM	Date Prep:	11.01.17 09.00	Basis:	Dry Weight
Seq Number:	3032136				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.7	15.7	mg/kg	11.01.17 14.36	U	1
Diesel Range Organics	C10C28DRO	<15.7	15.7	mg/kg	11.01.17 14.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	11.01.17 14.36	
o-Terphenyl	84-15-1	96	%	70-135	11.01.17 14.36	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	4.39
Analyst:	JTR	Date Prep:	11.08.17 20.00	Basis:	Dry Weight
Seq Number:	3032785			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00105	0.00105	mg/kg	11.09.17 00.41	U	1
Toluene	108-88-3	<0.00105	0.00105	mg/kg	11.09.17 00.41	U	1
Ethylbenzene	100-41-4	<0.00105	0.00105	mg/kg	11.09.17 00.41	U	1
m,p-Xylenes	179601-23-1	<0.00210	0.00210	mg/kg	11.09.17 00.41	U	1
o-Xylene	95-47-6	<0.00105	0.00105	mg/kg	11.09.17 00.41	U	1
Total Xylenes	1330-20-7	<0.00105	0.00105	mg/kg	11.09.17 00.41	U	1
Total BTEX		<0.00105	0.00105	mg/kg	11.09.17 00.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	74-126	11.09.17 00.41	
1,2-Dichloroethane-D4	17060-07-0	101	%	80-120	11.09.17 00.41	
Toluene-D8	2037-26-5	102	%	73-132	11.09.17 00.41	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-3-S-79-80-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-010 Date Collected: 10.28.17 09.43

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 3.73

Analyst: MNV Date Prep: 11.07.17 12.05 Basis: Dry Weight

Seq Number: 3032701

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**26.7**	5.12	mg/kg	11.07.17 16.39		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 3.73

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.6	15.6	mg/kg	11.01.17 14.56	U	1
Diesel Range Organics	C10C28DRO	<15.6	15.6	mg/kg	11.01.17 14.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	11.01.17 14.56	
o-Terphenyl	84-15-1	99	%	70-135	11.01.17 14.56	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 3.73

Analyst: JTR Date Prep: 11.08.17 20.00 Basis: Dry Weight

Seq Number: 3032785 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00104	0.00104	mg/kg	11.09.17 00.22	U	1
Toluene	108-88-3	<0.00104	0.00104	mg/kg	11.09.17 00.22	U	1
Ethylbenzene	100-41-4	<0.00104	0.00104	mg/kg	11.09.17 00.22	U	1
m,p-Xylenes	179601-23-1	<0.00209	0.00209	mg/kg	11.09.17 00.22	U	1
o-Xylene	95-47-6	<0.00104	0.00104	mg/kg	11.09.17 00.22	U	1
Total Xylenes	1330-20-7	<0.00104	0.00104	mg/kg	11.09.17 00.22	U	1
Total BTEX		<0.00104	0.00104	mg/kg	11.09.17 00.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	115	%	74-126	11.09.17 00.22	
1,2-Dichloroethane-D4	17060-07-0	118	%	80-120	11.09.17 00.22	
Toluene-D8	2037-26-5	120	%	73-132	11.09.17 00.22	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-3-S-89-90-171028**	Matrix:	Soil	Date Received:	10.30.17 09.30
Lab Sample Id:	566983-011	Date Collected:	10.28.17 09.48		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	2.92
Analyst:	MNV	Date Prep:	11.07.17 12.05	Basis:	Dry Weight
Seq Number:	3032701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**24.5**	5.08	mg/kg	11.07.17 16.48		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	2.92
Analyst:	ARM	Date Prep:	11.01.17 09.00	Basis:	Dry Weight
Seq Number:	3032136				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.4	15.4	mg/kg	11.01.17 16.36	U	1
Diesel Range Organics	C10C28DRO	<15.4	15.4	mg/kg	11.01.17 16.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	11.01.17 16.36	
o-Terphenyl	84-15-1	104	%	70-135	11.01.17 16.36	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	2.92
Analyst:	JTR	Date Prep:	11.09.17 11.00	Basis:	Dry Weight
Seq Number:	3032921			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00515	0.00515	mg/kg	11.09.17 12.35	U	1
Toluene	108-88-3	<0.00515	0.00515	mg/kg	11.09.17 12.35	U	1
Ethylbenzene	100-41-4	<0.00515	0.00515	mg/kg	11.09.17 12.35	U	1
m,p-Xylenes	179601-23-1	<0.0103	0.0103	mg/kg	11.09.17 12.35	U	1
o-Xylene	95-47-6	<0.00515	0.00515	mg/kg	11.09.17 12.35	U	1
Total Xylenes	1330-20-7	<0.00515	0.00515	mg/kg	11.09.17 12.35	U	1
Total BTEX		<0.00515	0.00515	mg/kg	11.09.17 12.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	108	%	74-126	11.09.17 12.35	
1,2-Dichloroethane-D4	17060-07-0	115	%	80-120	11.09.17 12.35	
Toluene-D8	2037-26-5	88	%	73-132	11.09.17 12.35	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-5-S-0.5-1-171028**	Matrix:	Soil	Date Received:	10.30.17 09.30
Lab Sample Id:	566983-012	Date Collected:	10.28.17 11.20		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	9.66
Analyst:	MNV	Date Prep:	11.07.17 12.05	Basis:	Dry Weight
Seq Number:	3032701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**31.4**	5.51	mg/kg	11.07.17 17.15		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	9.66
Analyst:	ARM	Date Prep:	11.01.17 09.00	Basis:	Dry Weight
Seq Number:	3032136				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<16.6	16.6	mg/kg	11.01.17 16.55	U	1
Diesel Range Organics	C10C28DRO	**150**	16.6	mg/kg	11.01.17 16.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	11.01.17 16.55	
o-Terphenyl	84-15-1	109	%	70-135	11.01.17 16.55	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	9.66
Analyst:	JTR	Date Prep:	11.08.17 20.00	Basis:	Dry Weight
Seq Number:	3032785			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00111	0.00111	mg/kg	11.09.17 02.42	U	1
Toluene	108-88-3	<0.00111	0.00111	mg/kg	11.09.17 02.42	U	1
Ethylbenzene	100-41-4	<0.00111	0.00111	mg/kg	11.09.17 02.42	U	1
m,p-Xylenes	179601-23-1	<0.00222	0.00222	mg/kg	11.09.17 02.42	U	1
o-Xylene	95-47-6	<0.00111	0.00111	mg/kg	11.09.17 02.42	U	1
Total Xylenes	1330-20-7	<0.00111	0.00111	mg/kg	11.09.17 02.42	U	1
Total BTEX		<0.00111	0.00111	mg/kg	11.09.17 02.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	124	%	74-126	11.09.17 02.42	
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	11.09.17 02.42	
Toluene-D8	2037-26-5	86	%	73-132	11.09.17 02.42	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-5-S-4-5-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-013 Date Collected: 10.28.17 11.23

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 2.24

Analyst: MNV Date Prep: 11.07.17 12.05 Basis: Dry Weight

Seq Number: 3032701

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28.5**	5.06	mg/kg	11.07.17 17.23		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 2.24

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.3	15.3	mg/kg	11.01.17 17.15	U	1
Diesel Range Organics	C10C28DRO	**33.5**	15.3	mg/kg	11.01.17 17.15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	11.01.17 17.15	
o-Terphenyl	84-15-1	98	%	70-135	11.01.17 17.15	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 2.24

Analyst: JTR Date Prep: 11.08.17 20.00 Basis: Dry Weight

Seq Number: 3032785 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00102	0.00102	mg/kg	11.08.17 23.21	U	1
Toluene	108-88-3	<0.00102	0.00102	mg/kg	11.08.17 23.21	U	1
Ethylbenzene	100-41-4	<0.00102	0.00102	mg/kg	11.08.17 23.21	U	1
m,p-Xylenes	179601-23-1	<0.00205	0.00205	mg/kg	11.08.17 23.21	U	1
o-Xylene	95-47-6	<0.00102	0.00102	mg/kg	11.08.17 23.21	U	1
Total Xylenes	1330-20-7	<0.00102	0.00102	mg/kg	11.08.17 23.21	U	1
Total BTEX		<0.00102	0.00102	mg/kg	11.08.17 23.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	113	%	74-126	11.08.17 23.21	
1,2-Dichloroethane-D4	17060-07-0	115	%	80-120	11.08.17 23.21	
Toluene-D8	2037-26-5	82	%	73-132	11.08.17 23.21	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-5-S-9-10-171028**	Matrix:	Soil	Date Received:	10.30.17 09.30
Lab Sample Id:	566983-014	Date Collected:	10.28.17 11.26		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	10.45
Analyst:	MNV	Date Prep:	11.07.17 12.05	Basis:	Dry Weight
Seq Number:	3032701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**46.3**	5.56	mg/kg	11.07.17 17.32		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	10.45
Analyst:	ARM	Date Prep:	11.01.17 09.00	Basis:	Dry Weight
Seq Number:	3032136				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<16.7	16.7	mg/kg	11.01.17 17.35	U	1
Diesel Range Organics	C10C28DRO	<16.7	16.7	mg/kg	11.01.17 17.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	11.01.17 17.35	
o-Terphenyl	84-15-1	100	%	70-135	11.01.17 17.35	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	10.45
Analyst:	JTR	Date Prep:	11.09.17 11.00	Basis:	Dry Weight
Seq Number:	3032921			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00558	0.00558	mg/kg	11.09.17 12.15	U	1
Toluene	108-88-3	<0.00558	0.00558	mg/kg	11.09.17 12.15	U	1
Ethylbenzene	100-41-4	<0.00558	0.00558	mg/kg	11.09.17 12.15	U	1
m,p-Xylenes	179601-23-1	<0.0112	0.0112	mg/kg	11.09.17 12.15	U	1
o-Xylene	95-47-6	<0.00558	0.00558	mg/kg	11.09.17 12.15	U	1
Total Xylenes	1330-20-7	<0.00558	0.00558	mg/kg	11.09.17 12.15	U	1
Total BTEX		<0.00558	0.00558	mg/kg	11.09.17 12.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	74-126	11.09.17 12.15	
1,2-Dichloroethane-D4	17060-07-0	104	%	80-120	11.09.17 12.15	
Toluene-D8	2037-26-5	92	%	73-132	11.09.17 12.15	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-5-S-19-20-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-015 Date Collected: 10.28.17 11.29

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 4.75

Analyst: MNV Date Prep: 11.07.17 12.05 Basis: Dry Weight

Seq Number: 3032701

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**31.8**	5.23	mg/kg	11.07.17 17.41		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 4.75

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.7	15.7	mg/kg	11.01.17 17.55	U	1
Diesel Range Organics	C10C28DRO	<15.7	15.7	mg/kg	11.01.17 17.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	11.01.17 17.55	
o-Terphenyl	84-15-1	94	%	70-135	11.01.17 17.55	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 4.75

Analyst: JTR Date Prep: 11.08.17 20.00 Basis: Dry Weight

Seq Number: 3032785 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00105	0.00105	mg/kg	11.08.17 23.01	U	1
Toluene	108-88-3	<0.00105	0.00105	mg/kg	11.08.17 23.01	U	1
Ethylbenzene	100-41-4	<0.00105	0.00105	mg/kg	11.08.17 23.01	U	1
m,p-Xylenes	179601-23-1	<0.00210	0.00210	mg/kg	11.08.17 23.01	U	1
o-Xylene	95-47-6	<0.00105	0.00105	mg/kg	11.08.17 23.01	U	1
Total Xylenes	1330-20-7	<0.00105	0.00105	mg/kg	11.08.17 23.01	U	1
Total BTEX		<0.00105	0.00105	mg/kg	11.08.17 23.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	74-126	11.08.17 23.01	
1,2-Dichloroethane-D4	17060-07-0	111	%	80-120	11.08.17 23.01	
Toluene-D8	2037-26-5	83	%	73-132	11.08.17 23.01	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-5-S-29-30-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-016 Date Collected: 10.28.17 11.40

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 5.02

Analyst: MNV Date Prep: 11.07.17 12.05 Basis: Dry Weight

Seq Number: 3032701

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**59.2**	5.25	mg/kg	11.07.17 17.50		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 5.02

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.8	15.8	mg/kg	11.01.17 18.16	U	1
Diesel Range Organics	C10C28DRO	<15.8	15.8	mg/kg	11.01.17 18.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	11.01.17 18.16	
o-Terphenyl	84-15-1	97	%	70-135	11.01.17 18.16	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 5.02

Analyst: JTR Date Prep: 11.08.17 20.00 Basis: Dry Weight

Seq Number: 3032785 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00104	0.00104	mg/kg	11.08.17 22.41	U	1
Toluene	108-88-3	<0.00104	0.00104	mg/kg	11.08.17 22.41	U	1
Ethylbenzene	100-41-4	<0.00104	0.00104	mg/kg	11.08.17 22.41	U	1
m,p-Xylenes	179601-23-1	<0.00209	0.00209	mg/kg	11.08.17 22.41	U	1
o-Xylene	95-47-6	<0.00104	0.00104	mg/kg	11.08.17 22.41	U	1
Total Xylenes	1330-20-7	<0.00104	0.00104	mg/kg	11.08.17 22.41	U	1
Total BTEX		<0.00104	0.00104	mg/kg	11.08.17 22.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	74-126	11.08.17 22.41	
1,2-Dichloroethane-D4	17060-07-0	102	%	80-120	11.08.17 22.41	
Toluene-D8	2037-26-5	95	%	73-132	11.08.17 22.41	

Certificate of Analytical Results 566983

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-5-S-39-40-171028**	Matrix:	Soil	Date Received:	10.30.17 09.30
Lab Sample Id:	566983-017	Date Collected:	10.28.17 11.43		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	4.99
Analyst:	MNV	Date Prep:	11.07.17 12.05	Basis:	Dry Weight
Seq Number:	3032701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**40.1**	5.23	mg/kg	11.07.17 17.59		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	4.99
Analyst:	ARM	Date Prep:	11.01.17 09.00	Basis:	Dry Weight
Seq Number:	3032136				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.8	15.8	mg/kg	11.01.17 18.37	U	1
Diesel Range Organics	C10C28DRO	<15.8	15.8	mg/kg	11.01.17 18.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	11.01.17 18.37	
o-Terphenyl	84-15-1	90	%	70-135	11.01.17 18.37	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	4.99
Analyst:	JTR	Date Prep:	11.08.17 20.00	Basis:	Dry Weight
Seq Number:	3032785			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00106	0.00106	mg/kg	11.08.17 22.21	U	1
Toluene	108-88-3	<0.00106	0.00106	mg/kg	11.08.17 22.21	U	1
Ethylbenzene	100-41-4	<0.00106	0.00106	mg/kg	11.08.17 22.21	U	1
m,p-Xylenes	179601-23-1	<0.00211	0.00211	mg/kg	11.08.17 22.21	U	1
o-Xylene	95-47-6	<0.00106	0.00106	mg/kg	11.08.17 22.21	U	1
Total Xylenes	1330-20-7	<0.00106	0.00106	mg/kg	11.08.17 22.21	U	1
Total BTEX		<0.00106	0.00106	mg/kg	11.08.17 22.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	107	%	74-126	11.08.17 22.21	
1,2-Dichloroethane-D4	17060-07-0	115	%	80-120	11.08.17 22.21	
Toluene-D8	2037-26-5	79	%	73-132	11.08.17 22.21	

Certificate of Analytical Results 566983

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-5-S-49-50-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-018 Date Collected: 10.28.17 12.00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 4.31

Analyst: MNV Date Prep: 11.07.17 12.05 Basis: Dry Weight

Seq Number: 3032701

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**35.8**	5.20	mg/kg	11.07.17 18.25		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 4.31

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.7	15.7	mg/kg	11.01.17 18.57	U	1
Diesel Range Organics	C10C28DRO	<15.7	15.7	mg/kg	11.01.17 18.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	11.01.17 18.57	
o-Terphenyl	84-15-1	93	%	70-135	11.01.17 18.57	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 4.31

Analyst: JTR Date Prep: 11.08.17 20.00 Basis: Dry Weight

Seq Number: 3032785 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00103	0.00103	mg/kg	11.09.17 01.02	U	1
Toluene	108-88-3	<0.00103	0.00103	mg/kg	11.09.17 01.02	U	1
Ethylbenzene	100-41-4	<0.00103	0.00103	mg/kg	11.09.17 01.02	U	1
m,p-Xylenes	179601-23-1	<0.00207	0.00207	mg/kg	11.09.17 01.02	U	1
o-Xylene	95-47-6	<0.00103	0.00103	mg/kg	11.09.17 01.02	U	1
Total Xylenes	1330-20-7	<0.00103	0.00103	mg/kg	11.09.17 01.02	U	1
Total BTEX		<0.00103	0.00103	mg/kg	11.09.17 01.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	115	%	74-126	11.09.17 01.02	
1,2-Dichloroethane-D4	17060-07-0	115	%	80-120	11.09.17 01.02	
Toluene-D8	2037-26-5	80	%	73-132	11.09.17 01.02	

Certificate of Analytical Results 566983

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-5-S-59-60-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-019 Date Collected: 10.28.17 12.03

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 5.09

Analyst: MNV Date Prep: 11.07.17 12.05 Basis: Dry Weight

Seq Number: 3032701

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.1**	5.25	mg/kg	11.07.17 18.34		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 5.09

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.8	15.8	mg/kg	11.01.17 19.18	U	1
Diesel Range Organics	C10C28DRO	<15.8	15.8	mg/kg	11.01.17 19.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	11.01.17 19.18	
o-Terphenyl	84-15-1	93	%	70-135	11.01.17 19.18	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 5.09

Analyst: JTR Date Prep: 11.08.17 20.00 Basis: Dry Weight

Seq Number: 3032785 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00105	0.00105	mg/kg	11.08.17 23.41	U	1
Toluene	108-88-3	<0.00105	0.00105	mg/kg	11.08.17 23.41	U	1
Ethylbenzene	100-41-4	<0.00105	0.00105	mg/kg	11.08.17 23.41	U	1
m,p-Xylenes	179601-23-1	<0.00211	0.00211	mg/kg	11.08.17 23.41	U	1
o-Xylene	95-47-6	<0.00105	0.00105	mg/kg	11.08.17 23.41	U	1
Total Xylenes	1330-20-7	<0.00105	0.00105	mg/kg	11.08.17 23.41	U	1
Total BTEX		<0.00105	0.00105	mg/kg	11.08.17 23.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	111	%	74-126	11.08.17 23.41	
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	11.08.17 23.41	
Toluene-D8	2037-26-5	82	%	73-132	11.08.17 23.41	

Certificate of Analytical Results 566983

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-5-S-69-70-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-020 Date Collected: 10.28.17 12.20

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 4.7

Analyst: MNV Date Prep: 11.07.17 12.05 Basis: Dry Weight

Seq Number: 3032701

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**99.2**	5.23	mg/kg	11.07.17 19.01		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 4.7

Analyst: ARM Date Prep: 11.01.17 09.00 Basis: Dry Weight

Seq Number: 3032136

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.7	15.7	mg/kg	11.01.17 19.39	U	1
Diesel Range Organics	C10C28DRO	<15.7	15.7	mg/kg	11.01.17 19.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	11.01.17 19.39	
o-Terphenyl	84-15-1	94	%	70-135	11.01.17 19.39	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 4.7

