Kegan W. Boyer, P.G.
Project Manager

Upstream Business Unit
Environmental Management Company
1400 Smith Street
Room 07076
Houston, Texas 77002
Tel 713-372-7705
kegan.boyer@chevron.com

June 6, 2016

Mr. Jamie Keyes
Environmental Specialist, District 1
Oil Conservation Division, EMNRD
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Soil Sampling Summary Report and Path Forward Workplan
Howse 1 (API 30-025-36226)

Mr. Keyes,

Chevron Environmental Management Company (CEMC) is submitting the attached report entitled: *Soil Assessment Summary Report, Howse #1 (API #30-025-36226), Section 17, Township 20-S, Range 39-E, Latitude N 32.571190°, Longitude W -103.075300°, Lea County, New Mexico* dated June 9, 2016.

This report documents the results of the initial site assessment activities performed at the former tank battery location associated with the plugged Howse 1 well location (API 30-025-36226). This report was prepared for CEMC by GHD Services, Inc. (GHD).

This report also includes a description of the path forward workplan for additional sampling activities to complete vertical delineation of the identified chloride impacts. A C-141 Release Notification and Corrective Action Form is also included as Attachment B of this report.

I anticipate that the additional sampling activities outlined in this document will be completed by a GHD and subcontractor crew during the week of June 20, 2016. Contingent on the results of the additional sampling activities, the proposed remediation plan will be implemented. CEMC will contact you in advance of implementing any remedial actions.

Should you have any questions regarding the content of the report or the proposed actions, please do not hesitate to contact me by phone at 713-372-7705 or via e-mail at kegan.boyer@chevron.com.

Sincerely,

Kegan W. Boyer, P.G.
Environmental Project Manager

encl: *Howse 1 Initial Investigation*
cc: Bernie Bockisch, GHD
Leslie Lehrman, GHD

June 9, 2016 Reference No. 11121230(2)

Mr. Kegan Boyer
Chevron Environmental Management Company
1400 Smith Street, Room 07086
Houston, Texas 77002

Re: Soil Assessment Summary Report
Howse #1 (API #30-025-36226)
Section 17, Township 20-S, Range 39-E
Latitude N 32.571190°, Longitude W -103.075300°
Lea County, New Mexico

Dear Mr. Boyer:

GHD Services, Inc. (GHD) is pleased to submit this report to Chevron Environmental Management Company (CEMC) summarizing soil assessment activities conducted April 25th through the 28th for the above referenced site (Site). The Howse #1 site is located 11 miles northeast of Jal in Lea County, New Mexico (Figure 1) within the House (San Andres) Oil Field.

1. Introduction

The Site is a former oil production and salt water disposal well site that formerly contained a tank battery and flare. During decommissioning and demolition activities conducted in March 2016, soils beneath the tank battery location were removed to a depth of 1 to 3 feet below ground surface (bgs) in an approximately 50 feet (ft) x 120 ft area. Three soil samples were collected from three 3 ft x 6 ft x 10 ft test pits located in the center of the excavation area beneath the former tank battery location. Analytical results from the three samples indicated chloride concentrations above New Mexico Oil Conservation Division (NMOCD) Recommended Remedial Action Limits (RRALs). The specific location and depth of these samples, however, was unknown.

Soil assessment activities described in this report were conducted to determine the horizontal and vertical extent of chloride concentrations above NMOCD RRALs in soils on-site. All activities performed were conducted in accordance with the Initial Site Assessment Work Plan submitted to the NMOCD on April 13, 2016.

There are relatively few groundwater wells in the area of the Site with which to obtain a depth to groundwater. No wells were identified within the vicinity of the site using the NMOCD GIS Oil and Gas Map. The United States Geological Survey (USGS) database was also reviewed for current groundwater data. The USGS database indicated the presence of two well located in the vicinity of the

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Site. The closest well (Well number 323405103044501), was located approximately 0.70 miles southwest of the Site. The depth to groundwater in this well was 46.37 ft bgs as of January 7, 2016. The depth to groundwater in the second well (well number 323555103053201), was 80.18 ft bgs as of February 3, 2016. This well was located approximately 2.4 miles north of the site. An extrapolation of these well depths would indicate that the depth to groundwater at the site would be approximately 55 ft bgs.

There do not appear to be any well head protection areas and no surface water bodies within 200 to 1,000 ft of the Site. Therefore, the preliminary total ranking score for the Site is 10 (see table below).

Based on this score, the applicable NMOCD Site-specific Recommended Remediation Action Limits (RRALs) are 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total benzene, toluene, ethylbenzene, and xylenes (BTEX), 1000 mg/kg for total petroleum hydrocarbons (TPH), and 500 mg/kg for chlorides.

New Mexico Oil Conservation Division Site Assessment	
Ranking Criteria	Score
Depth to Ground Water (> 100 ft bgs)	10
Wellhead Protection Area (> 1000 ft from water source, > 200 ft from domestic source)	0
Distance to Surface Body Water (200-1000 ft)	0
Ranking Criteria Total Score	**10***
*Because the ranking criteria total score is 10, NMOCD established RRALs are 10 mg/kg for benzene, 50 mg/kg for total BTEX, 1,000 mg/kg for TPH[1], and 250 mg/kg for chlorides.	

1. NMOCD Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993

2. April 2016 Soil Assessment Activities

Field activities occurred April 25th through the 28th, 2016. Prior to mobilization, a New Mexico 811 utility locate was completed 48 hours prior to conducting any intrusive activities. On April 25th 2016, GHD personnel mobilized to the site to conduct a Utility Clearance Survey within the planned excavation areas. As an additional precaution, an air knifing crew was also utilized to clear each planned soil sample location.