Analyst: JTR Date Prep: 11.08.17 20.00 Basis: Dry Weight

Seq Number: 3032785 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00104	0.00104	mg/kg	11.09.17 01.23	U	1
Toluene	108-88-3	<0.00104	0.00104	mg/kg	11.09.17 01.23	U	1
Ethylbenzene	100-41-4	<0.00104	0.00104	mg/kg	11.09.17 01.23	U	1
m,p-Xylenes	179601-23-1	<0.00208	0.00208	mg/kg	11.09.17 01.23	U	1
o-Xylene	95-47-6	<0.00104	0.00104	mg/kg	11.09.17 01.23	U	1
Total Xylenes	1330-20-7	<0.00104	0.00104	mg/kg	11.09.17 01.23	U	1
Total BTEX		<0.00104	0.00104	mg/kg	11.09.17 01.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	100	%	74-126	11.09.17 01.23	
1,2-Dichloroethane-D4	17060-07-0	102	%	80-120	11.09.17 01.23	
Toluene-D8	2037-26-5	104	%	73-132	11.09.17 01.23	

Certificate of Analytical Results 566983

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-5-S-79-80-171028** Matrix: Soil Date Received:10.30.17 09.30

Lab Sample Id: 566983-021 Date Collected: 10.28.17 12.23

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 3.62

Analyst: MNV Date Prep: 11.07.17 12.05 Basis: Dry Weight

Seq Number: 3032701

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**106**	5.13	mg/kg	11.07.17 19.10		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 3.62

Analyst: ARM Date Prep: 11.02.17 07.00 Basis: Dry Weight

Seq Number: 3032266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.5	15.5	mg/kg	11.02.17 08.33	U	1
Diesel Range Organics	C10C28DRO	<15.5	15.5	mg/kg	11.02.17 08.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	11.02.17 08.33	
o-Terphenyl	84-15-1	101	%	70-135	11.02.17 08.33	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 3.62

Analyst: JTR Date Prep: 11.08.17 20.00 Basis: Dry Weight

Seq Number: 3032785 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00105	0.00105	mg/kg	11.09.17 01.43	U	1
Toluene	108-88-3	<0.00105	0.00105	mg/kg	11.09.17 01.43	U	1
Ethylbenzene	100-41-4	<0.00105	0.00105	mg/kg	11.09.17 01.43	U	1
m,p-Xylenes	179601-23-1	<0.00210	0.00210	mg/kg	11.09.17 01.43	U	1
o-Xylene	95-47-6	<0.00105	0.00105	mg/kg	11.09.17 01.43	U	1
Total Xylenes	1330-20-7	<0.00105	0.00105	mg/kg	11.09.17 01.43	U	1
Total BTEX		<0.00105	0.00105	mg/kg	11.09.17 01.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	74-126	11.09.17 01.43	
1,2-Dichloroethane-D4	17060-07-0	103	%	80-120	11.09.17 01.43	
Toluene-D8	2037-26-5	99	%	73-132	11.09.17 01.43	

Certificate of Analytical Results 566983

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-5-S-89-90-171028**	Matrix:	Soil	Date Received:	10.30.17 09.30
Lab Sample Id:	566983-022	Date Collected:	10.28.17 12.36		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	2.33
Analyst:	MNV	Date Prep:	11.07.17 12.05	Basis:	Dry Weight
Seq Number:	3032701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**66.3**	5.05	mg/kg	11.07.17 19.18		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	2.33
Analyst:	ARM	Date Prep:	11.02.17 07.00	Basis:	Dry Weight
Seq Number:	3032266				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.3	15.3	mg/kg	11.02.17 09.32	U	1
Diesel Range Organics	C10C28DRO	<15.3	15.3	mg/kg	11.02.17 09.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	11.02.17 09.32	
o-Terphenyl	84-15-1	99	%	70-135	11.02.17 09.32	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	2.33
Analyst:	JTR	Date Prep:	11.08.17 20.00	Basis:	Dry Weight
Seq Number:	3032785			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.09.17 02.03	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.09.17 02.03	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.09.17 02.03	U	1
m,p-Xylenes	179601-23-1	<0.00203	0.00203	mg/kg	11.09.17 02.03	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.09.17 02.03	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.09.17 02.03	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.09.17 02.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	74-126	11.09.17 02.03	
1,2-Dichloroethane-D4	17060-07-0	104	%	80-120	11.09.17 02.03	
Toluene-D8	2037-26-5	97	%	73-132	11.09.17 02.03	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

QC Summary 566983

GHD Services, INC- Midland

LPU #96

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032690 Matrix: Solid Date Prep: 11.07.17
MB Sample Id: 7633933-1-BLK LCS Sample Id: 7633933-1-BKS LCSD Sample Id: 7633933-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	252	101	253	101	90-110	0	20	mg/kg	11.07.17 13:09	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032701 Matrix: Solid Date Prep: 11.07.17
MB Sample Id: 7633960-1-BLK LCS Sample Id: 7633960-1-BKS LCSD Sample Id: 7633960-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	243	97	243	97	90-110	0	20	mg/kg	11.07.17 15:37	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032690 Matrix: Soil Date Prep: 11.07.17
Parent Sample Id: 567041-001 MS Sample Id: 567041-001 S MSD Sample Id: 567041-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	86.4	250	359	109	348	105	90-110	3	20	mg/kg	11.07.17 13:29	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032690 Matrix: Soil Date Prep: 11.07.17
Parent Sample Id: 567042-003 MS Sample Id: 567042-003 S MSD Sample Id: 567042-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	166	248	410	98	414	100	90-110	1	20	mg/kg	11.07.17 14:58	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032701 Matrix: Soil Date Prep: 11.07.17
Parent Sample Id: 566983-007 MS Sample Id: 566983-007 S MSD Sample Id: 566983-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	30.8	256	276	96	265	91	90-110	4	20	mg/kg	11.07.17 16:04	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032701 Matrix: Soil Date Prep: 11.07.17
Parent Sample Id: 566983-017 MS Sample Id: 566983-017 S MSD Sample Id: 566983-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	40.1	262	281	92	280	92	90-110	0	20	mg/kg	11.07.17 18:08	

QC Summary 566983

GHD Services, INC- Midland

LPU #96

Analytical Method: **Percent Moisture**
Seq Number: 3032082 Matrix: Solid
MB Sample Id: 3032082-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<1.00	%	11.01.17 09:30	

Analytical Method: **Percent Moisture**
Seq Number: 3032083 Matrix: Solid
MB Sample Id: 3032083-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<1.00	%	11.01.17 09:30	

Analytical Method: **Percent Moisture**
Seq Number: 3032082 Matrix: Soil
Parent Sample Id: 566983-001 MD Sample Id: 566983-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	4.86	4.63	5	20	%	11.01.17 09:30	

Analytical Method: **Percent Moisture**
Seq Number: 3032082 Matrix: Soil
Parent Sample Id: 566983-018 MD Sample Id: 566983-018 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	4.31	4.53	5	20	%	11.01.17 09:30	

Analytical Method: **Percent Moisture**
Seq Number: 3032083 Matrix: Soil
Parent Sample Id: 566983-019 MD Sample Id: 566983-019 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	5.09	4.82	5	20	%	11.01.17 09:30	

QC Summary 566983

GHD Services, INC- Midland

LPU #96

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3032136 Matrix: Solid Date Prep: 11.01.17
MB Sample Id: 7633638-1-BLK LCS Sample Id: 7633638-1-BKS LCSD Sample Id: 7633638-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	1040	104	1070	107	70-135	3	35	mg/kg	11.01.17 11:13	
Diesel Range Organics	<15.0	1000	1100	110	1120	112	70-135	2	35	mg/kg	11.01.17 11:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		105		91		70-135	%	11.01.17 11:13
o-Terphenyl	102		98		86		70-135	%	11.01.17 11:13

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3032266 Matrix: Solid Date Prep: 11.02.17
MB Sample Id: 7633717-1-BLK LCS Sample Id: 7633717-1-BKS LCSD Sample Id: 7633717-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	1080	108	1100	110	70-135	2	35	mg/kg	11.02.17 07:53	
Diesel Range Organics	<15.0	1000	1100	110	1110	111	70-135	1	35	mg/kg	11.02.17 07:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		100		101		70-135	%	11.02.17 07:53
o-Terphenyl	108		95		95		70-135	%	11.02.17 07:53

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3032136 Matrix: Soil Date Prep: 11.01.17
Parent Sample Id: 566983-010 MS Sample Id: 566983-010 S MSD Sample Id: 566983-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.6	1040	1150	111	1160	112	70-135	1	35	mg/kg	11.01.17 15:16	
Diesel Range Organics	<15.6	1040	1210	116	1230	118	70-135	2	35	mg/kg	11.01.17 15:16	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		106		70-135	%	11.01.17 15:16
o-Terphenyl	93		94		70-135	%	11.01.17 15:16

QC Summary 566983

GHD Services, INC- Midland

LPU #96

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3032266 Matrix: Soil Date Prep: 11.02.17
Parent Sample Id: 566983-021 MS Sample Id: 566983-021 S MSD Sample Id: 566983-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.5	1040	1140	110	1170	113	70-135	3	35	mg/kg	11.02.17 08:53	
Diesel Range Organics	<15.5	1040	1170	113	1190	114	70-135	2	35	mg/kg	11.02.17 08:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		95		70-135	%	11.02.17 08:53
o-Terphenyl	110		90		70-135	%	11.02.17 08:53

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B
Seq Number: 3032780 Matrix: Solid Date Prep: 11.08.17
MB Sample Id: 7634063-1-BLK LCS Sample Id: 7634063-1-BKS LCSD Sample Id: 7634063-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.115	115	0.116	116	62-132	1	25	mg/kg	11.08.17 08:34	
Toluene	<0.00100	0.100	0.0875	88	0.0852	85	66-124	3	25	mg/kg	11.08.17 08:34	
Ethylbenzene	<0.00100	0.100	0.106	106	0.102	102	71-134	4	25	mg/kg	11.08.17 08:34	
m,p-Xylenes	<0.00200	0.200	0.228	114	0.221	111	69-128	3	25	mg/kg	11.08.17 08:34	
o-Xylene	<0.00100	0.100	0.114	114	0.108	108	72-131	5	25	mg/kg	11.08.17 08:34	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	103		103		105		74-126	%	11.08.17 08:34
1,2-Dichloroethane-D4	117		106		112		80-120	%	11.08.17 08:34
Toluene-D8	80		89		87		73-132	%	11.08.17 08:34

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B
Seq Number: 3032785 Matrix: Solid Date Prep: 11.08.17
MB Sample Id: 7634064-1-BLK LCS Sample Id: 7634064-1-BKS LCSD Sample Id: 7634064-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.102	102	0.117	117	62-132	14	25	mg/kg	11.08.17 19:02	
Toluene	<0.00100	0.100	0.0667	67	0.0683	68	66-124	2	25	mg/kg	11.08.17 19:02	
Ethylbenzene	<0.00100	0.100	0.0857	86	0.0839	84	71-134	2	25	mg/kg	11.08.17 19:02	
m,p-Xylenes	<0.00200	0.200	0.184	92	0.174	87	69-128	6	25	mg/kg	11.08.17 19:02	
o-Xylene	<0.00100	0.100	0.0905	91	0.107	107	72-131	17	25	mg/kg	11.08.17 19:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	109		110		105		74-126	%	11.08.17 19:02
1,2-Dichloroethane-D4	120		119		118		80-120	%	11.08.17 19:02
Toluene-D8	94		80		81		73-132	%	11.08.17 19:02

QC Summary 566983

GHD Services, INC- Midland

LPU #96

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B
Seq Number: 3032921 Matrix: Solid Date Prep: 11.09.17
MB Sample Id: 7634143-1-BLK LCS Sample Id: 7634143-1-BKS LCSD Sample Id: 7634143-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0970	97	0.109	109	62-132	12	25	mg/kg	11.09.17 09:09	
Toluene	<0.00100	0.100	0.0685	69	0.0767	77	66-124	11	25	mg/kg	11.09.17 09:09	
Ethylbenzene	<0.00100	0.100	0.0852	85	0.0927	93	71-134	8	25	mg/kg	11.09.17 09:09	
m,p-Xylenes	<0.00200	0.200	0.184	92	0.201	101	69-128	9	25	mg/kg	11.09.17 09:09	
o-Xylene	<0.00100	0.100	0.0898	90	0.0980	98	72-131	9	25	mg/kg	11.09.17 09:09	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	106		106		108		74-126	%	11.09.17 09:09
1,2-Dichloroethane-D4	115		116		118		80-120	%	11.09.17 09:09
Toluene-D8	93		86		86		73-132	%	11.09.17 09:09

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B
Seq Number: 3032780 Matrix: Soil Date Prep: 11.08.17
Parent Sample Id: 566984-010 MS Sample Id: 566984-010 S MSD Sample Id: 566984-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00103	0.103	0.107	104	0.109	106	62-132	2	25	mg/kg	11.08.17 11:42	
Toluene	<0.00103	0.103	0.0791	77	0.0899	87	66-124	13	25	mg/kg	11.08.17 11:42	
Ethylbenzene	<0.00103	0.103	0.0992	96	0.103	100	71-134	4	25	mg/kg	11.08.17 11:42	
m,p-Xylenes	<0.00206	0.206	0.216	105	0.219	107	69-128	1	25	mg/kg	11.08.17 11:42	
o-Xylene	<0.00103	0.103	0.105	102	0.105	102	72-131	0	25	mg/kg	11.08.17 11:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	102		103		74-126	%	11.08.17 11:42
1,2-Dichloroethane-D4	102		108		80-120	%	11.08.17 11:42
Toluene-D8	83		92		73-132	%	11.08.17 11:42

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B
Seq Number: 3032921 Matrix: Soil Date Prep: 11.09.17
Parent Sample Id: 566984-004 MS Sample Id: 566984-004 S MSD Sample Id: 566984-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00547	0.547	0.606	111	0.580	106	62-132	4	25	mg/kg	11.09.17 09:48	
Toluene	<0.00547	0.547	0.480	88	0.398	73	66-124	19	25	mg/kg	11.09.17 09:48	
Ethylbenzene	<0.00547	0.547	0.571	104	0.502	92	71-134	13	25	mg/kg	11.09.17 09:48	
m,p-Xylenes	<0.0109	1.09	1.21	111	1.07	98	69-128	12	25	mg/kg	11.09.17 09:48	
o-Xylene	<0.00547	0.547	0.631	115	0.517	95	72-131	20	25	mg/kg	11.09.17 09:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	100		105		74-126	%	11.09.17 09:48
1,2-Dichloroethane-D4	113		114		80-120	%	11.09.17 09:48
Toluene-D8	98		81		73-132	%	11.09.17 09:48

QC Summary 566983

GHD Services, INC- Midland

LPU #96

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032785 Matrix: Soil Date Prep: 11.08.17

Parent Sample Id: 566984-003 MS Sample Id: 566984-003 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.00106	0.106	0.0840	79	62-132	mg/kg	11.08.17 19:41	
Toluene	<0.00106	0.106	0.0737	70	66-124	mg/kg	11.08.17 19:41	
Ethylbenzene	<0.00106	0.106	0.0924	87	71-134	mg/kg	11.08.17 19:41	
m,p-Xylenes	<0.00212	0.212	0.194	92	69-128	mg/kg	11.08.17 19:41	
o-Xylene	<0.00106	0.106	0.0862	81	72-131	mg/kg	11.08.17 19:41	

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	123		74-126	%	11.08.17 19:41
1,2-Dichloroethane-D4	119		80-120	%	11.08.17 19:41
Toluene-D8	101		73-132	%	11.08.17 19:41

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330960 Page 1 of 3

Company-City: GHD-Houston **Phone:** 713-734-3990
Project Name-Location: LPU #96-Lea County, NM ☐ Previously done at XENCO **Project ID:** 073816
Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM **Proj. Manager (PM):** Scott Foord
E-mail Results to ☒ PM and Chris.Knight@ghd.com **Fax No:**
Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:
Quote/Pricing: **P.O. No:** ☐ Call for P.O.
Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:
Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)
Sampler Name: Rebecca Jones **Signature:** Rebecca Jones

Lab Only: SLW983

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

	Sample ID	Sampling Date	Time	Depth (ft/in" m)	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	BTEX	TPH-GRO	TPH-DRO	Chloride	Moisture	TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed	Addn: Date Rcv. by: From:	
1	MW-3-S-0.5-1-171028	10/28/17	0836	1	S		✓	2	2,4	C	C										✓	✓	✓	✓	✓						1
2	MW-3-S-4-5-171028		0839	5			✓	2													✓	✓	✓	✓	✓						2
3	MW-3-S-9-10-171028		0842	10			✓	2													✓	✓	✓	✓	✓						3
4	MW-3-S-19-20-171028		0845	20			✓	2													✓	✓	✓	✓	✓						4
5	MW-3-S-29-30-171028		0852	30			✓	2													✓	✓	✓	✓	✓						5
6	MW-3-S-39-40-171028		0855	40			✓	2													✓	✓	✓	✓	✓						6
7	MW-3-S-49-50-171028		0920	50			✓	2													✓	✓	✓	✓	✓						7
8	MW-3-S-59-60-171028		0923	60			✓	2													✓	✓	✓	✓	✓						8
9	MW-3-S-69-70-171028		0940	70			✓	2													✓	✓	✓	✓	✓						9
10	MW-3-S-79-80-171028		0943	80			✓	2													✓	✓	✓	✓	✓						10

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) Rebecca Jones	10/30/17 - 0930	2) Esperanza Gonzalez	10/31/17 9:30
2	3)		4)	
3	5)		6)	

Total Containers per COC: Cooler Temp: 0.5 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

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☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330947 Page 2 of 3

Company-City GHD-Houston **Phone** 713-734-3090	**Lab Only:** 566983
Project Name-Location ☐ Previously done at XENCO LPU #96-Lea County, NM **Project ID** 073816	**TAT:** ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific. It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.
Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM **Proj. Manager (PM)**	
E-mail Results to ☐ PM and **Fax No:**	
Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O. Bill to:	
Quote/Pricing: **P.O. No:** ☐ Call for P.O.	
Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP** QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:	
Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)	
Sampler Name Rebecca Jones **Signature** Rebecca Jones	

Analysis columns printed: VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs; VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:; PAHs SIM 8310 8270; TX-1005 DRO GRO MA EPH MA VPH; SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL; OC Pesticides PCBs Herbicides OP Pesticides; Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2; SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs); EDB / DBCP; TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d; Addn: PAH above mg/L W, mg/Kg S Highest Hit; Hold Samples (Surcharges will apply and are pre-approved); Sample Clean-ups are pre-approved as needed

Remarks — Addn: Date Rcv. by: From:

	Sample ID	Sampling Date	Time	Depth @In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	BTEX	TPH-GRO	TPH-DRO	Chloride	Moisture	
1	MW-3-S-89-90-171028	10/28/17	0948	90	S		\	2	2,4	C	C	\	\	\	\	\	1
2	MW-5-S-0.5-1-171028		1120	1			\	2				\	\	\	\	\	2
3	MW-5-S-4-5-171028		1123	5			\	2				\	\	\	\	\	3
4	MW-5-S-9-10-171028		1126	10			\	2				\	\	\	\	\	4
5	MW-5-S-19-20-171028		1129	20			\	2				\	\	\	\	\	5
6	MW-5-S-29-30-171028		1140	30			\	2				\	\	\	\	\	6
7	MW-5-S-39-40-171028		1143	40			\	2				\	\	\	\	\	7
8	MW-5-S-49-50-171028		1200	50			\	2				\	\	\	\	\	8
9	MW-5-S-59-60-171028		1203	60			\	2				\	\	\	\	\	9
10	MW-5-S-69-70-171028		1220	70			\	2				\	\	\	\	\	10

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) Rebecca Jones	10/30/17-0830	2) Esperanza Gonzalez	10-30-17 9:30
2	3)		4)	
3	5)		6)	

Total Containers per COC: Cooler Temp: 0.5 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**), See Label (**L**), Other (**O**)
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)
Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

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☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330946 Page 3 of 3

Company-City: GHD-Houston **Phone:** 713-734-3090

Lab Only: 560983

Project Name-Location: LPU #96-Lea County NM ☐ Previously done at XENCO **Project ID:** 073816

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM **Proj. Manager (PM)**

E-mail Results to ☐ PM and **Fax No:**

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**

QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Rebecca Jones **Signature** Rebecca Jones

	Sample ID	Sampling Date	Time	Depth (ft) "in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
1	MW-5-S-79-80-171028	10/28/17	1223	80	S		/	2	2,4	C	C
2	MW-5-S-89-90-171028	↓	1236	90	↓		/	2	↓	↓	↓
3											
4											
5											
6											
7											
8											
9											
10											

VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	BTEX	TPH-GRO	TPH-DRO	Chloride	Moisture	TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)
									/	/	/	/	/		
									/	/	/	/	/		

Remarks

Sample Clean-ups are pre-approved as needed

Addn: Date Rcv. by: From:

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) Rebecca Jones	10/30/17-0930	2) Esperanza Gonzalez	10-30-17 9:30
3)		4)	
5)		6)	

Total Containers per COC: Cooler Temp: 0.5 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

Committed to Excellence in Service and Quality www.xenco.com

Inter-Office Shipment

IOS Number **1051107**

Date/Time: 10/31/17 10:50
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Shawnee Smith
Delivery Priority:
Air Bill No.: 770636521542

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
566983-001	S	MW-3-S-0.5-1-171028	10/28/17 08:36	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-002	S	MW-3-S-4-5-171028	10/28/17 08:39	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-003	S	MW-3-S-9-10-171028	10/28/17 08:42	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-004	S	MW-3-S-19-20-171028	10/28/17 08:45	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-005	S	MW-3-S-29-30-171028	10/28/17 08:52	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-006	S	MW-3-S-39-40-171028	10/28/17 08:55	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-007	S	MW-3-S-49-50-171028	10/28/17 09:20	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-008	S	MW-3-S-59-60-171028	10/28/17 09:23	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-009	S	MW-3-S-69-70-171028	10/28/17 09:40	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-010	S	MW-3-S-79-80-171028	10/28/17 09:43	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-011	S	MW-3-S-89-90-171028	10/28/17 09:48	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-012	S	MW-5-S-0.5-1-171028	10/28/17 11:20	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-013	S	MW-5-S-4-5-171028	10/28/17 11:23	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-014	S	MW-5-S-9-10-171028	10/28/17 11:26	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-015	S	MW-5-S-19-20-171028	10/28/17 11:29	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-016	S	MW-5-S-29-30-171028	10/28/17 11:40	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-017	S	MW-5-S-39-40-171028	10/28/17 11:43	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-018	S	MW-5-S-49-50-171028	10/28/17 12:00	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-019	S	MW-5-S-59-60-171028	10/28/17 12:03	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-020	S	MW-5-S-69-70-171028	10/28/17 12:20	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-021	S	MW-5-S-79-80-171028	10/28/17 12:23	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	
566983-022	S	MW-5-S-89-90-171028	10/28/17 12:36	SW8260BTX	BTEX by SW 8260B	11/07/17	11/11/17	KEB	BZ BZME EBZ XYLENES	

Inter-Office Shipment

IOS Number **1051107**

Date/Time:	10/31/17 10:50	Created by:	Shawnee Smith
Lab# From:	**Midland**	Delivery Priority:	
Lab# To:	**Houston**	Air Bill No.:	770636521542

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Inter Office Shipment or Sample Comments:

Relinquished By: Shawnee Smith

Date Relinquished: 10/31/2017

Received By: Jean Quila

Date Received: 11/01/2017 09:15

Cooler Temperature: 3.4

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 1051107

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

Sent By: Shawnee Smith **Date Sent:** 10/31/2017 10:50 AM

Received By: Jean Quila **Date Received:** 11/01/2017 09:15 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.4	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 *Custody Seals Signed and dated for Containers/coolers	**No**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

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

Checklist reviewed by: _____ Date: 11/01/2017

Jean Quila

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 10/30/2017 09:30:00 AM

Work Order #: 566983

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

Temperature Measuring device used : R8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**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**	Houston
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Shawnee Smith Date: 10/31/2017

Shawnee Smith

Checklist reviewed by: Kelsey Brooks Date: 10/31/2017

Kelsey Brooks

Certificate of Analysis Summary 566984

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County,NM

Date Received in Lab: Mon Oct-30-17 09:40 am
Report Date: 10-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566984-001		566984-002		566984-003		566984-004		566984-005		566984-006	
	Field Id:	MW-2-S-0.5-1-171029		MW-2-S-4-5-171029		MW-2-S-9-10-171029		MW-2-S-19-20-171029		MW-2-S-29-30-171029		MW-2-S-39-40-171029	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-17 08:35		Oct-29-17 08:38		Oct-29-17 08:41		Oct-29-17 08:44		Oct-29-17 08:52		Oct-29-17 08:55	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-09-17 20:00		Nov-09-17 11:00		Nov-08-17 20:00		Nov-09-17 11:00		Nov-09-17 11:00		Nov-09-17 11:00	
	Analyzed:	Nov-10-17 03:20		Nov-09-17 12:56		Nov-08-17 21:21		Nov-09-17 11:51		Nov-09-17 13:16		Nov-09-17 13:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00528	0.00528	<0.00536	0.00536	<0.00107	0.00107	<0.00547	0.00547	<0.00531	0.00531	<0.00534	0.00534
Toluene		<0.00528	0.00528	<0.00536	0.00536	<0.00107	0.00107	<0.00547	0.00547	<0.00531	0.00531	<0.00534	0.00534
Ethylbenzene		<0.00528	0.00528	<0.00536	0.00536	<0.00107	0.00107	<0.00547	0.00547	<0.00531	0.00531	<0.00534	0.00534
m,p-Xylenes		<0.0106	0.0106	<0.0107	0.0107	<0.00214	0.00214	<0.0109	0.0109	<0.0106	0.0106	<0.0107	0.0107
o-Xylene		<0.00528	0.00528	<0.00536	0.00536	<0.00107	0.00107	<0.00547	0.00547	<0.00531	0.00531	<0.00534	0.00534
Total Xylenes		<0.00528	0.00528	<0.00536	0.00536	<0.00107	0.00107	<0.00547	0.00547	<0.00531	0.00531	<0.00534	0.00534
Total BTEX		<0.00528	0.00528	<0.00536	0.00536	<0.00107	0.00107	<0.00547	0.00547	<0.00531	0.00531	<0.00534	0.00534
Chloride by EPA 300	***Extracted:***	Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 12:05		Nov-07-17 14:30		Nov-07-17 14:30	
	Analyzed:	Nov-07-17 19:27		Nov-07-17 19:36		Nov-07-17 19:45		Nov-07-17 19:54		Nov-07-17 16:53		Nov-07-17 17:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		25.8	5.27	47.4	5.34	68.1	5.29	103	5.38	288	5.31	36.6	5.32
Percent Moisture	***Extracted:***												
	Analyzed:	Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		5.30	1.00	6.73	1.00	6.23	1.00	8.61	1.00	5.76	1.00	6.34	1.00
TPH By SW8015 Mod	***Extracted:***	Nov-01-17 14:00		Nov-01-17 14:00		Nov-01-17 14:00		Nov-01-17 14:00		Nov-01-17 14:00		Nov-01-17 14:00	
	Analyzed:	Nov-01-17 21:22		Nov-01-17 21:43		Nov-01-17 22:45		Nov-01-17 23:05		Nov-01-17 23:27		Nov-01-17 23:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.8	15.8	<16.1	16.1	<16.0	16.0	<16.4	16.4	<15.9	15.9	<16.0	16.0
Diesel Range Organics		616	15.8	<16.1	16.1	<16.0	16.0	<16.4	16.4	<15.9	15.9	<16.0	16.0

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566984

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County,NM

Date Received in Lab: Mon Oct-30-17 09:40 am
Report Date: 10-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566984-007		566984-008		566984-009		566984-010		566984-011		566984-012	
	Field Id:	MW-2-S-49-50-171029		MW-2-S-59-60-171029		MW-2-S-69-70-171029		MW-2-S-79-80-171029		MW-2-S-89-90-171029		MW-4-S-0.5-1-171029	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-17 09:15		Oct-29-17 09:18		Oct-29-17 09:35		Oct-29-17 09:38		Oct-29-17 09:50		Oct-29-17 11:40	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-09-17 20:00		Nov-10-17 09:00		Nov-09-17 20:00		Nov-08-17 15:30		Nov-09-17 20:00		Nov-09-17 20:00	
	Analyzed:	Nov-10-17 03:41		Nov-10-17 13:34		Nov-10-17 04:21		Nov-08-17 16:56		Nov-10-17 04:41		Nov-10-17 05:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00525	0.00525	<0.00532	0.00532	<0.00523	0.00523	<0.00102	0.00102	<0.00513	0.00513	<0.00544	0.00544
Toluene		<0.00525	0.00525	<0.00532	0.00532	<0.00523	0.00523	<0.00102	0.00102	<0.00513	0.00513	<0.00544	0.00544
Ethylbenzene		<0.00525	0.00525	<0.00532	0.00532	<0.00523	0.00523	<0.00102	0.00102	<0.00513	0.00513	<0.00544	0.00544
m,p-Xylenes		<0.0105	0.0105	<0.0106	0.0106	<0.0105	0.0105	<0.00204	0.00204	<0.0103	0.0103	<0.0109	0.0109
o-Xylene		<0.00525	0.00525	<0.00532	0.00532	<0.00523	0.00523	<0.00102	0.00102	<0.00513	0.00513	<0.00544	0.00544
Total Xylenes		<0.00525	0.00525	<0.00532	0.00532	<0.00523	0.00523	<0.00102	0.00102	<0.00513	0.00513	<0.00544	0.00544
Total BTEX		<0.00525	0.00525	<0.00532	0.00532	<0.00523	0.00523	<0.00102	0.00102	<0.00513	0.00513	<0.00544	0.00544
Chloride by EPA 300	***Extracted:***	Nov-07-17 14:30		Nov-07-17 14:30		Nov-07-17 14:30		Nov-07-17 14:30		Nov-07-17 14:30		Nov-07-17 14:30	
	Analyzed:	Nov-07-17 17:18		Nov-07-17 17:25		Nov-07-17 17:31		Nov-07-17 17:50		Nov-07-17 17:56		Nov-07-17 18:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		11.2	5.17	12.1	5.31	5.98	5.18	<5.11	5.11	<5.07	5.07	109	5.34
Percent Moisture	***Extracted:***												
	Analyzed:	Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.85	1.00	5.95	1.00	4.40	1.00	3.06	1.00	2.45	1.00	8.16	1.00
TPH By SW8015 Mod	***Extracted:***	Nov-01-17 14:00		Nov-01-17 14:00		Nov-01-17 14:00		Nov-01-17 14:00		Nov-01-17 14:00		Nov-01-17 14:00	
	Analyzed:	Nov-02-17 00:08		Nov-02-17 00:29		Nov-02-17 00:52		Nov-02-17 01:13		Nov-02-17 02:16		Nov-02-17 02:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.7	15.7	<15.9	15.9	<15.6	15.6	<15.5	15.5	<15.3	15.3	<16.3	16.3
Diesel Range Organics		<15.7	15.7	<15.9	15.9	<15.6	15.6	<15.5	15.5	<15.3	15.3	250	16.3

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566984

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County,NM

Date Received in Lab: Mon Oct-30-17 09:40 am
Report Date: 10-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566984-013		566984-014		566984-015		566984-016		566984-017		566984-018	
	Field Id:	MW-4-S-4-5-171029		MW-4-S-9-10-171029		MW-4-S-19-20-171029		MW-4-S-29-30-171029		MW-4-S-39-40-171029		MW-4-S-49-50-171029	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-17 11:43		Oct-29-17 11:46		Oct-29-17 11:49		Oct-29-17 12:02		Oct-29-17 12:05		Oct-29-17 12:25	
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-09-17 20:00		Nov-10-17 09:00		Nov-09-17 20:00		Nov-09-17 20:00		Nov-09-17 20:00		Nov-09-17 20:00	
	Analyzed:	Nov-10-17 08:25		Nov-10-17 13:55		Nov-10-17 05:42		Nov-10-17 06:02		Nov-10-17 06:23		Nov-10-17 06:44	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		0.305	0.0279	<0.00580	0.00580	<0.00532	0.00532	<0.00530	0.00530	<0.00582	0.00582	<0.00547	0.00547
Toluene		<0.0279	0.0279	<0.00580	0.00580	<0.00532	0.00532	<0.00530	0.00530	<0.00582	0.00582	<0.00547	0.00547
Ethylbenzene		15.6 D	0.113	0.107	0.00580	<0.00532	0.00532	<0.00530	0.00530	<0.00582	0.00582	<0.00547	0.00547
m,p-Xylenes		0.663	0.0559	<0.0116	0.0116	<0.0106	0.0106	<0.0106	0.0106	<0.0116	0.0116	<0.0109	0.0109
o-Xylene		0.0883	0.0279	<0.00580	0.00580	<0.00532	0.00532	<0.00530	0.00530	<0.00582	0.00582	<0.00547	0.00547
Total Xylenes		0.751	0.0279	<0.00580	0.00580	<0.00532	0.00532	<0.00530	0.00530	<0.00582	0.00582	<0.00547	0.00547
Total BTEX		16.7	0.0279	0.107	0.00580	<0.00532	0.00532	<0.00530	0.00530	<0.00582	0.00582	<0.00547	0.00547
Chloride by EPA 300	***Extracted:***	Nov-07-17 14:30		Nov-07-17 14:30		Nov-07-17 14:30		Nov-07-17 14:30		Nov-07-17 14:30		Nov-07-17 14:30	
	Analyzed:	Nov-07-17 18:09		Nov-07-17 18:16		Nov-07-17 18:22		Nov-07-17 18:41		Nov-07-17 18:47		Nov-07-17 19:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		90.3	5.60	57.9	5.76	64.1	5.29	140	5.22	191	5.74	125	5.36
Percent Moisture	***Extracted:***												
	Analyzed:	Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		11.4	1.00	13.7	1.00	6.02	1.00	5.60	1.00	14.1	1.00	8.54	1.00
TPH By SW8015 Mod	***Extracted:***	Nov-01-17 14:00		Nov-01-17 14:00		Nov-01-17 14:00		Nov-01-17 14:00		Nov-01-17 14:00		Nov-01-17 14:00	
	Analyzed:	Nov-02-17 02:56		Nov-02-17 03:17		Nov-02-17 03:37		Nov-02-17 03:57		Nov-02-17 04:19		Nov-02-17 04:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		1210	16.9	57.6	17.3	<15.9	15.9	<15.9	15.9	<17.4	17.4	<16.4	16.4
Diesel Range Organics		3050	16.9	433	17.3	121	15.9	<15.9	15.9	<17.4	17.4	<16.4	16.4

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 566984

GHD Services, INC- Midland, Midland, TX

Project Name: LPU #96

Project Id: 073816
Contact: Scott Foord
Project Location: Lea County,NM

Date Received in Lab: Mon Oct-30-17 09:40 am
Report Date: 10-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566984-019		566984-020		566984-021		566984-022					
	Field Id:	MW-4-S-59-60-171029		MW-4-S-69-70-171029		MW-4-S-79-80-171029		MW-4-S-89-90-171029					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Oct-29-17 12:28		Oct-29-17 12:45		Oct-29-17 12:48		Oct-29-17 13:02					
BTEX by SW 8260B SUB: TX104704215-17-23	***Extracted:***	Nov-09-17 20:00		Nov-09-17 20:00		Nov-09-17 20:00		Nov-09-17 20:00					
	Analyzed:	Nov-10-17 07:04		Nov-10-17 07:23		Nov-10-17 07:44		Nov-10-17 08:05					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00542	0.00542	<0.00547	0.00547	<0.00517	0.00517	<0.00511	0.00511				
Toluene		<0.00542	0.00542	<0.00547	0.00547	<0.00517	0.00517	<0.00511	0.00511				
Ethylbenzene		<0.00542	0.00542	<0.00547	0.00547	<0.00517	0.00517	<0.00511	0.00511				
m,p-Xylenes		<0.0108	0.0108	<0.0109	0.0109	<0.0103	0.0103	<0.0102	0.0102				
o-Xylene		<0.00542	0.00542	<0.00547	0.00547	<0.00517	0.00517	<0.00511	0.00511				
Total Xylenes		<0.00542	0.00542	<0.00547	0.00547	<0.00517	0.00517	<0.00511	0.00511				
Total BTEX		<0.00542	0.00542	<0.00547	0.00547	<0.00517	0.00517	<0.00511	0.00511				
Chloride by EPA 300	***Extracted:***	Nov-07-17 14:30		Nov-07-17 14:30		Nov-07-17 14:30		Nov-07-17 14:30					
	Analyzed:	Nov-07-17 19:13		Nov-07-17 19:19		Nov-07-17 19:26		Nov-07-17 19:32					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		289	5.38	247	5.40	405	5.14	133	5.03				
Percent Moisture	***Extracted:***												
	Analyzed:	Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30		Nov-01-17 09:30					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		7.76	1.00	8.63	1.00	3.36	1.00	2.12	1.00				
TPH By SW8015 Mod	***Extracted:***	Nov-01-17 14:00		Nov-01-17 14:00		Nov-02-17 07:00		Nov-02-17 07:00					
	Analyzed:	Nov-02-17 04:59		Nov-02-17 05:21		Nov-02-17 09:53		Nov-02-17 10:13					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons		<16.2	16.2	<16.4	16.4	<15.5	15.5	<15.3	15.3				
Diesel Range Organics		<16.2	16.2	<16.4	16.4	<15.5	15.5	<15.3	15.3				

Mike Kimmel
Client Services Manager

Analytical Report 566984

for

GHD Services, INC- Midland

Project Manager: Scott Foord

LPU #96

073816

10-NOV-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

10-NOV-17

Project Manager: **Scott Foord**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **566984**
LPU #96
Project Address: Lea County,NM

Scott Foord:

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) 566984. 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. 566984 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,

Mike Kimmel
Client Services Manager

Sample Cross Reference 566984

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-2-S-0.5-1-171029	S	10-29-17 08:35		566984-001
MW-2-S-4-5-171029	S	10-29-17 08:38		566984-002
MW-2-S-9-10-171029	S	10-29-17 08:41		566984-003
MW-2-S-19-20-171029	S	10-29-17 08:44		566984-004
MW-2-S-29-30-171029	S	10-29-17 08:52		566984-005
MW-2-S-39-40-171029	S	10-29-17 08:55		566984-006
MW-2-S-49-50-171029	S	10-29-17 09:15		566984-007
MW-2-S-59-60-171029	S	10-29-17 09:18		566984-008
MW-2-S-69-70-171029	S	10-29-17 09:35		566984-009
MW-2-S-79-80-171029	S	10-29-17 09:38		566984-010
MW-2-S-89-90-171029	S	10-29-17 09:50		566984-011
MW-4-S-0.5-1-171029	S	10-29-17 11:40		566984-012
MW-4-S-4-5-171029	S	10-29-17 11:43		566984-013
MW-4-S-9-10-171029	S	10-29-17 11:46		566984-014
MW-4-S-19-20-171029	S	10-29-17 11:49		566984-015
MW-4-S-29-30-171029	S	10-29-17 12:02		566984-016
MW-4-S-39-40-171029	S	10-29-17 12:05		566984-017
MW-4-S-49-50-171029	S	10-29-17 12:25		566984-018
MW-4-S-59-60-171029	S	10-29-17 12:28		566984-019
MW-4-S-69-70-171029	S	10-29-17 12:45		566984-020
MW-4-S-79-80-171029	S	10-29-17 12:48		566984-021
MW-4-S-89-90-171029	S	10-29-17 13:02		566984-022