Sampling activities were initiated on April 26th once all planned sampling locations had been cleared to the greatest extent possible. A backhoe was utilized to collect the soil samples from each location. Collected soils were field screened for chloride by mixing the soil sample with de-ionized water. The rinsate was then analyzed using Hach chloride test strips. Soils were also field screened for organic vapors using a calibrated Petroflag total petroleum hydrocarbon (TPH) Analyzer. If a soil sample indicated the presence of chloride or TPH based on field screening, a second “step-out” sample was then collected approximately 15 feet away from the original location and screened.

Field screened samples that indicated that soils were below the RRALs were placed in laboratory-supplied containers, recorded on a chain of custody form and placed on ice in a cooler to maintain a temperature of 40°F (4°C) or lower. Soil samples were submitted to Xenco Laboratories (Xenco) in

Midland, Texas for analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, gasoline and diesel range organics (GRO/DRO) TPH by EPA Method 8015B, and chloride by EPA Method 300.0.

2.1 Analytical Results

A total of fourteen samples were collected from the former tank battery area and analyzed for BTEX, TPH GRO/DRO and chloride. BTEX and TPH were not detected in any samples. Chloride exceeded the RRAL of 250 mg/kg in five soil samples (#1, #5, #8, #10 and #11) at depths ranging from 4 feet to 12 feet bgs. Soil sample locations are included on Figure 2.

Soil analytical results are summarized on Table 1. A copy of the analytical data and chain of custody documentation is included as Attachment A.

3. Summary and Recommendations

As chloride concentrations in soil exceeded the NMOCD RRAL of 250 mg/kg, a Form C-141 has been prepared in accordance with New Mexico Administrative Code 19.15.29. A copy of Form C-141 is included as Attachment B.

Based on the results of the first phase of assessment GHD recommends the following:

- Install two soil borings to a maximum depth of 50 feet bgs, as part of Phase Two activities to achieve vertical delineation of the identified chloride impacts. These borings will be installed near locations with the highest chloride concentrations in soil. Soil samples will be collected for field screening starting at 10 feet bgs and every 5 feet thereafter. As BTEX and TPH GRO/DRO were not detected during Phase One sampling, samples will only be analyzed for chlorides. More detailed information on the planned soil boring scope of work is included in the April 13, 2016 Work Plan previously submitted to the NMOCD. Please see Figure 3 for the proposed soil boring locations.
- Contingent on the analytical results of the soil samples collected from the two proposed vertical delineation borings, excavate soils within the limits of the former tank battery pad and additional areas to the northwest and southeast of the pad, to 4 feet bgs and transport to an off-site facility for disposal. Please see Figure 3 for the proposed excavation limits.
- Place a 20 mil polyethylene liner in the bottom of the excavation indicated at a depth of 4 ft bgs.
- Backfill the excavation with clean fill material and wheel compact to grade.
- Fertilize and reseed the disturbed area with a BLM-approved seed mix.

Upon completion of the field program a summary report will be prepared and submitted to CEMC. The report will summarize the results of the field program and will include a sample location map, tabulation of the soil analytical results, geotagged photographic documentation, and boring logs. The report will also include conclusions and future recommendations. ‘No Further Action’ will be recommended for the site if supported by the data.

Should you have any questions, or require additional information regarding this submittal, please feel free to contact Bernie Bockisch at (505) 884-0672.

Sincerely,

GHD

Leslie Lehrman
Project Manager

Bernard Bockisch, PMP
Senior Project Manager

LL/ag/2

Attachments:

Table 1 – Soil Analytical Data Summary BTEX/TPH/Chlorides

Figure 1 – Site Location Map

Figure 2 – Soil Assessment Analytical Results Map

Figure 3 – Proposed Soil Boring and Excavation Limits

Attachment A – Analytical Data Report and Chain of Custody Documentation

Attachment B – Form C-141

Tables

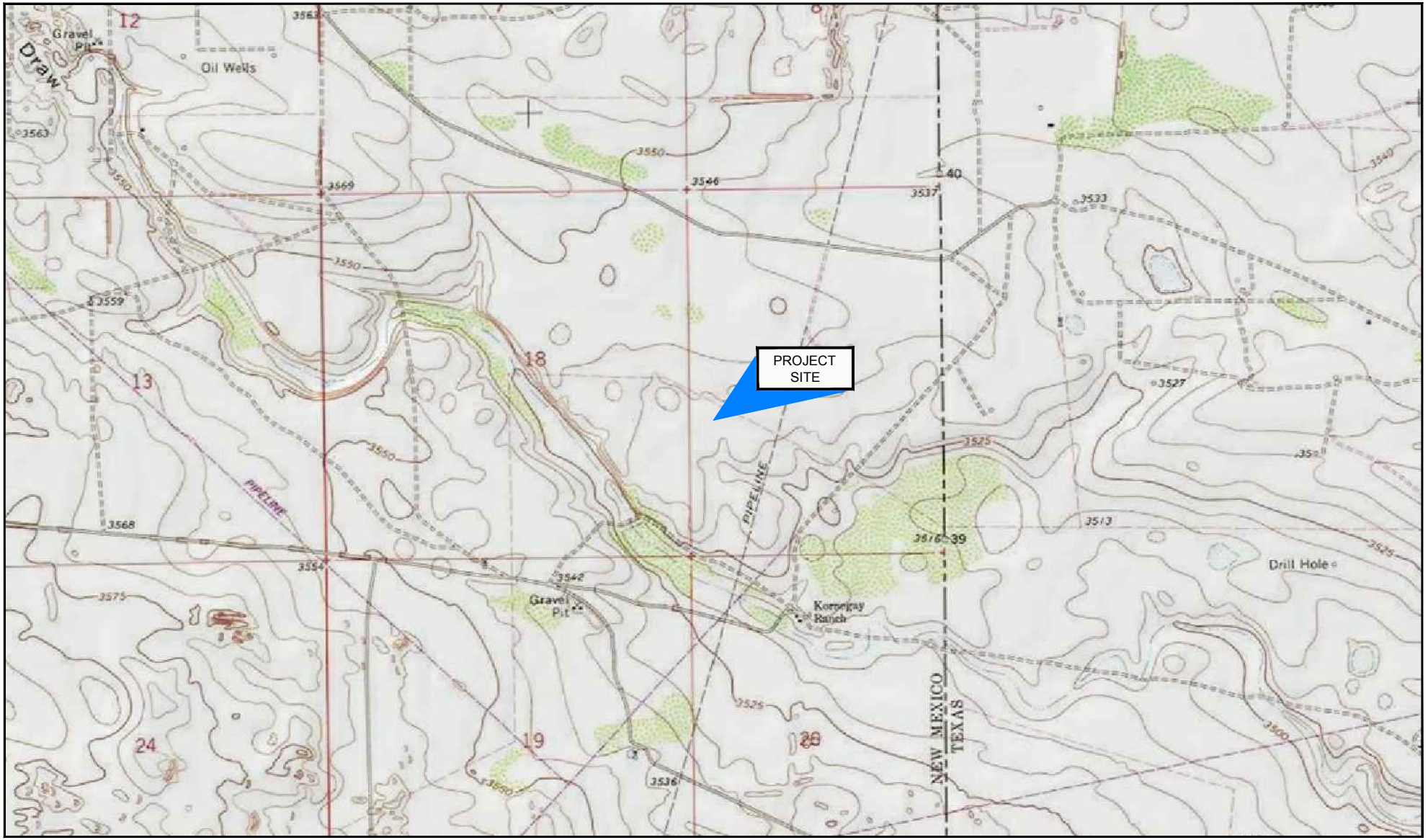
TABLE 1
SOIL ANALYTICAL RESULTS SUMMARY - BTEX/TPH GRO/DRO/CHLORIDE
HOWSE #1
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LEA COUNTY, NEW MEXICO

Sample Location:			***#1***	***#1A***	***#2***	***#3***	***#4***	***#5***	***#5A***	***#6***	***#6A***	***#7***	***#8***
Sample ID:			***# 1-S-10.5-160426***	***# 1A-S-4-160427***	***# 2-S-4-160426***	***# 3-S-4-160426***	***# 4-S-4-160426***	***# 5-S-12-160427***	***# 5A-S-9-160427***	***# 6-S-12-160427***	***# 6A-S-4-160427***	***# 7-S-4-160426***	***# 8-S-4-160426***
Sample Date:			***4/26/2016***	***4/27/2016***	***4/26/2016***	***4/26/2016***	***4/26/2016***	***4/27/2016***	***4/27/2016***	***4/27/2016***	***4/27/2016***	***4/26/2016***	***4/26/2016***
Sample Depth:			***10.5 ft BGS***	***4 ft BGS***	***4 ft BGS***	***4 ft BGS***	***4 ft BGS***	***12 ft BGS***	***9 ft BGS***	***12 ft BGS***	***4 ft BGS***	***4 ft BGS***	***4 ft BGS***
Parameters	***Units***	***Limit***											
Petrl Prod													
Total Petroleum Hydrocarbons (C6-C10)	mg/kg	--	<10.8	<10.2	<10.5	<10.3	<10.3	<11.5	<10.6	<10.9	<10.8	<11.1	<11.2
Total Petroleum Hydrocarbons (C10-C28)	mg/kg	--	<10.8	<10.2	<10.5	<10.3	<10.3	<11.5	<10.6	<10.9	<10.8	<11.1	<11.2
Total Petroleum Hydrocarbons (C6-C35)	mg/kg	100	<10.8	<10.2	<10.5	<10.3	<10.3	<11.5	<10.6	<10.9	<10.8	<11.1	<11.2
VOAs													
Benzene	mg/kg	10	<0.000368	<0.000344	<0.000354	<0.000350	<0.000347	<0.000390	<0.000360	<0.000370	<0.000365	<0.000374	<0.000379
Toluene	mg/kg	--	<0.00110	<0.00103	<0.00106	<0.00104	<0.00103	<0.00116	<0.00107	<0.00110	<0.00109	<0.00111	<0.00113
Ethylbenzene	mg/kg	--	<0.000537	<0.000503	<0.000518	<0.000512	<0.000507	<0.000571	<0.000527	<0.000541	<0.000534	<0.000546	<0.000554
Xylenes (total)	mg/kg	--	<0.000927	<0.000867	<0.000893	<0.000883	<0.000874	<0.000984	<0.000908	<0.000933	<0.000920	<0.000942	<0.000956
Total BTEX	mg/kg	50	<0.000368	<0.000344	<0.000354	<0.000350	<0.000347	<0.000390	<0.000360	<0.000370	<0.000365	<0.000374	<0.000379
Wet													
Chloride	mg/kg	250	**1660**	200	61.4	43.6	109	**620**	185	211	52.9	130	**278**
Moisture	%	--	8.96	3.24	6.12	4.49	3.99	14.2	6.89	9.59	8.28	10.8	11.7