Client Name: GHD Services, INC- Midland

Project Name: LPU #96

Project ID: *073816*
Work Order Number(s): *566984*

Report Date: *10-NOV-17*
Date Received: *10/30/2017*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3032780 BTEX by SW 8260B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3032785 BTEX by SW 8260B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3032921 BTEX by SW 8260B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3032961 BTEX-MTBE by SW 8260B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3032997 BTEX-MTBE by SW 8260B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 566984

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-2-S-0.5-1-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-001	Date Collected:	10.29.17 08.35		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	5.3
Analyst:	MNV	Date Prep:	11.07.17 12.05	Basis:	Dry Weight
Seq Number:	3032701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**25.8**	5.27	mg/kg	11.07.17 19.27		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	5.3
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.8	15.8	mg/kg	11.01.17 21.22	U	1
Diesel Range Organics	C10C28DRO	**616**	15.8	mg/kg	11.01.17 21.22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	11.01.17 21.22	
o-Terphenyl	84-15-1	102	%	70-135	11.01.17 21.22	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	5.3
Analyst:	JTR	Date Prep:	11.09.17 20.00	Basis:	Dry Weight
Seq Number:	3032961			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00528	0.00528	mg/kg	11.10.17 03.20	U	1
Toluene	108-88-3	<0.00528	0.00528	mg/kg	11.10.17 03.20	U	1
Ethylbenzene	100-41-4	<0.00528	0.00528	mg/kg	11.10.17 03.20	U	1
m,p-Xylenes	179601-23-1	<0.0106	0.0106	mg/kg	11.10.17 03.20	U	1
o-Xylene	95-47-6	<0.00528	0.00528	mg/kg	11.10.17 03.20	U	1
Total Xylenes	1330-20-7	<0.00528	0.00528	mg/kg	11.10.17 03.20	U	1
Total BTEX		<0.00528	0.00528	mg/kg	11.10.17 03.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	122	%	74-126	11.10.17 03.20	
1,2-Dichloroethane-D4	17060-07-0	118	%	80-120	11.10.17 03.20	
Toluene-D8	2037-26-5	80	%	73-132	11.10.17 03.20	

Certificate of Analytical Results 566984

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-2-S-4-5-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-002	Date Collected:	10.29.17 08.38		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	6.73
Analyst:	MNV	Date Prep:	11.07.17 12.05	Basis:	Dry Weight
Seq Number:	3032701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**47.4**	5.34	mg/kg	11.07.17 19.36		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	6.73
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<16.1	16.1	mg/kg	11.01.17 21.43	U	1
Diesel Range Organics	C10C28DRO	<16.1	16.1	mg/kg	11.01.17 21.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	11.01.17 21.43	
o-Terphenyl	84-15-1	95	%	70-135	11.01.17 21.43	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	6.73
Analyst:	JTR	Date Prep:	11.09.17 11.00	Basis:	Dry Weight
Seq Number:	3032921			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00536	0.00536	mg/kg	11.09.17 12.56	U	1
Toluene	108-88-3	<0.00536	0.00536	mg/kg	11.09.17 12.56	U	1
Ethylbenzene	100-41-4	<0.00536	0.00536	mg/kg	11.09.17 12.56	U	1
m,p-Xylenes	179601-23-1	<0.0107	0.0107	mg/kg	11.09.17 12.56	U	1
o-Xylene	95-47-6	<0.00536	0.00536	mg/kg	11.09.17 12.56	U	1
Total Xylenes	1330-20-7	<0.00536	0.00536	mg/kg	11.09.17 12.56	U	1
Total BTEX		<0.00536	0.00536	mg/kg	11.09.17 12.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	110	%	74-126	11.09.17 12.56	
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	11.09.17 12.56	
Toluene-D8	2037-26-5	79	%	73-132	11.09.17 12.56	

Certificate of Analytical Results 566984

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-2-S-9-10-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-003	Date Collected:	10.29.17 08.41		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	6.23
Analyst:	MNV	Date Prep:	11.07.17 12.05	Basis:	Dry Weight
Seq Number:	3032701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**68.1**	5.29	mg/kg	11.07.17 19.45		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	6.23
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<16.0	16.0	mg/kg	11.01.17 22.45	U	1
Diesel Range Organics	C10C28DRO	<16.0	16.0	mg/kg	11.01.17 22.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	11.01.17 22.45	
o-Terphenyl	84-15-1	103	%	70-135	11.01.17 22.45	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	6.23
Analyst:	JTR	Date Prep:	11.08.17 20.00	Basis:	Dry Weight
Seq Number:	3032785			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00107	0.00107	mg/kg	11.08.17 21.21	U	1
Toluene	108-88-3	<0.00107	0.00107	mg/kg	11.08.17 21.21	U	1
Ethylbenzene	100-41-4	<0.00107	0.00107	mg/kg	11.08.17 21.21	U	1
m,p-Xylenes	179601-23-1	<0.00214	0.00214	mg/kg	11.08.17 21.21	U	1
o-Xylene	95-47-6	<0.00107	0.00107	mg/kg	11.08.17 21.21	U	1
Total Xylenes	1330-20-7	<0.00107	0.00107	mg/kg	11.08.17 21.21	U	1
Total BTEX		<0.00107	0.00107	mg/kg	11.08.17 21.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	114	%	74-126	11.08.17 21.21	
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	11.08.17 21.21	
Toluene-D8	2037-26-5	93	%	73-132	11.08.17 21.21	

Certificate of Analytical Results 566984

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-2-S-19-20-171029** Matrix: Soil Date Received:10.30.17 09.40

Lab Sample Id: 566984-004 Date Collected: 10.29.17 08.44

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 8.61

Analyst: MNV Date Prep: 11.07.17 12.05 Basis: Dry Weight

Seq Number: 3032701

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**103**	5.38	mg/kg	11.07.17 19.54		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 8.61

Analyst: ARM Date Prep: 11.01.17 14.00 Basis: Dry Weight

Seq Number: 3032139

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<16.4	16.4	mg/kg	11.01.17 23.05	U	1
Diesel Range Organics	C10C28DRO	<16.4	16.4	mg/kg	11.01.17 23.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	11.01.17 23.05	
o-Terphenyl	84-15-1	106	%	70-135	11.01.17 23.05	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 8.61

Analyst: JTR Date Prep: 11.09.17 11.00 Basis: Dry Weight

Seq Number: 3032921 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00547	0.00547	mg/kg	11.09.17 11.51	U	1
Toluene	108-88-3	<0.00547	0.00547	mg/kg	11.09.17 11.51	U	1
Ethylbenzene	100-41-4	<0.00547	0.00547	mg/kg	11.09.17 11.51	U	1
m,p-Xylenes	179601-23-1	<0.0109	0.0109	mg/kg	11.09.17 11.51	U	1
o-Xylene	95-47-6	<0.00547	0.00547	mg/kg	11.09.17 11.51	U	1
Total Xylenes	1330-20-7	<0.00547	0.00547	mg/kg	11.09.17 11.51	U	1
Total BTEX		<0.00547	0.00547	mg/kg	11.09.17 11.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	111	%	74-126	11.09.17 11.51	
1,2-Dichloroethane-D4	17060-07-0	120	%	80-120	11.09.17 11.51	
Toluene-D8	2037-26-5	120	%	73-132	11.09.17 11.51	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-2-S-29-30-171029** Matrix: Soil Date Received:10.30.17 09.40

Lab Sample Id: 566984-005 Date Collected: 10.29.17 08.52

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 5.76

Analyst: MNV Date Prep: 11.07.17 14.30 Basis: Dry Weight

Seq Number: 3032704

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**288**	5.31	mg/kg	11.07.17 16.53		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 5.76

Analyst: ARM Date Prep: 11.01.17 14.00 Basis: Dry Weight

Seq Number: 3032139

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.9	15.9	mg/kg	11.01.17 23.27	U	1
Diesel Range Organics	C10C28DRO	<15.9	15.9	mg/kg	11.01.17 23.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	11.01.17 23.27	
o-Terphenyl	84-15-1	100	%	70-135	11.01.17 23.27	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 5.76

Analyst: JTR Date Prep: 11.09.17 11.00 Basis: Dry Weight

Seq Number: 3032921 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00531	0.00531	mg/kg	11.09.17 13.16	U	1
Toluene	108-88-3	<0.00531	0.00531	mg/kg	11.09.17 13.16	U	1
Ethylbenzene	100-41-4	<0.00531	0.00531	mg/kg	11.09.17 13.16	U	1
m,p-Xylenes	179601-23-1	<0.0106	0.0106	mg/kg	11.09.17 13.16	U	1
o-Xylene	95-47-6	<0.00531	0.00531	mg/kg	11.09.17 13.16	U	1
Total Xylenes	1330-20-7	<0.00531	0.00531	mg/kg	11.09.17 13.16	U	1
Total BTEX		<0.00531	0.00531	mg/kg	11.09.17 13.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	74-126	11.09.17 13.16	
1,2-Dichloroethane-D4	17060-07-0	113	%	80-120	11.09.17 13.16	
Toluene-D8	2037-26-5	86	%	73-132	11.09.17 13.16	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-2-S-39-40-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-006	Date Collected:	10.29.17 08.55		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	6.34
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**36.6**	5.32	mg/kg	11.07.17 17.12		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	6.34
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<16.0	16.0	mg/kg	11.01.17 23.47	U	1
Diesel Range Organics	C10C28DRO	<16.0	16.0	mg/kg	11.01.17 23.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	11.01.17 23.47	
o-Terphenyl	84-15-1	95	%	70-135	11.01.17 23.47	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	6.34
Analyst:	JTR	Date Prep:	11.09.17 11.00	Basis:	Dry Weight
Seq Number:	3032921			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00534	0.00534	mg/kg	11.09.17 13.37	U	1
Toluene	108-88-3	<0.00534	0.00534	mg/kg	11.09.17 13.37	U	1
Ethylbenzene	100-41-4	<0.00534	0.00534	mg/kg	11.09.17 13.37	U	1
m,p-Xylenes	179601-23-1	<0.0107	0.0107	mg/kg	11.09.17 13.37	U	1
o-Xylene	95-47-6	<0.00534	0.00534	mg/kg	11.09.17 13.37	U	1
Total Xylenes	1330-20-7	<0.00534	0.00534	mg/kg	11.09.17 13.37	U	1
Total BTEX		<0.00534	0.00534	mg/kg	11.09.17 13.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	111	%	74-126	11.09.17 13.37	
1,2-Dichloroethane-D4	17060-07-0	116	%	80-120	11.09.17 13.37	
Toluene-D8	2037-26-5	86	%	73-132	11.09.17 13.37	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id: **MW-2-S-49-50-171029** Matrix: Soil Date Received:10.30.17 09.40

Lab Sample Id: 566984-007 Date Collected: 10.29.17 09.15

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 4.85

Analyst: MNV Date Prep: 11.07.17 14.30 Basis: Dry Weight

Seq Number: 3032704

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.2**	5.17	mg/kg	11.07.17 17.18		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 4.85

Analyst: ARM Date Prep: 11.01.17 14.00 Basis: Dry Weight

Seq Number: 3032139

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.7	15.7	mg/kg	11.02.17 00.08	U	1
Diesel Range Organics	C10C28DRO	<15.7	15.7	mg/kg	11.02.17 00.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	11.02.17 00.08	
o-Terphenyl	84-15-1	99	%	70-135	11.02.17 00.08	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 4.85

Analyst: JTR Date Prep: 11.09.17 20.00 Basis: Dry Weight

Seq Number: 3032961 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00525	0.00525	mg/kg	11.10.17 03.41	U	1
Toluene	108-88-3	<0.00525	0.00525	mg/kg	11.10.17 03.41	U	1
Ethylbenzene	100-41-4	<0.00525	0.00525	mg/kg	11.10.17 03.41	U	1
m,p-Xylenes	179601-23-1	<0.0105	0.0105	mg/kg	11.10.17 03.41	U	1
o-Xylene	95-47-6	<0.00525	0.00525	mg/kg	11.10.17 03.41	U	1
Total Xylenes	1330-20-7	<0.00525	0.00525	mg/kg	11.10.17 03.41	U	1
Total BTEX		<0.00525	0.00525	mg/kg	11.10.17 03.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	119	%	74-126	11.10.17 03.41	
1,2-Dichloroethane-D4	17060-07-0	117	%	80-120	11.10.17 03.41	
Toluene-D8	2037-26-5	79	%	73-132	11.10.17 03.41	

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LPU #96

Sample Id:	**MW-2-S-59-60-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-008	Date Collected:	10.29.17 09.18		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	5.95
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.1**	5.31	mg/kg	11.07.17 17.25		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	5.95
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.9	15.9	mg/kg	11.02.17 00.29	U	1
Diesel Range Organics	C10C28DRO	<15.9	15.9	mg/kg	11.02.17 00.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	11.02.17 00.29	
o-Terphenyl	84-15-1	103	%	70-135	11.02.17 00.29	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	5.95
Analyst:	JTR	Date Prep:	11.10.17 09.00	Basis:	Dry Weight
Seq Number:	3032997			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00532	0.00532	mg/kg	11.10.17 13.34	U	1
Toluene	108-88-3	<0.00532	0.00532	mg/kg	11.10.17 13.34	U	1
Ethylbenzene	100-41-4	<0.00532	0.00532	mg/kg	11.10.17 13.34	U	1
m,p-Xylenes	179601-23-1	<0.0106	0.0106	mg/kg	11.10.17 13.34	U	1
o-Xylene	95-47-6	<0.00532	0.00532	mg/kg	11.10.17 13.34	U	1
Total Xylenes	1330-20-7	<0.00532	0.00532	mg/kg	11.10.17 13.34	U	1
Total BTEX		<0.00532	0.00532	mg/kg	11.10.17 13.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	111	%	74-126	11.10.17 13.34	
1,2-Dichloroethane-D4	17060-07-0	114	%	80-120	11.10.17 13.34	
Toluene-D8	2037-26-5	106	%	73-132	11.10.17 13.34	

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LPU #96

Sample Id:	**MW-2-S-69-70-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-009	Date Collected:	10.29.17 09.35		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	4.4
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5.98**	5.18	mg/kg	11.07.17 17.31		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	4.4
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.6	15.6	mg/kg	11.02.17 00.52	U	1
Diesel Range Organics	C10C28DRO	<15.6	15.6	mg/kg	11.02.17 00.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	11.02.17 00.52	
o-Terphenyl	84-15-1	99	%	70-135	11.02.17 00.52	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	4.4
Analyst:	JTR	Date Prep:	11.09.17 20.00	Basis:	Dry Weight
Seq Number:	3032961			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00523	0.00523	mg/kg	11.10.17 04.21	U	1
Toluene	108-88-3	<0.00523	0.00523	mg/kg	11.10.17 04.21	U	1
Ethylbenzene	100-41-4	<0.00523	0.00523	mg/kg	11.10.17 04.21	U	1
m,p-Xylenes	179601-23-1	<0.0105	0.0105	mg/kg	11.10.17 04.21	U	1
o-Xylene	95-47-6	<0.00523	0.00523	mg/kg	11.10.17 04.21	U	1
Total Xylenes	1330-20-7	<0.00523	0.00523	mg/kg	11.10.17 04.21	U	1
Total BTEX		<0.00523	0.00523	mg/kg	11.10.17 04.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	113	%	74-126	11.10.17 04.21	
1,2-Dichloroethane-D4	17060-07-0	114	%	80-120	11.10.17 04.21	
Toluene-D8	2037-26-5	85	%	73-132	11.10.17 04.21	

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LPU #96

Sample Id:	**MW-2-S-79-80-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-010	Date Collected:	10.29.17 09.38		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	3.06
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.11	5.11	mg/kg	11.07.17 17.50	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	3.06
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.5	15.5	mg/kg	11.02.17 01.13	U	1
Diesel Range Organics	C10C28DRO	<15.5	15.5	mg/kg	11.02.17 01.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	11.02.17 01.13	
o-Terphenyl	84-15-1	84	%	70-135	11.02.17 01.13	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	3.06
Analyst:	JTR	Date Prep:	11.08.17 15.30	Basis:	Dry Weight
Seq Number:	3032780			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00102	0.00102	mg/kg	11.08.17 16.56	U	1
Toluene	108-88-3	<0.00102	0.00102	mg/kg	11.08.17 16.56	U	1
Ethylbenzene	100-41-4	<0.00102	0.00102	mg/kg	11.08.17 16.56	U	1
m,p-Xylenes	179601-23-1	<0.00204	0.00204	mg/kg	11.08.17 16.56	U	1
o-Xylene	95-47-6	<0.00102	0.00102	mg/kg	11.08.17 16.56	U	1
Total Xylenes	1330-20-7	<0.00102	0.00102	mg/kg	11.08.17 16.56	U	1
Total BTEX		<0.00102	0.00102	mg/kg	11.08.17 16.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	74-126	11.08.17 16.56	
1,2-Dichloroethane-D4	17060-07-0	110	%	80-120	11.08.17 16.56	
Toluene-D8	2037-26-5	83	%	73-132	11.08.17 16.56	

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GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-2-S-89-90-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-011	Date Collected:	10.29.17 09.50		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	2.45
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.07	5.07	mg/kg	11.07.17 17.56	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	2.45
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.3	15.3	mg/kg	11.02.17 02.16	U	1
Diesel Range Organics	C10C28DRO	<15.3	15.3	mg/kg	11.02.17 02.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	11.02.17 02.16	
o-Terphenyl	84-15-1	92	%	70-135	11.02.17 02.16	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	2.45
Analyst:	JTR	Date Prep:	11.09.17 20.00	Basis:	Dry Weight
Seq Number:	3032961			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00513	0.00513	mg/kg	11.10.17 04.41	U	1
Toluene	108-88-3	<0.00513	0.00513	mg/kg	11.10.17 04.41	U	1
Ethylbenzene	100-41-4	<0.00513	0.00513	mg/kg	11.10.17 04.41	U	1
m,p-Xylenes	179601-23-1	<0.0103	0.0103	mg/kg	11.10.17 04.41	U	1
o-Xylene	95-47-6	<0.00513	0.00513	mg/kg	11.10.17 04.41	U	1
Total Xylenes	1330-20-7	<0.00513	0.00513	mg/kg	11.10.17 04.41	U	1
Total BTEX		<0.00513	0.00513	mg/kg	11.10.17 04.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	74-126	11.10.17 04.41	
1,2-Dichloroethane-D4	17060-07-0	113	%	80-120	11.10.17 04.41	
Toluene-D8	2037-26-5	86	%	73-132	11.10.17 04.41	