TABLE 1
SOIL ANALYTICAL RESULTS SUMMARY - BTEX/TPH GRO/DRO/CHLORIDE
HOWSE #1
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LEA COUNTY, NEW MEXICO

Sample Location:		***#9***	***#10***	***#11***
Sample ID:		***# 9-S-12-160427***	***# 10-S-12-160427***	***# 11-S-12-160427***
Sample Date:		***4/27/2016***	***4/27/2016***	***4/27/2016***
Sample Depth:		***12 ft BGS***	***12 ft BGS***	***12 ft BGS***
Parameters	***Units***			
Petrl Prod				
Total Petroleum Hydrocarbons (C6-C10)	mg/kg	<10.9	<11.3	<10.9
Total Petroleum Hydrocarbons (C10-C28)	mg/kg	<10.9	<11.3	<10.9
Total Petroleum Hydrocarbons (C6-C35)	mg/kg	<10.9	<11.3	<10.9
VOAs				
Benzene	mg/kg	<0.000369	<0.000383	<0.000371
Toluene	mg/kg	<0.00110	<0.00114	<0.00111
Ethylbenzene	mg/kg	<0.000540	<0.000559	<0.000542
Xylenes (total)	mg/kg	<0.000930	<0.000965	<0.000935
Total BTEX	mg/kg	<0.000369	<0.000383	<0.000371
Wet				
Chloride	mg/kg	124	**274**	**770**
Moisture	%	9.86	12.9	9.78

Figures



Source: USGS 7.5 Minute Quad "Hobbs SE, New Mexico"

Lat/Long: 32.57119° North, 103.07530° West

0 1000 2000ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LEA COUNTY, NEW MEXICO
HOWSE #1

11121230-00

May 12, 2016

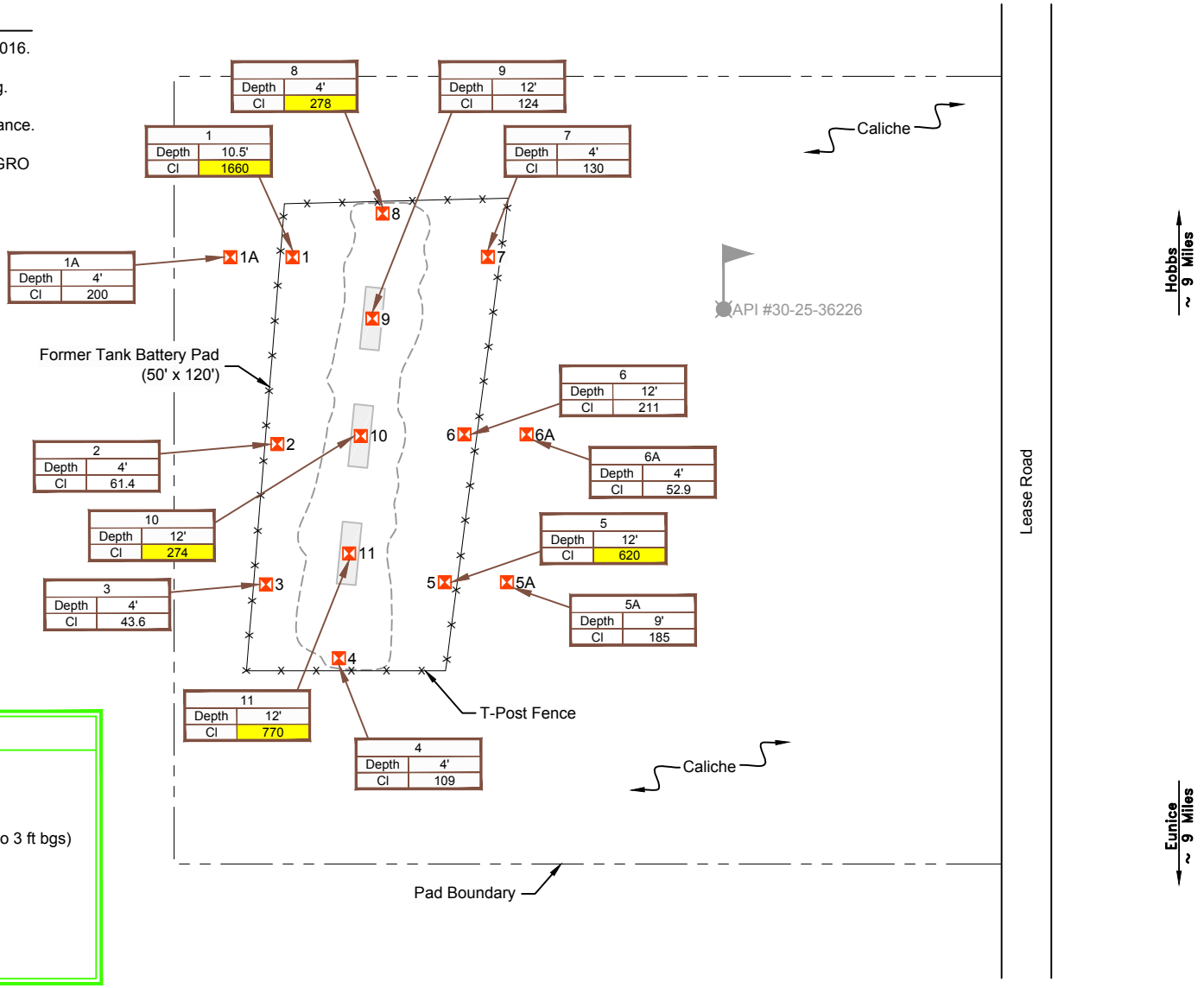
SITE LOCATION MAP

FIGURE 1

CAD File: I:\CAD\Files\Eight Digit Job Numbers\1112----\11121230-CEMC-Eunice Nadine\11121230-00(002)GN-DL001.dwg

NOTES:

1. Soil samples were collected on April 26 and 27, 2016.
2. The New Mexico RRAL for chlorides is 250 mg/kg.
3. Shaded cells indicate New Mexico RRAL exceedance.
4. All samples were non-detect for BTEX and TPH GRO and DRO.



LEGEND

	Soil Sample Location
	Test Pits - March 2016
	Plugged Well Marker
	Initial Excavation Limits - March 2016 (1 to 3 ft bgs)
	Approximate Pad Boundary
	Fence Line
Depth	Depth of Sample (ft bgs)
Cl	Chlorides Concentration (mg/kg)
bgs	Below Ground Surface

0 20 40ft

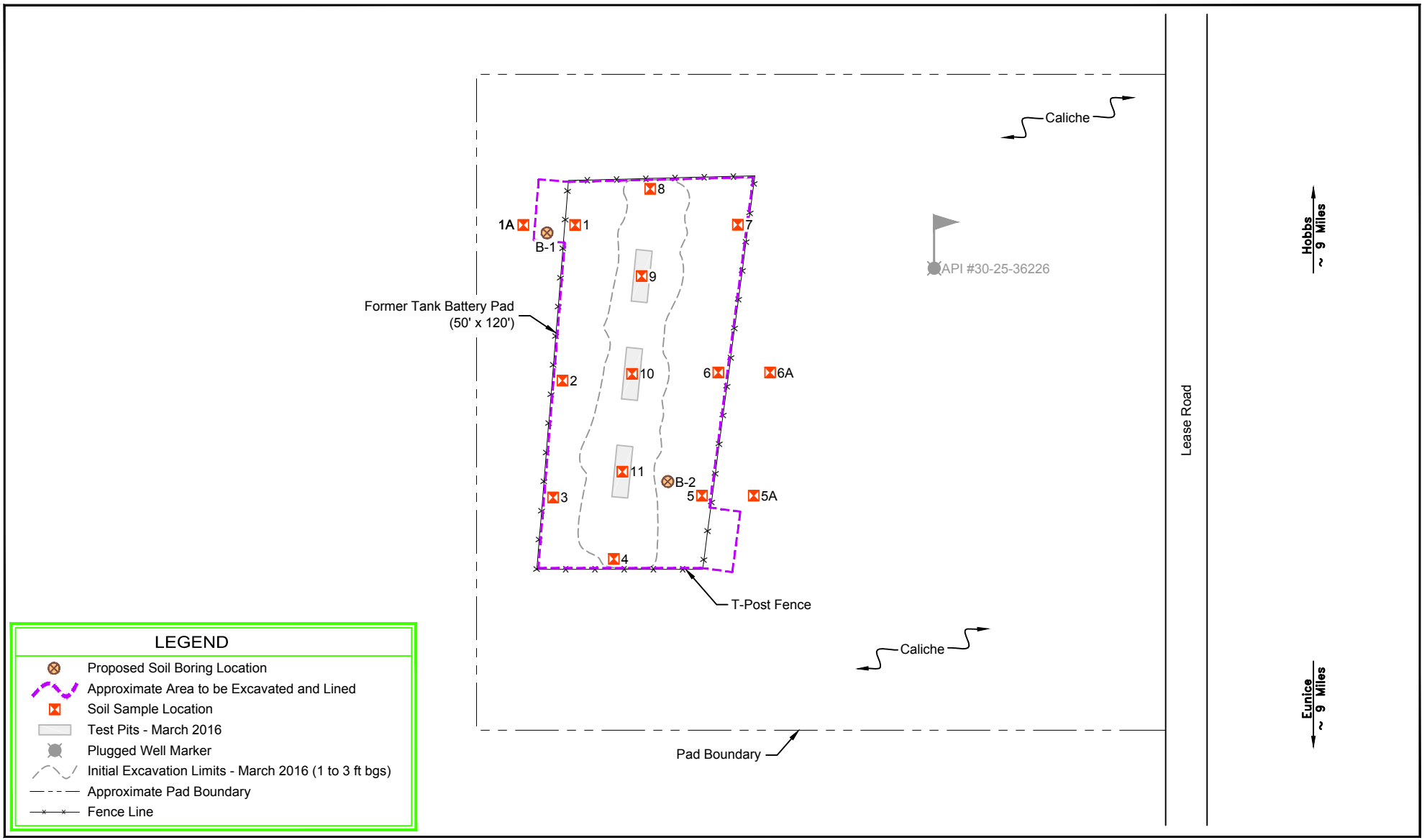
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LEA COUNTY, NEW MEXICO
HOWSE #1

11121230-00
May 17, 2016

SOIL ASSESSMENT ANALYTICAL RESULTS MAP

FIGURE 2

CAD File: I:\CAD\Files\Eight Digit Job Numbers\1112----\11121230-CEMC-Eunice Nadine\11121230-00(002)GN-DL001.dwg



0 20 40ft

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LEA COUNTY, NEW MEXICO
HOWSE #1

11121230-00
May 16, 2016

PROPOSED SOIL BORINGS AND EXCAVATION LIMITS

FIGURE 3

CAD File: I:\CAD\Files\Eight Digit Job Numbers\1112----\11121230-CEMC-Eunice Nadine\11121230-00(002)GN-DL001.dwg