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LPU #96

Sample Id: **MW-4-S-0.5-1-171029** Matrix: Soil Date Received:10.30.17 09.40

Lab Sample Id: 566984-012 Date Collected: 10.29.17 11.40

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MNV % Moisture: 8.16

Analyst: MNV Date Prep: 11.07.17 14.30 Basis: Dry Weight

Seq Number: 3032704

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**109**	5.34	mg/kg	11.07.17 18.03		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 8.16

Analyst: ARM Date Prep: 11.01.17 14.00 Basis: Dry Weight

Seq Number: 3032139

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<16.3	16.3	mg/kg	11.02.17 02.35	U	1
Diesel Range Organics	C10C28DRO	**250**	16.3	mg/kg	11.02.17 02.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	11.02.17 02.35	
o-Terphenyl	84-15-1	100	%	70-135	11.02.17 02.35	

Analytical Method: BTEX by SW 8260B Prep Method: SW5030B

Tech: JTR % Moisture: 8.16

Analyst: JTR Date Prep: 11.09.17 20.00 Basis: Dry Weight

Seq Number: 3032961 SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00544	0.00544	mg/kg	11.10.17 05.01	U	1
Toluene	108-88-3	<0.00544	0.00544	mg/kg	11.10.17 05.01	U	1
Ethylbenzene	100-41-4	<0.00544	0.00544	mg/kg	11.10.17 05.01	U	1
m,p-Xylenes	179601-23-1	<0.0109	0.0109	mg/kg	11.10.17 05.01	U	1
o-Xylene	95-47-6	<0.00544	0.00544	mg/kg	11.10.17 05.01	U	1
Total Xylenes	1330-20-7	<0.00544	0.00544	mg/kg	11.10.17 05.01	U	1
Total BTEX		<0.00544	0.00544	mg/kg	11.10.17 05.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	110	%	74-126	11.10.17 05.01	
1,2-Dichloroethane-D4	17060-07-0	117	%	80-120	11.10.17 05.01	
Toluene-D8	2037-26-5	89	%	73-132	11.10.17 05.01	

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LPU #96

Sample Id:	**MW-4-S-4-5-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-013	Date Collected:	10.29.17 11.43		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	11.44
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**90.3**	5.60	mg/kg	11.07.17 18.09		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	11.44
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	**1210**	16.9	mg/kg	11.02.17 02.56		1
Diesel Range Organics	C10C28DRO	**3050**	16.9	mg/kg	11.02.17 02.56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	11.02.17 02.56	
o-Terphenyl	84-15-1	90	%	70-135	11.02.17 02.56	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	11.44
Analyst:	JTR	Date Prep:	11.09.17 20.00	Basis:	Dry Weight
Seq Number:	3032961			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.305**	0.0279	mg/kg	11.10.17 08.25		25
Toluene	108-88-3	<0.0279	0.0279	mg/kg	11.10.17 08.25	U	25
Ethylbenzene	100-41-4	**15.6**	0.113	mg/kg	11.10.17 15.35	D	100
m,p-Xylenes	179601-23-1	**0.663**	0.0559	mg/kg	11.10.17 08.25		25
o-Xylene	95-47-6	**0.0883**	0.0279	mg/kg	11.10.17 08.25		25
Total Xylenes	1330-20-7	**0.751**	0.0279	mg/kg	11.10.17 08.25		25
Total BTEX		**16.7**	0.0279	mg/kg	11.10.17 15.35		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	74-126	11.10.17 08.25	
1,2-Dichloroethane-D4	17060-07-0	117	%	80-120	11.10.17 08.25	
Toluene-D8	2037-26-5	115	%	73-132	11.10.17 08.25	

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LPU #96

Sample Id:	**MW-4-S-9-10-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-014	Date Collected:	10.29.17 11.46		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	13.73
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**57.9**	5.76	mg/kg	11.07.17 18.16		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	13.73
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	**57.6**	17.3	mg/kg	11.02.17 03.17		1
Diesel Range Organics	C10C28DRO	**433**	17.3	mg/kg	11.02.17 03.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	11.02.17 03.17	
o-Terphenyl	84-15-1	104	%	70-135	11.02.17 03.17	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	13.73
Analyst:	JTR	Date Prep:	11.10.17 09.00	Basis:	Dry Weight
Seq Number:	3032997			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00580	0.00580	mg/kg	11.10.17 13.55	U	1
Toluene	108-88-3	<0.00580	0.00580	mg/kg	11.10.17 13.55	U	1
Ethylbenzene	100-41-4	**0.107**	0.00580	mg/kg	11.10.17 13.55		1
m,p-Xylenes	179601-23-1	<0.0116	0.0116	mg/kg	11.10.17 13.55	U	1
o-Xylene	95-47-6	<0.00580	0.00580	mg/kg	11.10.17 13.55	U	1
Total Xylenes	1330-20-7	<0.00580	0.00580	mg/kg	11.10.17 13.55	U	1
Total BTEX		**0.107**	0.00580	mg/kg	11.10.17 13.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	108	%	74-126	11.10.17 13.55	
1,2-Dichloroethane-D4	17060-07-0	116	%	80-120	11.10.17 13.55	
Toluene-D8	2037-26-5	101	%	73-132	11.10.17 13.55	

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LPU #96

Sample Id:	**MW-4-S-19-20-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-015	Date Collected:	10.29.17 11.49		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	6.02
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**64.1**	5.29	mg/kg	11.07.17 18.22		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	6.02
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.9	15.9	mg/kg	11.02.17 03.37	U	1
Diesel Range Organics	C10C28DRO	**121**	15.9	mg/kg	11.02.17 03.37		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	11.02.17 03.37	
o-Terphenyl	84-15-1	97	%	70-135	11.02.17 03.37	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	6.02
Analyst:	JTR	Date Prep:	11.09.17 20.00	Basis:	Dry Weight
Seq Number:	3032961			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00532	0.00532	mg/kg	11.10.17 05.42	U	1
Toluene	108-88-3	<0.00532	0.00532	mg/kg	11.10.17 05.42	U	1
Ethylbenzene	100-41-4	<0.00532	0.00532	mg/kg	11.10.17 05.42	U	1
m,p-Xylenes	179601-23-1	<0.0106	0.0106	mg/kg	11.10.17 05.42	U	1
o-Xylene	95-47-6	<0.00532	0.00532	mg/kg	11.10.17 05.42	U	1
Total Xylenes	1330-20-7	<0.00532	0.00532	mg/kg	11.10.17 05.42	U	1
Total BTEX		<0.00532	0.00532	mg/kg	11.10.17 05.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	108	%	74-126	11.10.17 05.42	
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	11.10.17 05.42	
Toluene-D8	2037-26-5	88	%	73-132	11.10.17 05.42	

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Sample Id:	**MW-4-S-29-30-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-016	Date Collected:	10.29.17 12.02		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	5.6
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**140**	5.22	mg/kg	11.07.17 18.41		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	5.6
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.9	15.9	mg/kg	11.02.17 03.57	U	1
Diesel Range Organics	C10C28DRO	<15.9	15.9	mg/kg	11.02.17 03.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	11.02.17 03.57	
o-Terphenyl	84-15-1	93	%	70-135	11.02.17 03.57	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	5.6
Analyst:	JTR	Date Prep:	11.09.17 20.00	Basis:	Dry Weight
Seq Number:	3032961			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00530	0.00530	mg/kg	11.10.17 06.02	U	1
Toluene	108-88-3	<0.00530	0.00530	mg/kg	11.10.17 06.02	U	1
Ethylbenzene	100-41-4	<0.00530	0.00530	mg/kg	11.10.17 06.02	U	1
m,p-Xylenes	179601-23-1	<0.0106	0.0106	mg/kg	11.10.17 06.02	U	1
o-Xylene	95-47-6	<0.00530	0.00530	mg/kg	11.10.17 06.02	U	1
Total Xylenes	1330-20-7	<0.00530	0.00530	mg/kg	11.10.17 06.02	U	1
Total BTEX		<0.00530	0.00530	mg/kg	11.10.17 06.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	108	%	74-126	11.10.17 06.02	
1,2-Dichloroethane-D4	17060-07-0	116	%	80-120	11.10.17 06.02	
Toluene-D8	2037-26-5	91	%	73-132	11.10.17 06.02	

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LPU #96

Sample Id:	**MW-4-S-39-40-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-017	Date Collected:	10.29.17 12.05		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	14.06
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**191**	5.74	mg/kg	11.07.17 18.47		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	14.06
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<17.4	17.4	mg/kg	11.02.17 04.19	U	1
Diesel Range Organics	C10C28DRO	<17.4	17.4	mg/kg	11.02.17 04.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	11.02.17 04.19	
o-Terphenyl	84-15-1	93	%	70-135	11.02.17 04.19	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	14.06
Analyst:	JTR	Date Prep:	11.09.17 20.00	Basis:	Dry Weight
Seq Number:	3032961			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00582	0.00582	mg/kg	11.10.17 06.23	U	1
Toluene	108-88-3	<0.00582	0.00582	mg/kg	11.10.17 06.23	U	1
Ethylbenzene	100-41-4	<0.00582	0.00582	mg/kg	11.10.17 06.23	U	1
m,p-Xylenes	179601-23-1	<0.0116	0.0116	mg/kg	11.10.17 06.23	U	1
o-Xylene	95-47-6	<0.00582	0.00582	mg/kg	11.10.17 06.23	U	1
Total Xylenes	1330-20-7	<0.00582	0.00582	mg/kg	11.10.17 06.23	U	1
Total BTEX		<0.00582	0.00582	mg/kg	11.10.17 06.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	114	%	74-126	11.10.17 06.23	
1,2-Dichloroethane-D4	17060-07-0	120	%	80-120	11.10.17 06.23	
Toluene-D8	2037-26-5	82	%	73-132	11.10.17 06.23	

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LPU #96

Sample Id:	**MW-4-S-49-50-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-018	Date Collected:	10.29.17 12.25		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	8.54
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**125**	5.36	mg/kg	11.07.17 19.07		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	8.54
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<16.4	16.4	mg/kg	11.02.17 04.39	U	1
Diesel Range Organics	C10C28DRO	<16.4	16.4	mg/kg	11.02.17 04.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	11.02.17 04.39	
o-Terphenyl	84-15-1	102	%	70-135	11.02.17 04.39	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	8.54
Analyst:	JTR	Date Prep:	11.09.17 20.00	Basis:	Dry Weight
Seq Number:	3032961			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00547	0.00547	mg/kg	11.10.17 06.44	U	1
Toluene	108-88-3	<0.00547	0.00547	mg/kg	11.10.17 06.44	U	1
Ethylbenzene	100-41-4	<0.00547	0.00547	mg/kg	11.10.17 06.44	U	1
m,p-Xylenes	179601-23-1	<0.0109	0.0109	mg/kg	11.10.17 06.44	U	1
o-Xylene	95-47-6	<0.00547	0.00547	mg/kg	11.10.17 06.44	U	1
Total Xylenes	1330-20-7	<0.00547	0.00547	mg/kg	11.10.17 06.44	U	1
Total BTEX		<0.00547	0.00547	mg/kg	11.10.17 06.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	74-126	11.10.17 06.44	
1,2-Dichloroethane-D4	17060-07-0	117	%	80-120	11.10.17 06.44	
Toluene-D8	2037-26-5	82	%	73-132	11.10.17 06.44	

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LPU #96

Sample Id:	**MW-4-S-59-60-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-019	Date Collected:	10.29.17 12.28		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	7.76
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**289**	5.38	mg/kg	11.07.17 19.13		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	7.76
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<16.2	16.2	mg/kg	11.02.17 04.59	U	1
Diesel Range Organics	C10C28DRO	<16.2	16.2	mg/kg	11.02.17 04.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	11.02.17 04.59	
o-Terphenyl	84-15-1	96	%	70-135	11.02.17 04.59	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	7.76
Analyst:	JTR	Date Prep:	11.09.17 20.00	Basis:	Dry Weight
Seq Number:	3032961			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00542	0.00542	mg/kg	11.10.17 07.04	U	1
Toluene	108-88-3	<0.00542	0.00542	mg/kg	11.10.17 07.04	U	1
Ethylbenzene	100-41-4	<0.00542	0.00542	mg/kg	11.10.17 07.04	U	1
m,p-Xylenes	179601-23-1	<0.0108	0.0108	mg/kg	11.10.17 07.04	U	1
o-Xylene	95-47-6	<0.00542	0.00542	mg/kg	11.10.17 07.04	U	1
Total Xylenes	1330-20-7	<0.00542	0.00542	mg/kg	11.10.17 07.04	U	1
Total BTEX		<0.00542	0.00542	mg/kg	11.10.17 07.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	74-126	11.10.17 07.04	
1,2-Dichloroethane-D4	17060-07-0	116	%	80-120	11.10.17 07.04	
Toluene-D8	2037-26-5	85	%	73-132	11.10.17 07.04	

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LPU #96

Sample Id:	**MW-4-S-69-70-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-020	Date Collected:	10.29.17 12.45		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	8.63
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**247**	5.40	mg/kg	11.07.17 19.19		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	8.63
Analyst:	ARM	Date Prep:	11.01.17 14.00	Basis:	Dry Weight
Seq Number:	3032139				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<16.4	16.4	mg/kg	11.02.17 05.21	U	1
Diesel Range Organics	C10C28DRO	<16.4	16.4	mg/kg	11.02.17 05.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	11.02.17 05.21	
o-Terphenyl	84-15-1	87	%	70-135	11.02.17 05.21	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	8.63
Analyst:	JTR	Date Prep:	11.09.17 20.00	Basis:	Dry Weight
Seq Number:	3032961			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00547	0.00547	mg/kg	11.10.17 07.23	U	1
Toluene	108-88-3	<0.00547	0.00547	mg/kg	11.10.17 07.23	U	1
Ethylbenzene	100-41-4	<0.00547	0.00547	mg/kg	11.10.17 07.23	U	1
m,p-Xylenes	179601-23-1	<0.0109	0.0109	mg/kg	11.10.17 07.23	U	1
o-Xylene	95-47-6	<0.00547	0.00547	mg/kg	11.10.17 07.23	U	1
Total Xylenes	1330-20-7	<0.00547	0.00547	mg/kg	11.10.17 07.23	U	1
Total BTEX		<0.00547	0.00547	mg/kg	11.10.17 07.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	115	%	74-126	11.10.17 07.23	
1,2-Dichloroethane-D4	17060-07-0	120	%	80-120	11.10.17 07.23	
Toluene-D8	2037-26-5	82	%	73-132	11.10.17 07.23	

Certificate of Analytical Results 566984

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-4-S-79-80-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-021	Date Collected:	10.29.17 12.48		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	3.36
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**405**	5.14	mg/kg	11.07.17 19.26		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	3.36
Analyst:	ARM	Date Prep:	11.02.17 07.00	Basis:	Dry Weight
Seq Number:	3032266				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.5	15.5	mg/kg	11.02.17 09.53	U	1
Diesel Range Organics	C10C28DRO	<15.5	15.5	mg/kg	11.02.17 09.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	11.02.17 09.53	
o-Terphenyl	84-15-1	99	%	70-135	11.02.17 09.53	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	3.36
Analyst:	JTR	Date Prep:	11.09.17 20.00	Basis:	Dry Weight
Seq Number:	3032961			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00517	0.00517	mg/kg	11.10.17 07.44	U	1
Toluene	108-88-3	<0.00517	0.00517	mg/kg	11.10.17 07.44	U	1
Ethylbenzene	100-41-4	<0.00517	0.00517	mg/kg	11.10.17 07.44	U	1
m,p-Xylenes	179601-23-1	<0.0103	0.0103	mg/kg	11.10.17 07.44	U	1
o-Xylene	95-47-6	<0.00517	0.00517	mg/kg	11.10.17 07.44	U	1
Total Xylenes	1330-20-7	<0.00517	0.00517	mg/kg	11.10.17 07.44	U	1
Total BTEX		<0.00517	0.00517	mg/kg	11.10.17 07.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	116	%	74-126	11.10.17 07.44	
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	11.10.17 07.44	
Toluene-D8	2037-26-5	80	%	73-132	11.10.17 07.44	

Certificate of Analytical Results 566984

GHD Services, INC- Midland, Midland, TX

LPU #96

Sample Id:	**MW-4-S-89-90-171029**	Matrix:	Soil	Date Received:	10.30.17 09.40
Lab Sample Id:	566984-022	Date Collected:	10.29.17 13.02		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	2.12
Analyst:	MNV	Date Prep:	11.07.17 14.30	Basis:	Dry Weight
Seq Number:	3032704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**133**	5.03	mg/kg	11.07.17 19.32		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	2.12
Analyst:	ARM	Date Prep:	11.02.17 07.00	Basis:	Dry Weight
Seq Number:	3032266				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.3	15.3	mg/kg	11.02.17 10.13	U	1
Diesel Range Organics	C10C28DRO	<15.3	15.3	mg/kg	11.02.17 10.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	11.02.17 10.13	
o-Terphenyl	84-15-1	97	%	70-135	11.02.17 10.13	

Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5030B
Tech:	JTR			% Moisture:	2.12
Analyst:	JTR	Date Prep:	11.09.17 20.00	Basis:	Dry Weight
Seq Number:	3032961			SUB:	TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00511	0.00511	mg/kg	11.10.17 08.05	U	1
Toluene	108-88-3	<0.00511	0.00511	mg/kg	11.10.17 08.05	U	1
Ethylbenzene	100-41-4	<0.00511	0.00511	mg/kg	11.10.17 08.05	U	1
m,p-Xylenes	179601-23-1	<0.0102	0.0102	mg/kg	11.10.17 08.05	U	1
o-Xylene	95-47-6	<0.00511	0.00511	mg/kg	11.10.17 08.05	U	1
Total Xylenes	1330-20-7	<0.00511	0.00511	mg/kg	11.10.17 08.05	U	1
Total BTEX		<0.00511	0.00511	mg/kg	11.10.17 08.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	116	%	74-126	11.10.17 08.05	
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	11.10.17 08.05	
Toluene-D8	2037-26-5	83	%	73-132	11.10.17 08.05	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

QC Summary 566984

GHD Services, INC- Midland

LPU #96

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032701 Matrix: Solid Date Prep: 11.07.17
MB Sample Id: 7633960-1-BLK LCS Sample Id: 7633960-1-BKS LCSD Sample Id: 7633960-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	243	97	243	97	90-110	0	20	mg/kg	11.07.17 15:37	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032704 Matrix: Solid Date Prep: 11.07.17
MB Sample Id: 7633961-1-BLK LCS Sample Id: 7633961-1-BKS LCSD Sample Id: 7633961-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	260	104	261	104	90-110	0	20	mg/kg	11.07.17 16:40	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032701 Matrix: Soil Date Prep: 11.07.17
Parent Sample Id: 566983-007 MS Sample Id: 566983-007 S MSD Sample Id: 566983-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	30.8	256	276	96	265	91	90-110	4	20	mg/kg	11.07.17 16:04	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032701 Matrix: Soil Date Prep: 11.07.17
Parent Sample Id: 566983-017 MS Sample Id: 566983-017 S MSD Sample Id: 566983-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	40.1	262	281	92	280	92	90-110	0	20	mg/kg	11.07.17 18:08	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032704 Matrix: Soil Date Prep: 11.07.17
Parent Sample Id: 566984-005 MS Sample Id: 566984-005 S MSD Sample Id: 566984-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	288	265	544	97	545	97	90-110	0	20	mg/kg	11.07.17 16:59	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3032704 Matrix: Soil Date Prep: 11.07.17
Parent Sample Id: 566984-015 MS Sample Id: 566984-015 S MSD Sample Id: 566984-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	64.1	264	335	103	336	103	90-110	0	20	mg/kg	11.07.17 18:28	

QC Summary 566984

GHD Services, INC- Midland

LPU #96

Analytical Method: **Percent Moisture**
Seq Number: 3032083 Matrix: Solid
MB Sample Id: 3032083-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<1.00	%	11.01.17 09:30	

Analytical Method: **Percent Moisture**
Seq Number: 3032084 Matrix: Solid
MB Sample Id: 3032084-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<1.00	%	11.01.17 09:30	

Analytical Method: **Percent Moisture**
Seq Number: 3032083 Matrix: Soil
Parent Sample Id: 566983-019 MD Sample Id: 566983-019 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	5.09	4.82	5	20	%	11.01.17 09:30	

Analytical Method: **Percent Moisture**
Seq Number: 3032084 Matrix: Soil
Parent Sample Id: 566984-016 MD Sample Id: 566984-016 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	5.60	5.69	2	20	%	11.01.17 09:30	

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3032139 Matrix: Solid Date Prep: 11.01.17
MB Sample Id: 7633639-1-BLK LCS Sample Id: 7633639-1-BKS LCSD Sample Id: 7633639-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	1100	110	1090	109	70-135	1	35	mg/kg	11.01.17 20:41	
Diesel Range Organics	<15.0	1000	1150	115	1110	111	70-135	4	35	mg/kg	11.01.17 20:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		102		110		70-135	%	11.01.17 20:41
o-Terphenyl	106		92		102		70-135	%	11.01.17 20:41

QC Summary 566984

GHD Services, INC- Midland

LPU #96

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3032266 Matrix: Solid Date Prep: 11.02.17
MB Sample Id: 7633717-1-BLK LCS Sample Id: 7633717-1-BKS LCSD Sample Id: 7633717-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	1080	108	1100	110	70-135	2	35	mg/kg	11.02.17 07:53	
Diesel Range Organics	<15.0	1000	1100	110	1110	111	70-135	1	35	mg/kg	11.02.17 07:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		100		101		70-135	%	11.02.17 07:53
o-Terphenyl	108		95		95		70-135	%	11.02.17 07:53

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3032139 Matrix: Soil Date Prep: 11.01.17
Parent Sample Id: 566984-002 MS Sample Id: 566984-002 S MSD Sample Id: 566984-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<16.1	1070	1180	110	1110	104	70-135	6	35	mg/kg	11.01.17 22:03	
Diesel Range Organics	<16.1	1070	1170	109	1070	100	70-135	9	35	mg/kg	11.01.17 22:03	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		90		70-135	%	11.01.17 22:03
o-Terphenyl	87		85		70-135	%	11.01.17 22:03

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3032266 Matrix: Soil Date Prep: 11.02.17
Parent Sample Id: 566983-021 MS Sample Id: 566983-021 S MSD Sample Id: 566983-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.5	1040	1140	110	1170	113	70-135	3	35	mg/kg	11.02.17 08:53	
Diesel Range Organics	<15.5	1040	1170	113	1190	114	70-135	2	35	mg/kg	11.02.17 08:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		95		70-135	%	11.02.17 08:53
o-Terphenyl	110		90		70-135	%	11.02.17 08:53

QC Summary 566984

GHD Services, INC- Midland

LPU #96

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032780 Matrix: Solid Date Prep: 11.08.17

MB Sample Id: 7634063-1-BLK LCS Sample Id: 7634063-1-BKS LCSD Sample Id: 7634063-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.115	115	0.116	116	62-132	1	25	mg/kg	11.08.17 08:34	
Toluene	<0.00100	0.100	0.0875	88	0.0852	85	66-124	3	25	mg/kg	11.08.17 08:34	
Ethylbenzene	<0.00100	0.100	0.106	106	0.102	102	71-134	4	25	mg/kg	11.08.17 08:34	
m,p-Xylenes	<0.00200	0.200	0.228	114	0.221	111	69-128	3	25	mg/kg	11.08.17 08:34	
o-Xylene	<0.00100	0.100	0.114	114	0.108	108	72-131	5	25	mg/kg	11.08.17 08:34	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	103		103		105		74-126	%	11.08.17 08:34
1,2-Dichloroethane-D4	117		106		112		80-120	%	11.08.17 08:34
Toluene-D8	80		89		87		73-132	%	11.08.17 08:34

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032785 Matrix: Solid Date Prep: 11.08.17

MB Sample Id: 7634064-1-BLK LCS Sample Id: 7634064-1-BKS LCSD Sample Id: 7634064-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.102	102	0.117	117	62-132	14	25	mg/kg	11.08.17 19:02	
Toluene	<0.00100	0.100	0.0667	67	0.0683	68	66-124	2	25	mg/kg	11.08.17 19:02	
Ethylbenzene	<0.00100	0.100	0.0857	86	0.0839	84	71-134	2	25	mg/kg	11.08.17 19:02	
m,p-Xylenes	<0.00200	0.200	0.184	92	0.174	87	69-128	6	25	mg/kg	11.08.17 19:02	
o-Xylene	<0.00100	0.100	0.0905	91	0.107	107	72-131	17	25	mg/kg	11.08.17 19:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	109		110		105		74-126	%	11.08.17 19:02
1,2-Dichloroethane-D4	120		119		118		80-120	%	11.08.17 19:02
Toluene-D8	94		80		81		73-132	%	11.08.17 19:02

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032921 Matrix: Solid Date Prep: 11.09.17

MB Sample Id: 7634143-1-BLK LCS Sample Id: 7634143-1-BKS LCSD Sample Id: 7634143-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0970	97	0.109	109	62-132	12	25	mg/kg	11.09.17 09:09	
Toluene	<0.00100	0.100	0.0685	69	0.0767	77	66-124	11	25	mg/kg	11.09.17 09:09	
Ethylbenzene	<0.00100	0.100	0.0852	85	0.0927	93	71-134	8	25	mg/kg	11.09.17 09:09	
m,p-Xylenes	<0.00200	0.200	0.184	92	0.201	101	69-128	9	25	mg/kg	11.09.17 09:09	
o-Xylene	<0.00100	0.100	0.0898	90	0.0980	98	72-131	9	25	mg/kg	11.09.17 09:09	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	106		106		108		74-126	%	11.09.17 09:09
1,2-Dichloroethane-D4	115		116		118		80-120	%	11.09.17 09:09
Toluene-D8	93		86		86		73-132	%	11.09.17 09:09

QC Summary 566984

GHD Services, INC- Midland

LPU #96

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032961 Matrix: Solid Date Prep: 11.09.17

MB Sample Id: 7634173-1-BLK LCS Sample Id: 7634173-1-BKS LCSD Sample Id: 7634173-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.109	109	0.113	113	62-132	4	25	mg/kg	11.09.17 22:37	
Toluene	<0.00100	0.100	0.0852	85	0.0778	78	66-124	9	25	mg/kg	11.09.17 22:37	
Ethylbenzene	<0.00100	0.100	0.107	107	0.0999	100	71-134	7	25	mg/kg	11.09.17 22:37	
m,p-Xylenes	<0.00200	0.200	0.215	108	0.199	100	69-128	8	25	mg/kg	11.09.17 22:37	
o-Xylene	<0.00100	0.100	0.108	108	0.0992	99	72-131	8	25	mg/kg	11.09.17 22:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	116		108		108		74-126	%	11.09.17 22:37
1,2-Dichloroethane-D4	119		112		114		80-120	%	11.09.17 22:37
Toluene-D8	78		91		86		73-132	%	11.09.17 22:37

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032997 Matrix: Solid Date Prep: 11.10.17

MB Sample Id: 7634194-1-BLK LCS Sample Id: 7634194-1-BKS LCSD Sample Id: 7634194-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.112	112	0.0950	95	62-132	16	25	mg/kg	11.10.17 10:44	
Toluene	<0.00100	0.100	0.0899	90	0.0765	77	66-124	16	25	mg/kg	11.10.17 10:44	
Ethylbenzene	<0.00100	0.100	0.103	103	0.0886	89	71-134	15	25	mg/kg	11.10.17 10:44	
m,p-Xylenes	<0.00200	0.200	0.216	108	0.192	96	69-128	12	25	mg/kg	11.10.17 10:44	
o-Xylene	<0.00100	0.100	0.106	106	0.0927	93	72-131	13	25	mg/kg	11.10.17 10:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	107		107		108		74-126	%	11.10.17 10:44
1,2-Dichloroethane-D4	110		103		110		80-120	%	11.10.17 10:44
Toluene-D8	91		91		91		73-132	%	11.10.17 10:44

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032780 Matrix: Soil Date Prep: 11.08.17

Parent Sample Id: 566984-010 MS Sample Id: 566984-010 S MSD Sample Id: 566984-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00103	0.103	0.107	104	0.109	106	62-132	2	25	mg/kg	11.08.17 11:42	
Toluene	<0.00103	0.103	0.0791	77	0.0899	87	66-124	13	25	mg/kg	11.08.17 11:42	
Ethylbenzene	<0.00103	0.103	0.0992	96	0.103	100	71-134	4	25	mg/kg	11.08.17 11:42	
m,p-Xylenes	<0.00206	0.206	0.216	105	0.219	107	69-128	1	25	mg/kg	11.08.17 11:42	
o-Xylene	<0.00103	0.103	0.105	102	0.105	102	72-131	0	25	mg/kg	11.08.17 11:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	102		103		74-126	%	11.08.17 11:42
1,2-Dichloroethane-D4	102		108		80-120	%	11.08.17 11:42
Toluene-D8	83		92		73-132	%	11.08.17 11:42

QC Summary 566984

GHD Services, INC- Midland

LPU #96

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B
Seq Number: 3032921 Matrix: Soil Date Prep: 11.09.17
Parent Sample Id: 566984-004 MS Sample Id: 566984-004 S MSD Sample Id: 566984-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00547	0.547	0.606	111	0.580	106	62-132	4	25	mg/kg	11.09.17 09:48	
Toluene	<0.00547	0.547	0.480	88	0.398	73	66-124	19	25	mg/kg	11.09.17 09:48	
Ethylbenzene	<0.00547	0.547	0.571	104	0.502	92	71-134	13	25	mg/kg	11.09.17 09:48	
m,p-Xylenes	<0.0109	1.09	1.21	111	1.07	98	69-128	12	25	mg/kg	11.09.17 09:48	
o-Xylene	<0.00547	0.547	0.631	115	0.517	95	72-131	20	25	mg/kg	11.09.17 09:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	100		105		74-126	%	11.09.17 09:48
1,2-Dichloroethane-D4	113		114		80-120	%	11.09.17 09:48
Toluene-D8	98		81		73-132	%	11.09.17 09:48

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B
Seq Number: 3032961 Matrix: Soil Date Prep: 11.09.17
Parent Sample Id: 567486-001 MS Sample Id: 567486-001 S MSD Sample Id: 567486-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00126	0.126	0.140	111	0.143	113	62-132	2	25	mg/kg	11.09.17 23:18	
Toluene	<0.00126	0.126	0.0986	78	0.109	87	66-124	10	25	mg/kg	11.09.17 23:18	
Ethylbenzene	<0.00126	0.126	0.122	97	0.141	112	71-134	14	25	mg/kg	11.09.17 23:18	
m,p-Xylenes	<0.00253	0.253	0.252	100	0.286	113	69-128	13	25	mg/kg	11.09.17 23:18	
o-Xylene	<0.00126	0.126	0.129	102	0.144	114	72-131	11	25	mg/kg	11.09.17 23:18	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	113		108		74-126	%	11.09.17 23:18
1,2-Dichloroethane-D4	115		113		80-120	%	11.09.17 23:18
Toluene-D8	85		92		73-132	%	11.09.17 23:18

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B
Seq Number: 3032785 Matrix: Soil Date Prep: 11.08.17
Parent Sample Id: 566984-003 MS Sample Id: 566984-003 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.00106	0.106	0.0840	79	62-132	mg/kg	11.08.17 19:41	
Toluene	<0.00106	0.106	0.0737	70	66-124	mg/kg	11.08.17 19:41	
Ethylbenzene	<0.00106	0.106	0.0924	87	71-134	mg/kg	11.08.17 19:41	
m,p-Xylenes	<0.00212	0.212	0.194	92	69-128	mg/kg	11.08.17 19:41	
o-Xylene	<0.00106	0.106	0.0862	81	72-131	mg/kg	11.08.17 19:41	

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	123		74-126	%	11.08.17 19:41
1,2-Dichloroethane-D4	119		80-120	%	11.08.17 19:41
Toluene-D8	101		73-132	%	11.08.17 19:41

QC Summary 566984

GHD Services, INC- Midland

LPU #96

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5030B

Seq Number: 3032997 Matrix: Soil Date Prep: 11.10.17

Parent Sample Id: 567486-009 MS Sample Id: 567486-009 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.00127	0.127	0.139	109	62-132	mg/kg	11.10.17 14:33	
Toluene	<0.00127	0.127	0.126	99	66-124	mg/kg	11.10.17 14:33	
Ethylbenzene	<0.00127	0.127	0.138	109	71-134	mg/kg	11.10.17 14:33	
m,p-Xylenes	<0.00254	0.254	0.295	116	69-128	mg/kg	11.10.17 14:33	
o-Xylene	<0.00127	0.127	0.161	127	72-131	mg/kg	11.10.17 14:33	

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	104		74-126	%	11.10.17 14:33
1,2-Dichloroethane-D4	113		80-120	%	11.10.17 14:33
Toluene-D8	102		73-132	%	11.10.17 14:33

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330945 Page 1 of 3

Company-City: GHD-Houston **Phone:** 713-734-3090
Project Name-Location: LPU #96--Lea County, NM ☐ Previously done at XENCO **Project ID:** 073816
Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM **Proj. Manager (PM):** Scott Foord
E-mail Results to ☑ PM and Chris.Knight@ghd.com **Fax No:**
Invoice to ☐ Accounting ☑ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:
Quote/Pricing: **P.O. No:** ☐ Call for P.O.
Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:
Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)
Sampler Name Rebecca Jones **Signature** Rebecca Jones

Lab Only: Sld984

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

	Sample ID	Sampling Date	Time	Depth (ft) "In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
1	MW-2-S-05-1-171029	10/24/17	0835	1	S		X	2	2.4	C	C
2	MW-2-S-4-5-171029		0838	5			X	2			
3	MW-2-S-9-10-171029		0841	10			X	2			
4	MW-2-S-19-20-171029		0844	20			X	2			
5	MW-2-S-29-30-171029		0852	30			X	2			
6	MW-2-S-39-40-171029		0855	40			X	2			
7	MW-2-S-49-50-171029		0915	50			X	2			
8	MW-2-S-59-60-171029		0918	60			X	2			
9	MW-2-S-69-70-171029		0935	70			X	2			
10	MW-2-S-79-80-171029		0938	80			X	2			

	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	BTEX	TPH-GRO	TPH-DRO	Chloride	Moisture
1										X	X	X	X	X
2										X	X	X	X	X
3										X	X	X	X	X
4										X	X	X	X	X
5										X	X	X	X	X
6										X	X	X	X	X
7										X	X	X	X	X
8										X	X	X	X	X
9										X	X	X	X	X
10										X	X	X	X	X

	TAT ASAP	5h	12h	24h	48h	3d	5d	7d	10d	21d
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

	Addn: PAH above	mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Remarks

Sample Clean-ups are pre-approved as needed

Addn: Date Rcv. by: From:

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) Rebecca Jones	10/30/17 - 0940	2) Esperanza Gonzalez	10/30/17 9:40
2	3)		4)	
3	5)		6)	

Total Containers per COC: Cooler Temp: 0.5 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

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☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330959 Page 2 of 3

Company City GHD-Houston **Phone** 713-734-3080

Project Name-Location LPU #910-Lea County, NM ☐ Previously done at XENCO **Project ID** 073816

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other **Proj. Manager (PM)**

E-mail Results to ☐ PM and **Fax No:**

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Rebecca Jones **Signature** Rebecca Jones

Lab Only: 516984

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

	Sample ID	Sampling Date	Time	Depth (ft)	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
1	MW-S-39-90-171029	10/29/17	0950	90	S		✓	2	2,4	C	C
2	MW-4-S-0.5-1-171029		1140	1			✓	2			
3	MW-4-S-4-5-171029		1143	5			✓	2			
4	MW-4-S-9-10-171029		1146	10			✓	2			
5	MW-4-S-19-20-171029		1149	20			✓	2			
6	MW-4-S-29-30-171029		1202	30			✓	2			
7	MW-4-S-39-40-171029		1205	40			✓	2			
8	MW-4-S-49-50-171029		1225	50			✓	2			
9	MW-4-S-59-60-171029		1228	60			✓	2			
10	MW-4-S-69-70-171029		1245	70			✓	2			

	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	BTEX	TPH-GRO	TPH-DRO	Chloride	Moisture
1										✓	✓	✓	✓	✓
2										✓	✓	✓	✓	✓
3										✓	✓	✓	✓	✓
4										✓	✓	✓	✓	✓
5										✓	✓	✓	✓	✓
6										✓	✓	✓	✓	✓
7										✓	✓	✓	✓	✓
8										✓	✓	✓	✓	✓
9										✓	✓	✓	✓	✓
10										✓	✓	✓	✓	✓

TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d

Addn: PAH above mg/L W, mg/Kg S Highest Hit

Hold Samples (Surcharges will apply and are pre-approved)

Remarks

Sample Clean-ups are pre-approved as needed

Addn: Date Rcv. by: From:

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) Rebecca Jones	10/30/17-0940	2) Esperanza Gonzalez	10/30/17 9:40
2	3)		4)	
3	5)		6)	

Total Containers per COC: Cooler Temp: 0.5 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

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☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330949 Page 3 of 3

Company-City: GHD-Houston **Phone:** 713-734-3090

Project Name-Location: LDU #96-Lea County, NM ☐ Previously done at XENCO **Project ID:** 07381.10

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM **Proj. Manager (PM):**

E-mail Results to ☐ PM and **Fax No:**

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Rebecca Jones **Signature** Rebecca Jones

Lab Only: 566984

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

	Sample ID	Sampling Date	Time	Depth (ft/in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
1	MW-4-S-79-80-17024	10/29/17	1248	80	S		✓	2	2,4	C	C
2	MW-4-S-89-90-17024	↓	1302	90	S		✓	2	↓	↓	↓
3											
4											
5											
6											
7											
8											
9											
10											

	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	BTEX	TPH - GRO	TPH - DRO	Chloride	Moisture
1										✓	✓	✓	✓	✓
2										✓	✓	✓	✓	✓

Remarks

TAT ASAP	5h	12h	24h	48h	3d	5d	7d	10d	21d	Addn: PAH above	mg/L W,	mg/Kg S	Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed	Addn:	Date	Rcv. by:	From:

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) Rebecca Jones	10/30/17-0940	2) Esperanza Corrales	10/30/17 9:40
2	3)		4)	
3	5)		6)	

Total Containers per COC: Cooler Temp: 0.5 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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Inter-Office Shipment

IOS Number **1051111**

Date/Time: 10/31/17 11:10
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Shawnee Smith
Delivery Priority:
Air Bill No.: 770636521542