Attachments

Attachment A
Analytical Data Report and Chain of Custody Documentation

Analytical Report 529282

for

GHD Services, INC- Midland

Project Manager: Bernie Bockisch

House # 1

11121230

06-MAY-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534-15-1)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)

06-MAY-16

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

Reference: XENCO Report No(s): **529282**
House # 1
Project Address: Eunice, New Mexico

Bernie Bockisch:

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) 529282. 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. 529282 will be filed for 60 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,

Kelsey Brooks
Project Manager

Sample Cross Reference 529282

GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
# 1-S-10.5-160426	S	04-26-16 14:30	- 10.5 ft	529282-001
# 2-S-4-160426	S	04-26-16 10:30	- 4 ft	529282-002
# 3-S-4-160426	S	04-26-16 12:30	- 4 ft	529282-003
# 4-S-4-160426	S	04-26-16 13:45	- 4 ft	529282-004
# 7-S-4-160426	S	04-26-16 16:20	- 4 ft	529282-005
# 8-S-4-160426	S	04-26-16 17:00	- 4 ft	529282-006
# 11-S-12-160427	S	04-27-16 09:00	- 12 ft	529282-007
# 10-S-12-160427	S	04-27-16 09:45	- 12 ft	529282-008
# 9-S-12-160427	S	04-27-16 10:30	- 12 ft	529282-009
# 5-S-12-160427	S	04-27-16 10:50	- 12 ft	529282-010
# 6-S-12-160427	S	04-27-16 11:35	- 12 ft	529282-011
# 5A-S-9-160427	S	04-27-16 14:05	- 9 ft	529282-012
# 6A-S-4-160427	S	04-27-16 14:40	- 4 ft	529282-013
# 1A-S-4-160427	S	04-27-16 16:15	- 4 ft	529282-014
Trip Blank	W	04-27-16 00:00	ft	529282-015

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-993617 BTEX by EPA 8021B
Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.

Certificate of Analytical Results 529282

GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 1-S-10.5-160426**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-001	Date Collected:	04.26.16 14.30	Sample Depth:	10.5 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	8.96
Analyst:	DEP	Date Prep:	05.03.16 10.21	Basis:	Dry Weight
Seq Number:	993650			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1660**	108	mg/kg	05.03.16 22.05		10

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	8.96
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	16.4	mg/kg	04.30.16 21.08	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	16.4	mg/kg	04.30.16 21.08	U	1
Total TPH	PHC635	ND	16.4	mg/kg	04.30.16 21.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	04.30.16 21.08	
o-Terphenyl	84-15-1	97	%	70-135	04.30.16 21.08	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	8.96
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00164	mg/kg	05.02.16 16.10	U	1
Toluene	108-88-3	ND	0.00219	mg/kg	05.02.16 16.10	U	1
Ethylbenzene	100-41-4	ND	0.00219	mg/kg	05.02.16 16.10	U	1
m,p-Xylenes	179601-23-1	ND	0.00219	mg/kg	05.02.16 16.10	U	1
o-Xylene	95-47-6	ND	0.00329	mg/kg	05.02.16 16.10	U	1
Total Xylenes	1330-20-7	ND	0.00219	mg/kg	05.02.16 16.10	U	1
Total BTEX		ND	0.00164	mg/kg	05.02.16 16.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	80-120	05.02.16 16.10	
4-Bromofluorobenzene	460-00-4	108	%	80-120	05.02.16 16.10	

Certificate of Analytical Results 529282

GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 2-S-4-160426**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-002	Date Collected:	04.26.16 10.30	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	6.12
Analyst:	DEP	Date Prep:	05.03.16 10.21	Basis:	Dry Weight
Seq Number:	993650			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**61.4**	10.7	mg/kg	05.03.16 22.20		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	6.12
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	16.0	mg/kg	04.30.16 21.31	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	16.0	mg/kg	04.30.16 21.31	U	1
Total TPH	PHC635	ND	16.0	mg/kg	04.30.16 21.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	04.30.16 21.31	
o-Terphenyl	84-15-1	82	%	70-135	04.30.16 21.31	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	6.12
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00159	mg/kg	05.02.16 16.26	U	1
Toluene	108-88-3	ND	0.00211	mg/kg	05.02.16 16.26	U	1
Ethylbenzene	100-41-4	ND	0.00211	mg/kg	05.02.16 16.26	U	1
m,p-Xylenes	179601-23-1	ND	0.00211	mg/kg	05.02.16 16.26	U	1
o-Xylene	95-47-6	ND	0.00317	mg/kg	05.02.16 16.26	U	1
Total Xylenes	1330-20-7	ND	0.00211	mg/kg	05.02.16 16.26	U	1
Total BTEX		ND	0.00159	mg/kg	05.02.16 16.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	80-120	05.02.16 16.26	
1,4-Difluorobenzene	540-36-3	114	%	80-120	05.02.16 16.26	