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
566984-001	S	MW-2-S-0.5-1-171029	10/29/17 08:35	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-002	S	MW-2-S-4-5-171029	10/29/17 08:38	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-003	S	MW-2-S-9-10-171029	10/29/17 08:41	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-004	S	MW-2-S-19-20-171029	10/29/17 08:44	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-005	S	MW-2-S-29-30-171029	10/29/17 08:52	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-006	S	MW-2-S-39-40-171029	10/29/17 08:55	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-007	S	MW-2-S-49-50-171029	10/29/17 09:15	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-008	S	MW-2-S-59-60-171029	10/29/17 09:18	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-009	S	MW-2-S-69-70-171029	10/29/17 09:35	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-010	S	MW-2-S-79-80-171029	10/29/17 09:38	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-011	S	MW-2-S-89-90-171029	10/29/17 09:50	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-012	S	MW-4-S-0.5-1-171029	10/29/17 11:40	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-013	S	MW-4-S-4-5-171029	10/29/17 11:43	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-014	S	MW-4-S-9-10-171029	10/29/17 11:46	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-015	S	MW-4-S-19-20-171029	10/29/17 11:49	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-016	S	MW-4-S-29-30-171029	10/29/17 12:02	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-017	S	MW-4-S-39-40-171029	10/29/17 12:05	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-018	S	MW-4-S-49-50-171029	10/29/17 12:25	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-019	S	MW-4-S-59-60-171029	10/29/17 12:28	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-020	S	MW-4-S-69-70-171029	10/29/17 12:45	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-021	S	MW-4-S-79-80-171029	10/29/17 12:48	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	
566984-022	S	MW-4-S-89-90-171029	10/29/17 13:02	SW8260BTX	BTEX by SW 8260B	11/07/17	11/12/17	KEB	BZ BZME EBZ XYLENES	

Inter-Office Shipment

IOS Number **1051111**

Date/Time:	10/31/17 11:10	Created by:	Shawnee Smith
Lab# From:	**Midland**	Delivery Priority:	
Lab# To:	**Houston**	Air Bill No.:	770636521542

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Inter Office Shipment or Sample Comments:

Relinquished By: Shawnee Smith

Date Relinquished: 10/31/2017

Received By: Jean Quila

Date Received: 11/01/2017 09:15

Cooler Temperature: 3.4

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 1051111

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

Sent By: Shawnee Smith **Date Sent:** 10/31/2017 11:10 AM

Received By: Jean Quila **Date Received:** 11/01/2017 09:15 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.4	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 *Custody Seals Signed and dated for Containers/coolers	**No**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

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

Checklist reviewed by: _____ Date: 11/01/2017

Jean Quila

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 10/30/2017 09:40:00 AM

Work Order #: 566984

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

Temperature Measuring device used : R8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**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**	Houston
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Shawnee Smith Date: 10/31/2017
Shawnee Smith

Checklist reviewed by: Kelsey Brooks Date: 10/31/2017
Kelsey Brooks

Analytical Report 570674

for

GHD Services, INC- Midland

Project Manager: Chris Knight

CELMC LPU-96

073816

17-DEC-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

17-DEC-17

Project Manager: **Chris Knight**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **570674**
CELMC LPU-96
Project Address: Lovington,NM

Chris Knight:

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) 570674. 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. 570674 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,

Mike Kimmel
Client Services Manager

Sample Cross Reference 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1-W-171207	W	12-07-17 11:45		570674-001
MW-2-W-171207	W	12-07-17 13:40		570674-002
MW-4-W-171207	W	12-07-17 15:05		570674-003
MW-3-W-171208	W	12-07-17 14:00		570674-004
MW-5-W-171208	W	12-07-17 14:40		570674-005
MW-5-WD-171208	W	12-07-17 00:00		570674-006

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3035579 TDS by SM2540C
SM2540C
Batch 3035579, Total Dissolved Solids RPD is outside the QC limit. This is most likely due to sample non-homogeneity.
Samples in the analytical batch are: 570674-001, -002, -003, -004, -005, -006.

Certificate of Analytical Results 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id: **MW-1-W-171207** Matrix: Ground Water Date Received:12.08.17 16.52

Lab Sample Id: 570674-001 Date Collected: 12.07.17 11.45

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Tech: OJS % Moisture:

Analyst: OJS Date Prep: 12.11.17 13.30

Seq Number: 3036048

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**523**	5.00	mg/L	12.11.17 16.02		10

Analytical Method: TDS by SM2540C

Tech: LRI % Moisture:

Analyst: LRI

Seq Number: 3035579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	**1450**	5.00	mg/L	12.11.17 11.00		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 12.11.17 16.00

Seq Number: 3035622

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<0.986	1.50	mg/L	12.11.17 23.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<0.911	1.50	mg/L	12.11.17 23.50	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<0.911	1.50	mg/L	12.11.17 23.50	U	1
Total TPH	PHC635	<0.911	1.50	mg/L	12.11.17 23.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	12.11.17 23.50	
o-Terphenyl	84-15-1	105	%	70-135	12.11.17 23.50	

Certificate of Analytical Results 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id: **MW-1-W-171207** Matrix: Ground Water Date Received:12.08.17 16.52

Lab Sample Id: 570674-001 Date Collected: 12.07.17 11.45

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

Tech: ALJ % Moisture:

Analyst: ALJ Date Prep: 12.12.17 08.00

Seq Number: 3035737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.0421**	0.00200	mg/L	12.12.17 12.31		1
Toluene	108-88-3	<0.000367	0.00200	mg/L	12.12.17 12.31	U	1
Ethylbenzene	100-41-4	**0.00222**	0.00200	mg/L	12.12.17 12.31		1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	mg/L	12.12.17 12.31	U	1
o-Xylene	95-47-6	<0.000642	0.00200	mg/L	12.12.17 12.31	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	mg/L	12.12.17 12.31	U	1
Total BTEX		**0.0443**	0.00200	mg/L	12.12.17 12.31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	80-120	12.12.17 12.31	
4-Bromofluorobenzene	460-00-4	109	%	80-120	12.12.17 12.31	

Certificate of Analytical Results 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id: **MW-2-W-171207** Matrix: Ground Water Date Received:12.08.17 16.52

Lab Sample Id: 570674-002 Date Collected: 12.07.17 13.40

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Tech: OJS % Moisture:

Analyst: OJS Date Prep: 12.11.17 13.30

Seq Number: 3036048

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**138**	2.50	mg/L	12.11.17 16.08		5

Analytical Method: TDS by SM2540C

Tech: LRI % Moisture:

Analyst: LRI

Seq Number: 3035579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	**661**	5.00	mg/L	12.11.17 11.00		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 12.11.17 16.00

Seq Number: 3035622

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<0.986	1.50	mg/L	12.12.17 00.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<0.911	1.50	mg/L	12.12.17 00.49	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<0.911	1.50	mg/L	12.12.17 00.49	U	1
Total TPH	PHC635	<0.911	1.50	mg/L	12.12.17 00.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	12.12.17 00.49	
o-Terphenyl	84-15-1	99	%	70-135	12.12.17 00.49	

Certificate of Analytical Results 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id: **MW-2-W-171207** Matrix: Ground Water Date Received:12.08.17 16.52

Lab Sample Id: 570674-002 Date Collected: 12.07.17 13.40

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

Tech: ALJ % Moisture:

Analyst: ALJ Date Prep: 12.12.17 08.00

Seq Number: 3035737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000408	0.00200	mg/L	12.12.17 09.40	U	1
Toluene	108-88-3	<0.000367	0.00200	mg/L	12.12.17 09.40	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	mg/L	12.12.17 09.40	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	mg/L	12.12.17 09.40	U	1
o-Xylene	95-47-6	<0.000642	0.00200	mg/L	12.12.17 09.40	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	mg/L	12.12.17 09.40	U	1
Total BTEX		<0.000367	0.00200	mg/L	12.12.17 09.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	80-120	12.12.17 09.40	
4-Bromofluorobenzene	460-00-4	100	%	80-120	12.12.17 09.40	

Certificate of Analytical Results 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id: **MW-4-W-171207** Matrix: Ground Water Date Received:12.08.17 16.52

Lab Sample Id: 570674-003 Date Collected: 12.07.17 15.05

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Tech: OJS % Moisture:

Analyst: OJS Date Prep: 12.11.17 13.30

Seq Number: 3036048

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1020**	5.00	mg/L	12.11.17 16.26		10

Analytical Method: TDS by SM2540C

Tech: LRI % Moisture:

Analyst: LRI

Seq Number: 3035579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	**2140**	5.00	mg/L	12.11.17 11.00		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 12.11.17 16.00

Seq Number: 3035622

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**1.17**	1.50	mg/L	12.12.17 01.10	J	1
Diesel Range Organics (DRO)	C10C28DRO	<0.911	1.50	mg/L	12.12.17 01.10	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<0.911	1.50	mg/L	12.12.17 01.10	U	1
Total TPH	PHC635	**1.17**	1.50	mg/L	12.12.17 01.10	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	12.12.17 01.10	
o-Terphenyl	84-15-1	108	%	70-135	12.12.17 01.10	

Certificate of Analytical Results 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id:	**MW-4-W-171207**	Matrix:	Ground Water	Date Received:	12.08.17 16.52
Lab Sample Id:	570674-003	Date Collected:	12.07.17 15.05		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	12.12.17 08.00		
Seq Number:	3035737				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.381**	0.0100	mg/L	12.12.17 11.33		5
Toluene	108-88-3	**0.00195**	0.0100	mg/L	12.12.17 11.33	J	5
Ethylbenzene	100-41-4	**0.0861**	0.0100	mg/L	12.12.17 11.33		5
m,p-Xylenes	179601-23-1	**0.00325**	0.0200	mg/L	12.12.17 11.33	J	5
o-Xylene	95-47-6	<0.00321	0.0100	mg/L	12.12.17 11.33	U	5
Total Xylenes	1330-20-7	**0.00325**	0.0100	mg/L	12.12.17 11.33	J	5
Total BTEX		**0.472**	0.0100	mg/L	12.12.17 11.33		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	80-120	12.12.17 11.33	
4-Bromofluorobenzene	460-00-4	105	%	80-120	12.12.17 11.33	

Certificate of Analytical Results 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id: **MW-3-W-171208** Matrix: Ground Water Date Received:12.08.17 16.52

Lab Sample Id: 570674-004 Date Collected: 12.07.17 14.00

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Tech: OJS % Moisture:

Analyst: OJS Date Prep: 12.11.17 13.30

Seq Number: 3036048

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**250**	2.50	mg/L	12.11.17 16.44		5

Analytical Method: TDS by SM2540C

Tech: LRI % Moisture:

Analyst: LRI

Seq Number: 3035579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	**858**	5.00	mg/L	12.11.17 11.00		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 12.11.17 16.00

Seq Number: 3035622

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<0.986	1.50	mg/L	12.12.17 08.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<0.911	1.50	mg/L	12.12.17 08.20	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<0.911	1.50	mg/L	12.12.17 08.20	U	1
Total TPH	PHC635	<0.911	1.50	mg/L	12.12.17 08.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	12.12.17 08.20	
o-Terphenyl	84-15-1	92	%	70-135	12.12.17 08.20	

Certificate of Analytical Results 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id:	**MW-3-W-171208**	Matrix:	Ground Water	Date Received:	12.08.17 16.52
Lab Sample Id:	570674-004	Date Collected:	12.07.17 14.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	12.12.17 08.00		
Seq Number:	3035737				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.00218**	0.00200	mg/L	12.12.17 17.50		1
Toluene	108-88-3	<0.000367	0.00200	mg/L	12.12.17 17.50	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	mg/L	12.12.17 17.50	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	mg/L	12.12.17 17.50	U	1
o-Xylene	95-47-6	<0.000642	0.00200	mg/L	12.12.17 17.50	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	mg/L	12.12.17 17.50	U	1
Total BTEX		**0.00218**	0.00200	mg/L	12.12.17 17.50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	80-120	12.12.17 17.50	
4-Bromofluorobenzene	460-00-4	118	%	80-120	12.12.17 17.50	

Certificate of Analytical Results 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id: **MW-5-W-171208** Matrix: Ground Water Date Received:12.08.17 16.52

Lab Sample Id: 570674-005 Date Collected: 12.07.17 14.40

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Tech: OJS % Moisture:

Analyst: OJS Date Prep: 12.11.17 13.30

Seq Number: 3036048

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**199**	2.50	mg/L	12.11.17 16.50		5

Analytical Method: TDS by SM2540C

Tech: LRI % Moisture:

Analyst: LRI

Seq Number: 3035579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	**839**	5.00	mg/L	12.11.17 11.00		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 12.11.17 16.00

Seq Number: 3035622

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<0.987	1.50	mg/L	12.12.17 01.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<0.912	1.50	mg/L	12.12.17 01.51	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<0.912	1.50	mg/L	12.12.17 01.51	U	1
Total TPH	PHC635	<0.912	1.50	mg/L	12.12.17 01.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	12.12.17 01.51	
o-Terphenyl	84-15-1	100	%	70-135	12.12.17 01.51	

Certificate of Analytical Results 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id:	**MW-5-W-171208**	Matrix:	Ground Water	Date Received:	12.08.17 16.52
Lab Sample Id:	570674-005	Date Collected:	12.07.17 14.40		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	12.12.17 08.00		
Seq Number:	3035737				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.00756**	0.00200	mg/L	12.12.17 10.19		1
Toluene	108-88-3	<0.000367	0.00200	mg/L	12.12.17 10.19	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	mg/L	12.12.17 10.19	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	mg/L	12.12.17 10.19	U	1
o-Xylene	95-47-6	<0.000642	0.00200	mg/L	12.12.17 10.19	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	mg/L	12.12.17 10.19	U	1
Total BTEX		**0.00756**	0.00200	mg/L	12.12.17 10.19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	80-120	12.12.17 10.19	
4-Bromofluorobenzene	460-00-4	94	%	80-120	12.12.17 10.19	

Certificate of Analytical Results 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id: **MW-5-WD-171208** Matrix: Ground Water Date Received:12.08.17 16.52

Lab Sample Id: 570674-006 Date Collected: 12.07.17 00.00

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Tech: OJS % Moisture:

Analyst: OJS Date Prep: 12.11.17 13.30

Seq Number: 3036048

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**201**	2.50	mg/L	12.11.17 16.56		5

Analytical Method: TDS by SM2540C

Tech: LRI % Moisture:

Analyst: LRI

Seq Number: 3035579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	**925**	5.00	mg/L	12.11.17 11.00		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 12.11.17 16.00

Seq Number: 3035622

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<0.986	1.50	mg/L	12.12.17 02.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<0.911	1.50	mg/L	12.12.17 02.11	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<0.911	1.50	mg/L	12.12.17 02.11	U	1
Total TPH	PHC635	<0.911	1.50	mg/L	12.12.17 02.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	12.12.17 02.11	
o-Terphenyl	84-15-1	99	%	70-135	12.12.17 02.11	

Certificate of Analytical Results 570674

GHD Services, INC- Midland, Midland, TX

CELMC LPU-96

Sample Id: **MW-5-WD-171208** Matrix: Ground Water Date Received:12.08.17 16.52

Lab Sample Id: 570674-006 Date Collected: 12.07.17 00.00

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

Tech: ALJ % Moisture:

Analyst: ALJ Date Prep: 12.12.17 08.00

Seq Number: 3035737

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.00374**	0.00200	mg/L	12.12.17 10.38		1
Toluene	108-88-3	<0.000367	0.00200	mg/L	12.12.17 10.38	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	mg/L	12.12.17 10.38	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	mg/L	12.12.17 10.38	U	1
o-Xylene	95-47-6	<0.000642	0.00200	mg/L	12.12.17 10.38	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	mg/L	12.12.17 10.38	U	1
Total BTEX		**0.00374**	0.00200	mg/L	12.12.17 10.38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	80-120	12.12.17 10.38	
4-Bromofluorobenzene	460-00-4	96	%	80-120	12.12.17 10.38	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

QC Summary 570674

GHD Services, INC- Midland

CELMC LPU-96

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 3036048 Matrix: Water Date Prep: 12.11.17
MB Sample Id: 7635782-1-BLK LCS Sample Id: 7635782-1-BKS LCSD Sample Id: 7635782-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0858	25.0	25.9	104	25.2	101	90-110	3	20	mg/L	12.11.17 14:28	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 3036048 Matrix: Water Date Prep: 12.11.17
Parent Sample Id: 570671-003 MS Sample Id: 570671-003 S MSD Sample Id: 570671-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	24.8	25.0	49.3	98	49.5	99	90-110	0	20	mg/L	12.11.17 14:45	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 3036048 Matrix: Ground Water Date Prep: 12.11.17
Parent Sample Id: 570674-002 MS Sample Id: 570674-002 S MSD Sample Id: 570674-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	138	125	269	105	272	107	90-110	1	20	mg/L	12.11.17 16:14	

Analytical Method: **TDS by SM2540C**
Seq Number: 3035579 Matrix: Water
MB Sample Id: 3035579-1-BLK LCS Sample Id: 3035579-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	994	99	80-120	mg/L	12.11.17 11:00	

Analytical Method: **TDS by SM2540C**
Seq Number: 3035579 Matrix: Ground Water
Parent Sample Id: 570674-001 MD Sample Id: 570674-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1450	1330	9	10	mg/L	12.11.17 11:00	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 570674

GHD Services, INC- Midland

CELMC LPU-96

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3035622 Matrix: Water Date Prep: 12.11.17
MB Sample Id: 7635800-1-BLK LCS Sample Id: 7635800-1-BKS LCSD Sample Id: 7635800-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<0.988	100	89.6	90	94.0	94	70-135	5	35	mg/L	12.11.17 23:10	
Diesel Range Organics (DRO)	<0.912	100	92.6	93	91.9	92	70-135	1	35	mg/L	12.11.17 23:10	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		86		88		70-135	%	12.11.17 23:10
o-Terphenyl	100		89		92		70-135	%	12.11.17 23:10

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3035622 Matrix: Ground Water Date Prep: 12.11.17
Parent Sample Id: 570674-001 MS Sample Id: 570674-001 S MSD Sample Id: 570674-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<0.986	99.9	97.6	98	83.8	84	70-135	15	35	mg/L	12.12.17 00:10	
Diesel Range Organics (DRO)	<0.911	99.9	102	102	85.7	86	70-135	17	35	mg/L	12.12.17 00:10	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		90		70-135	%	12.12.17 00:10
o-Terphenyl	114		97		70-135	%	12.12.17 00:10

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3035737 Matrix: Water Date Prep: 12.12.17
MB Sample Id: 7635900-1-BLK LCS Sample Id: 7635900-1-BKS LCSD Sample Id: 7635900-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000408	0.100	0.101	101	0.0904	90	70-125	11	25	mg/L	12.12.17 07:48	
Toluene	<0.000367	0.100	0.0877	88	0.0775	78	70-125	12	25	mg/L	12.12.17 07:48	
Ethylbenzene	<0.000657	0.100	0.0979	98	0.0865	87	71-129	12	25	mg/L	12.12.17 07:48	
m,p-Xylenes	<0.000630	0.200	0.198	99	0.173	87	70-131	13	25	mg/L	12.12.17 07:48	
o-Xylene	<0.000642	0.100	0.0937	94	0.0854	85	71-133	9	25	mg/L	12.12.17 07:48	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		82		100		80-120	%	12.12.17 07:48
4-Bromofluorobenzene	105		111		112		80-120	%	12.12.17 07:48

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 570674

GHD Services, INC- Midland

CELMC LPU-96

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3035737 Matrix: Ground Water Date Prep: 12.12.17

Parent Sample Id: 570674-001 MS Sample Id: 570674-001 S MSD Sample Id: 570674-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.0421	0.100	0.151	109	0.154	112	70-125	2	25	mg/L	12.12.17 08:25	
Toluene	<0.000367	0.100	0.0905	91	0.0868	87	70-125	4	25	mg/L	12.12.17 08:25	
Ethylbenzene	0.00222	0.100	0.103	101	0.0986	96	71-129	4	25	mg/L	12.12.17 08:25	
m,p-Xylenes	<0.000630	0.200	0.204	102	0.196	98	70-131	4	25	mg/L	12.12.17 08:25	
o-Xylene	<0.000642	0.100	0.0966	97	0.0927	93	71-133	4	25	mg/L	12.12.17 08:25	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		95		80-120	%	12.12.17 08:25
4-Bromofluorobenzene	112		112		80-120	%	12.12.17 08:25

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200)
Dallas Texas (214-902-0300)
Service Center - San Antonio, Texas (210-509-3334)
Odessa, Texas (432-563-1800)
Norcross, Georgia (770-449-8800)
Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)
www.xenco.com

Xenco Quote #
Xenco Job # 570674

Client / Reporting Information

Company Name / Branch: GHD-Midland
Company Address: 2135 S Loop 250 W, Midland, TX 79703
Email: christopher.knight@ghd.com
Phone No: 713-734-3090
Project Contact: Chris Knight
Samplers's Name: Matt Loughlin / Justin Nixon

Project Information

Project Name/Number: CEMC LPU-96
Project Location: Lovington, NM
Invoice To:
PO Number:

Matrix Codes

S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
W = Wipe
O = Oil
WW= Waste Water
A = Air

Analytical Information

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chloride	TDS	BTEX	TPH 8015	Field Comments
1	MW-1-W-171207	NA	12/7	1145	GW	6	X							X	X	X	X	X	
2	MW-2-W-171207	NA	12/7	1340	GW	6	X							X	1	1	3	2	1 Bottle=Chloride/TDS
3	MW-4-W-171207	NA	12/7	1505	GW	6	5							1	X	X	X	X	2 Bottle=TPH
4	mw-3-w-171208	—	12-8-17	900	Gw	6	X							X	X	X	X	X	3 Bottle=BTEX
5	mw-5-w-171208	—	12-8-17	1440	Gw	6	X							X	X	X	X	X	
6	mw-5-wd-171208	—	12-8-17	—	Gw	6	X							X	X	X	X	X	
7																			
8																			
9																			
10																			

Turnaround Time (Business days)

- ☐ Same Day TAT
- ☐ 5 Day TAT
- ☐ Next Day EMERGENCY
- ☐ 7 Day TAT
- ☐ 2 Day EMERGENCY
- ☒ Contract TAT
- ☐ 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- ☐ Level II Std QC
- ☐ Level III Std QC+ Forms
- ☐ Level 3 (CLP Forms)
- ☐ TRRP Checklist
- ☐ Level IV (Full Data Pkg /raw data)
- ☐ TRRP Level IV
- ☐ UST / RG -411

Notes:

Temp: 1.6 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.4

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		12-8-17 1700	1	2		2
3	Relinquished by:	Date Time:	Received By: 16:52	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice ☒ Cooler Temp. Thermo. Corr. Factor

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

Final 1.000

Page 21 of 22

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 12/08/2017 04:52:00 PM

Work Order #: 570674

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.4
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**No**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**No**
#18 Water VOC samples have zero headspace?	**Yes**

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

Analyst: ss

PH Device/Lot#: 213315

Checklist completed by: Shawnee Smith Date: 12/11/2017

Shawnee Smith

Checklist reviewed by: Mike Kimmel Date: 12/17/2017

Mike Kimmel

Appendix C
Waste Management Documentation

CHEVRON
MCBU

EMC on behalf of MCBU

NON-HAZARDOUS WASTE MANIFEST | NO. EMC 2226__ | 1. PAGE 1 OF 1 | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Chevron EMC PHONE NO.	32.874603, -103.295274 CITY Lea County STATE NM ZIP	6.

7. NAME OF DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a. Soil Cuttings and debris impacted w/ Crude Oil Non-Haz Non-Regulated	1	CM		Y	
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

24-HOUR EMERGENCY NO. 800-424-3700

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME Frank Forster | SIGNATURE | DATE

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME Sundance Services	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE 575-408-2606	EMERGENCY PHONE
18. TRANSPORTER (1): Acknowledgement of receipt of material	**18. TRANSPORTER (2):** Acknowledgement of receipt of material
PRINTED/TYPED NAME Roy Calde	PRINTED/TYPED NAME
SIGNATURE DATE 11-3-17	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO. NM-01-003	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

GENERATOR: COPY 1 DISPOSAL SITE: COPY 2 TRANSPORTERS: COPY 3

24-HOUR SERVICE

SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231 (575) 394-2511

PRC #1750108

036528

#43 NM 6292

AUTHORIZATION FOR WORK

DATE 11-3-17

YOUR NO. 786008

COMPANY Chevron

LEASE Lovington Paddock Unit #96

MAIL INVOICE TO: Chevron EHC

WELL Jason Michelson

DESCRIPTION OF WORK

Bin Pickup / Dispose + End Rental + Go Empty

cuttings from monitor well 32.874146, -103.294588

Equipment Used	NULL CH	@$	Hrs. worked	Total
Box Rent		@$	Hrs. worked	Total
Liner	✓	@$	Hrs. worked	Total
Jet Out	✓	@$	Hrs. worked	Total
Disposal	✓	@$	Hrs. worked	Total
Disposal Facility	551	@$	Hrs. worked	Total
Box No. Delivered		@$	Hrs. worked	Total
Box No. Picked Up		@$	Hrs. worked	Total

Driver Roy Calderon

Approved by

Sub Total

Sales Tax

TOTAL

Appendix D
2018 Work Plan

May 18, 2018 Reference No. 073816-1

Ms. Olivia Yu
Environmental Specialist
New Mexico Oil Conservation Division – District 1
1625 N. French Drive
Hobbs, New Mexico 88240

Re: 2018 Scope of Work
Lovington Paddock Unit 96 (RP-1665)
East Lea County, New Mexico

Dear Ms. Yu:

1. Project Information

The Site is located in Unit N, Section 3, Township 16 South, Range 37 East, approximately 5.0 miles southeast of Lovington, New Mexico, in eastern Lea County. The land surface is owned by the City of Lovington (COL). Chevron submitted a C-141 Form to the New Mexico Oil Conservation Division (NMOCD) dated November 19, 2007 reporting a release of 5 barrels of produced brine from a polyethylene flow line which occurred on November 16, 2007. The released brine had a chloride concentration of 35,300 parts per million (ppm) and impacted surface soil in an approximate 30-ft diameter area. Remediation permit (RP) 1665 was assigned to this release incident by the NMOCD Hobbs office.

Soil

Information available on the Petroleum Recovery Research Center (PRRC) Mapping Portal, current (GHD) managed groundwater site(s) data, and the United States Geological Survey (USGS) Current Water Database for the Nation indicate:

- The depth to groundwater from the deepest impacted soil at the Site is less than 50-feet.
- The nearest private domestic water source is greater than 200-feet from the release site.
- The nearest public/municipal water source is greater than 1,000-feet from the release site.
- The release site lies more than 1,000 horizontal feet from the nearest surface water body.

The NMOCD provides guidance for remediation of contaminants of oil field wastes or products in Guidelines for Remediation of Leaks, Spills, and Releases (August 13, 1993). Consequently, the NMOCD total ranking criteria score is twenty (20) for the Site. The site-specific RRALs applied to this location by the NMOCD are 10 milligrams per kilogram (mg/kg) for benzene; 50 mg/kg for total benzene, toluene, ethylbenzene, and xylenes (BTEX); 100 mg/kg for total petroleum hydrocarbons (TPH); and an NMOCD accepted 600 mg/kg for horizontal and 250 mg/kg for vertical delineation of chlorides.

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In an August 28, 2017 telephone conversation between Bernard Bockisch (GHD) and Jim Griswold (NMOCD Environmental Bureau Chief), GHD was informed that the NMOCD is accepting chloride concentrations of 600 mg/kg for the horizontal delineation assessment clean up levels.

Groundwater

The NMOCD provides guidance for remediation of contaminants of oil field wastes or products in Guidelines for Remediation of Leaks, Spills, and Releases (August 13, 1993). The guidance requires remediation of groundwater to the human health standards of the NMWQCC set forth in New Mexico Administrative Code 20.6.2.3103. Standards for BTEX and chloride are listed below.

Analyte	NMWQCC Groundwater Standard (mg/L)
Benzene	0.01
Toluene	0.75
Ethylbenzene	0.75
Total Xylenes	0.62
Chloride	250

NMWQCC groundwater standards do not include TPH.

Analytical results of surface soil samples collected by Tetra Tech at two locations on July 15, 2010 indicated no concentrations of TPH, BTEX, or chloride above laboratory detection limits. Results of trench samples collected at 1 to 2 feet bgs from the same two locations on August 18, 2010 also indicated no detections of chloride.

From November 11 to 19, 2013, approximately 248 cubic yards of impacted soils were excavated from the impacted area and confirmatory soil samples were collected from eight locations. Analytical results from seven locations indicated exceedances of the RRALs for BTEX, TPH and/or chlorides.

On September 3 and 4, 2014, five soil borings (B-1 through B-5) were advanced outside of the former excavation area to depths ranging from 30 to 80 feet bgs. Soil analytical results for benzene and total BTEX in all borings were below the RRALs (10 and 50 milligrams per kilogram [mg/kg], respectively). TPH exceedances of the RRAL (100 mg/kg) extended to depths ranging from 5 to 10 feet bgs in two borings (B-1 and B-5, respectively), but were not detected at 40 feet bgs. Chloride exceeded the RRAL in soil samples extending down to at least 40 feet bgs in borings B-4 and B-5, and to at least 80 feet bgs in boring B-1. As such, the vertical extent of chloride impact was not confirmed and impact to groundwater was suspected.

Monitoring well MW-1 was installed adjacent to soil boring B-1 and sampled in October 2016. Detected constituents in groundwater consisted of benzene and chloride. Benzene was detected at a concentration of 0.00489 milligrams per liter (mg/L) which is below the 0.01 mg/L NMWQCC standard for benzene. Chloride was detected at a concentration of 772 mg/L which exceeds the 250 mg/L NMWQCC standard for chloride.

Additional delineation activities were completed in 2017 that included the advancement of five (5) soil borings (SB-6 through SB-10) to 90 feet bgs. Four (4) additional monitoring wells (MW-2 through MW-5)

were also installed to further assess groundwater. The analytical data obtained from the assessment and delineation activities performed in 2017 indicates that vertical and horizontal extent of TPH, BTEX, and chloride impacts in soil and groundwater are not delineated.

2. 2018 Scope of Work

On February 13, 2018, GHD and Chevron representatives met with NMOCD and New Mexico State Land Office (NMSLO) to discuss further delineation activities addressing the presence of TPH, BTEX, and chloride concentrations at the Site. Recommended additional assessment activities are detailed below.

2.1 Monitoring Well Installation Activities

GHD is proposing the installation of six soil borings that will be completed as 4-inch diameter monitoring wells (MW-6 through MW-11) to further screen soil and groundwater for BTEX, TPH, and chloride impact (see Figure 1). GHD will prepare a permit application and associated fees for the required New Mexico Office of the State Engineer (NMOSE) monitoring well permits and application for easement from the City of Lovington.

Prior to mobilizing drilling equipment to the Site, a utility notification will be made at least 48-hours prior to mobilization. GHD will coordinate all field work with CEMC and the Lovington Field Management Team (FMT). In addition to the utility locate, a geophysical survey will be completed for each of the proposed monitoring well locations. Following all utility clearance activities, a Chevron Dig Plan will be prepared and approved by Chevron prior to performing any drilling activities.

A hydroexcavator or similar borehole clearance equipment will be used to clear the boring locations with a diameter at least 2 inches greater than the size of the largest drilling tool. The monitoring well locations will be cleared to 5-feet bgs or refusal. Initially, each monitoring well will be drilled with an air/mud rotary drill rig. The rig will be operated by a New Mexico licensed water well driller.

Six monitoring wells will be installed extending approximately 20 feet below the groundwater table (encountered ranging from 98 to 99 feet bgs during 2017 assessment activities). The total depth of the monitoring wells are estimated at approximately 120 feet bgs based on the existing monitoring wells at the Site (MW-1 through MW-5).

A GHD geologist will record the subsurface lithology and any sample data on the well construction diagram/soil boring logs. Soil samples will be collected at 10 foot intervals. Soil samples will be field screened for chloride concentrations using Hach Chloride Titration strips and evaluated by the field geologist during the sampling event. Soils will also be field screened for organic vapors using a calibrated photoionization detector (PID).

Selected soil samples will be submitted for analysis of BTEX by EPA Method SW 8260B, chlorides by EPA Method 300, and TPH by EPA Method SW8015 Modified. The nature of any sampling of soils will be based on results of the chloride and PID field screening and the professional judgment of the GHD geologist with the intent to establish the depth at which soil concentrations are below the Site RRAL's. Soil

sampling will be completed in accordance with our standard Quality Assurance/ Quality Control (QA/QC) procedures designed to minimize cross-contamination between samples and to provide reliable laboratory results. The total depth and construction of the wells and nature of any soil sampling will be based on the professional judgment of the GHD geologist in coordination with CEMC personnel.

The newly installed monitoring wells will be surveyed by a State licensed surveyor. The ground surface elevation of each soil boring, including the top of casing and top of pad elevations from the monitoring wells, will be determined to the nearest hundredth of a foot.

2.2 2018 Groundwater Monitoring Activities

Following installation and development of the six new monitoring wells, all site monitoring wells (total of 11 monitoring wells) will be sampled. Prior to purging and sampling, static fluid levels will be measured with an electric interface probe to the nearest hundredth of a foot. After recording fluid levels, monitoring wells will be profiled using a conductivity meter. Subsequent to well gauging, the monitoring wells will be purged using EPA-approved low-flow methodology.

Groundwater samples will be placed on ice in insulated coolers and chilled to a temperature of approximately 4°C (40°F). The coolers will then be sealed for shipment and proper chain-of-custody documentation will accompany the samples for analysis of BTEX by EPA Method 8021B, TPH diesel range organics (DRO)/gasoline range organics (GRO) by Method SW8015B, chlorides by EPA Method 300/300.1, and total dissolved solids (TDS) by Method SM2540C.

2.3 Reporting

Following completion of the field activities detailed above, a report summarizing the results of the additional assessment will be prepared for submittal to the NMOCD. The report will include a Site description, project history, description of field events, a discussion of results, and recommendations (if any). Groundwater gauging data will be tabulated and a gradient map will be prepared and included in this report. Soil and groundwater analytical results collected will be tabulated in data tables and presented graphically using concentration maps. Monitoring well construction logs for MW-6 through MW-11 will also be completed.

If you have any questions, please contact us at 713-734-3090.

Sincerely,

GHD

Scott Foord, P.G.
Project Manager

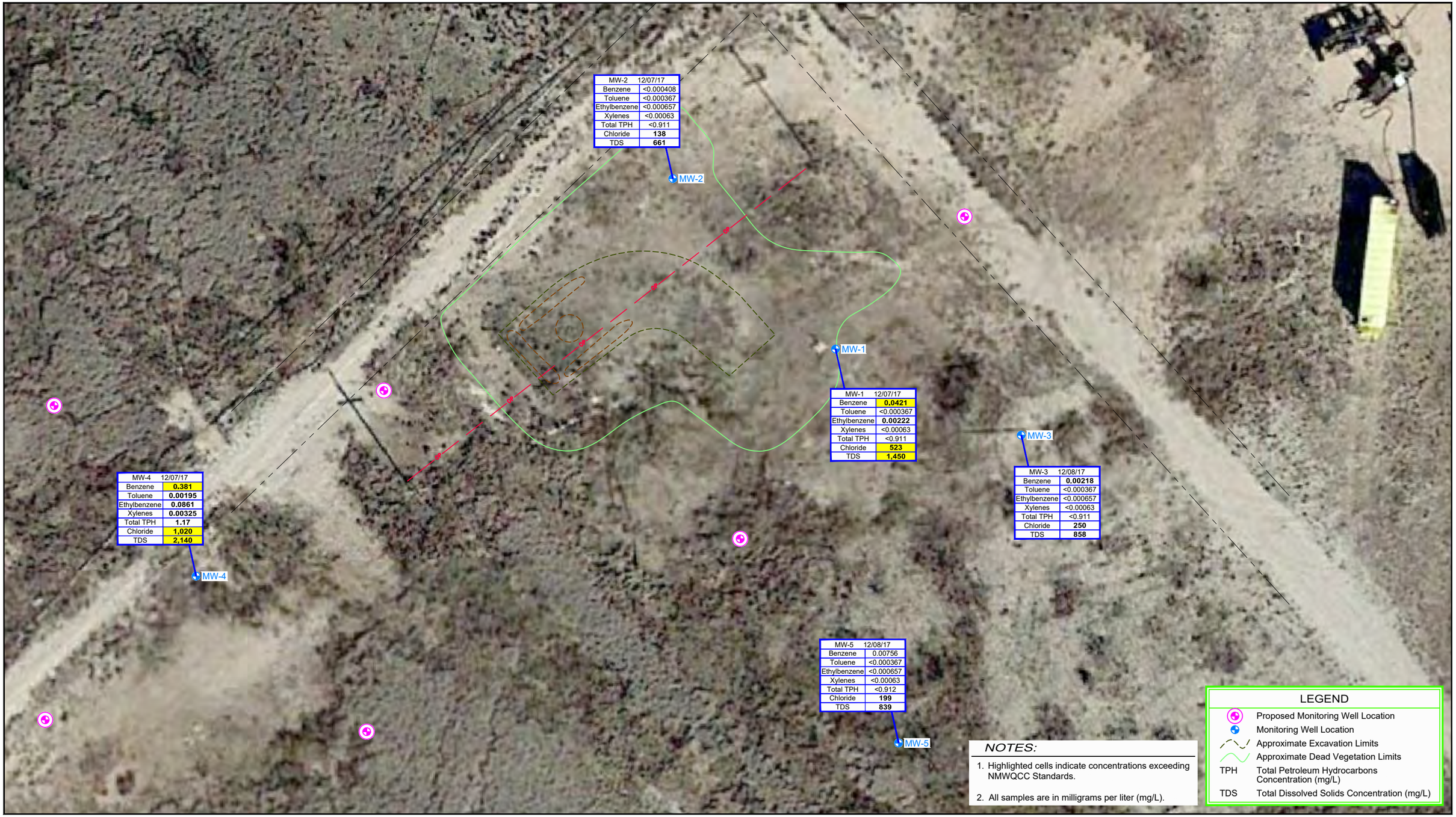
Raaj Patel, P.G.
Program Manager

SF/ag/1

Encl.

Attachment: Figure 1 – Proposed Monitoring Well Locations

Figure



Source: USGS 7.5 Minute Quad "Lovington SE and Lovington, New Mexico"

Lat/Long: 32.874112° North, 103.295337° West

0 ## ####

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

Sample ID	MW-1	12/07/17	Sample Depth
Constituent	Benzene	**0.0421**	
	Toluene	<0.000367	
	Ethylbenzene	**0.00222**	Result (mg/L)
	Xylenes	<0.00063	
	Total TPH	<0.911	
	Chloride	**523**	Yellow shade and Bold Indicate Exceedance
	TDS	**1,450**	

GHD

CEMC
LEA COUNTY, NEW MEXICO
LOVINGTON PADDOCK UNIT 96

073816-00

Feb 21, 2018

PROPOSED MONITORING WELL LOCATION MAP

FIGURE 1

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