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GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 3-S-4-160426**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-003	Date Collected:	04.26.16 12.30	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	4.49
Analyst:	DEP	Date Prep:	05.03.16 10.21	Basis:	Dry Weight
Seq Number:	993650			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.6**	10.3	mg/kg	05.03.16 22.36		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	4.49
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.7	mg/kg	04.30.16 21.54	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.7	mg/kg	04.30.16 21.54	U	1
Total TPH	PHC635	ND	15.7	mg/kg	04.30.16 21.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	04.30.16 21.54	
o-Terphenyl	84-15-1	101	%	70-135	04.30.16 21.54	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	4.49
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00157	mg/kg	05.02.16 16.43	U	1
Toluene	108-88-3	ND	0.00209	mg/kg	05.02.16 16.43	U	1
Ethylbenzene	100-41-4	ND	0.00209	mg/kg	05.02.16 16.43	U	1
m,p-Xylenes	179601-23-1	ND	0.00209	mg/kg	05.02.16 16.43	U	1
o-Xylene	95-47-6	ND	0.00313	mg/kg	05.02.16 16.43	U	1
Total Xylenes	1330-20-7	ND	0.00209	mg/kg	05.02.16 16.43	U	1
Total BTEX		ND	0.00157	mg/kg	05.02.16 16.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	80-120	05.02.16 16.43	
4-Bromofluorobenzene	460-00-4	122	%	80-120	05.02.16 16.43	**

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GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 4-S-4-160426**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-004	Date Collected:	04.26.16 13.45	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	3.99
Analyst:	DEP	Date Prep:	05.03.16 10.21	Basis:	Dry Weight
Seq Number:	993650			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**109**	10.3	mg/kg	05.03.16 22.51		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	3.99
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.6	mg/kg	04.30.16 22.18	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.6	mg/kg	04.30.16 22.18	U	1
Total TPH	PHC635	ND	15.6	mg/kg	04.30.16 22.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	04.30.16 22.18	
o-Terphenyl	84-15-1	83	%	70-135	04.30.16 22.18	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	3.99
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00155	mg/kg	05.02.16 16.59	U	1
Toluene	108-88-3	ND	0.00207	mg/kg	05.02.16 16.59	U	1
Ethylbenzene	100-41-4	ND	0.00207	mg/kg	05.02.16 16.59	U	1
m,p-Xylenes	179601-23-1	ND	0.00207	mg/kg	05.02.16 16.59	U	1
o-Xylene	95-47-6	ND	0.00310	mg/kg	05.02.16 16.59	U	1
Total Xylenes	1330-20-7	ND	0.00207	mg/kg	05.02.16 16.59	U	1
Total BTEX		ND	0.00155	mg/kg	05.02.16 16.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	80-120	05.02.16 16.59	
4-Bromofluorobenzene	460-00-4	112	%	80-120	05.02.16 16.59	

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GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 7-S-4-160426**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-005	Date Collected:	04.26.16 16.20	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	10.8
Analyst:	DEP	Date Prep:	05.03.16 10.21	Basis:	Dry Weight
Seq Number:	993650			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**130**	11.1	mg/kg	05.03.16 23.06		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	10.8
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	16.8	mg/kg	04.30.16 22.41	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	16.8	mg/kg	04.30.16 22.41	U	1
Total TPH	PHC635	ND	16.8	mg/kg	04.30.16 22.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	04.30.16 22.41	
o-Terphenyl	84-15-1	79	%	70-135	04.30.16 22.41	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	10.8
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00167	mg/kg	05.02.16 17.16	U	1
Toluene	108-88-3	ND	0.00223	mg/kg	05.02.16 17.16	U	1
Ethylbenzene	100-41-4	ND	0.00223	mg/kg	05.02.16 17.16	U	1
m,p-Xylenes	179601-23-1	ND	0.00223	mg/kg	05.02.16 17.16	U	1
o-Xylene	95-47-6	ND	0.00334	mg/kg	05.02.16 17.16	U	1
Total Xylenes	1330-20-7	ND	0.00223	mg/kg	05.02.16 17.16	U	1
Total BTEX		ND	0.00167	mg/kg	05.02.16 17.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	80-120	05.02.16 17.16	
4-Bromofluorobenzene	460-00-4	111	%	80-120	05.02.16 17.16	

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GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 8-S-4-160426**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-006	Date Collected:	04.26.16 17.00	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	11.71
Analyst:	DEP	Date Prep:	05.03.16 10.21	Basis:	Dry Weight
Seq Number:	993650			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**278**	11.2	mg/kg	05.03.16 23.22		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	11.71
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	16.9	mg/kg	04.30.16 23.05	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	16.9	mg/kg	04.30.16 23.05	U	1
Total TPH	PHC635	ND	16.9	mg/kg	04.30.16 23.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	04.30.16 23.05	
o-Terphenyl	84-15-1	101	%	70-135	04.30.16 23.05	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	11.71
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00170	mg/kg	05.02.16 18.05	U	1
Toluene	108-88-3	ND	0.00226	mg/kg	05.02.16 18.05	U	1
Ethylbenzene	100-41-4	ND	0.00226	mg/kg	05.02.16 18.05	U	1
m,p-Xylenes	179601-23-1	ND	0.00226	mg/kg	05.02.16 18.05	U	1
o-Xylene	95-47-6	ND	0.00339	mg/kg	05.02.16 18.05	U	1
Total Xylenes	1330-20-7	ND	0.00226	mg/kg	05.02.16 18.05	U	1
Total BTEX		ND	0.00170	mg/kg	05.02.16 18.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	121	%	80-120	05.02.16 18.05	**
4-Bromofluorobenzene	460-00-4	132	%	80-120	05.02.16 18.05	**

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GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 11-S-12-160427**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-007	Date Collected:	04.27.16 09.00	Sample Depth:	12 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	9.78
Analyst:	DEP	Date Prep:	05.03.16 10.21	Basis:	Dry Weight
Seq Number:	993650			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**770**	11.2	mg/kg	05.03.16 23.37		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	9.78
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	16.6	mg/kg	04.30.16 23.30	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	16.6	mg/kg	04.30.16 23.30	U	1
Total TPH	PHC635	ND	16.6	mg/kg	04.30.16 23.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	04.30.16 23.30	
o-Terphenyl	84-15-1	97	%	70-135	04.30.16 23.30	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	9.78
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00166	mg/kg	05.02.16 18.21	U	1
Toluene	108-88-3	ND	0.00221	mg/kg	05.02.16 18.21	U	1
Ethylbenzene	100-41-4	ND	0.00221	mg/kg	05.02.16 18.21	U	1
m,p-Xylenes	179601-23-1	ND	0.00221	mg/kg	05.02.16 18.21	U	1
o-Xylene	95-47-6	ND	0.00332	mg/kg	05.02.16 18.21	U	1
Total Xylenes	1330-20-7	ND	0.00221	mg/kg	05.02.16 18.21	U	1
Total BTEX		ND	0.00166	mg/kg	05.02.16 18.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	80-120	05.02.16 18.21	
1,4-Difluorobenzene	540-36-3	111	%	80-120	05.02.16 18.21	

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GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 10-S-12-160427**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-008	Date Collected:	04.27.16 09.45	Sample Depth:	12 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	12.88
Analyst:	DEP	Date Prep:	05.03.16 10.21	Basis:	Dry Weight
Seq Number:	993650			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**274**	11.2	mg/kg	05.03.16 23.53		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	12.88
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	17.2	mg/kg	04.30.16 23.53	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	17.2	mg/kg	04.30.16 23.53	U	1
Total TPH	PHC635	ND	17.2	mg/kg	04.30.16 23.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	04.30.16 23.53	
o-Terphenyl	84-15-1	100	%	70-135	04.30.16 23.53	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	12.88
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00171	mg/kg	05.02.16 18.37	U	1
Toluene	108-88-3	ND	0.00228	mg/kg	05.02.16 18.37	U	1
Ethylbenzene	100-41-4	ND	0.00228	mg/kg	05.02.16 18.37	U	1
m,p-Xylenes	179601-23-1	ND	0.00228	mg/kg	05.02.16 18.37	U	1
o-Xylene	95-47-6	ND	0.00342	mg/kg	05.02.16 18.37	U	1
Total Xylenes	1330-20-7	ND	0.00228	mg/kg	05.02.16 18.37	U	1
Total BTEX		ND	0.00171	mg/kg	05.02.16 18.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	143	%	80-120	05.02.16 18.37	**
1,4-Difluorobenzene	540-36-3	129	%	80-120	05.02.16 18.37	**

GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 9-S-12-160427**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-009	Date Collected:	04.27.16 10.30	Sample Depth:	12 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	9.86
Analyst:	DEP	Date Prep:	05.03.16 10.21	Basis:	Dry Weight
Seq Number:	993650			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**124**	10.7	mg/kg	05.04.16 00.39		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	9.86
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	16.6	mg/kg	05.01.16 00.17	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	16.6	mg/kg	05.01.16 00.17	U	1
Total TPH	PHC635	ND	16.6	mg/kg	05.01.16 00.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	05.01.16 00.17	
o-Terphenyl	84-15-1	79	%	70-135	05.01.16 00.17	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	9.86
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00165	mg/kg	05.02.16 18.54	U	1
Toluene	108-88-3	ND	0.00220	mg/kg	05.02.16 18.54	U	1
Ethylbenzene	100-41-4	ND	0.00220	mg/kg	05.02.16 18.54	U	1
m,p-Xylenes	179601-23-1	ND	0.00220	mg/kg	05.02.16 18.54	U	1
o-Xylene	95-47-6	ND	0.00330	mg/kg	05.02.16 18.54	U	1
Total Xylenes	1330-20-7	ND	0.00220	mg/kg	05.02.16 18.54	U	1
Total BTEX		ND	0.00165	mg/kg	05.02.16 18.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	80-120	05.02.16 18.54	
1,4-Difluorobenzene	540-36-3	113	%	80-120	05.02.16 18.54	

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GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 5-S-12-160427**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-010	Date Collected:	04.27.16 10.50	Sample Depth:	12 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	14.23
Analyst:	DEP	Date Prep:	05.03.16 10.21	Basis:	Dry Weight
Seq Number:	993650			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**620**	11.6	mg/kg	05.04.16 00.54		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	14.23
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	17.5	mg/kg	05.01.16 00.41	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	17.5	mg/kg	05.01.16 00.41	U	1
Total TPH	PHC635	ND	17.5	mg/kg	05.01.16 00.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	05.01.16 00.41	
o-Terphenyl	84-15-1	102	%	70-135	05.01.16 00.41	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	14.23
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00175	mg/kg	05.02.16 19.09	U	1
Toluene	108-88-3	ND	0.00233	mg/kg	05.02.16 19.09	U	1
Ethylbenzene	100-41-4	ND	0.00233	mg/kg	05.02.16 19.09	U	1
m,p-Xylenes	179601-23-1	ND	0.00233	mg/kg	05.02.16 19.09	U	1
o-Xylene	95-47-6	ND	0.00349	mg/kg	05.02.16 19.09	U	1
Total Xylenes	1330-20-7	ND	0.00233	mg/kg	05.02.16 19.09	U	1
Total BTEX		ND	0.00175	mg/kg	05.02.16 19.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	80-120	05.02.16 19.09	
4-Bromofluorobenzene	460-00-4	103	%	80-120	05.02.16 19.09	

Certificate of Analytical Results 529282

GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 6-S-12-160427**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-011	Date Collected:	04.27.16 11.35	Sample Depth:	12 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	9.59
Analyst:	DEP	Date Prep:	05.03.16 10.21	Basis:	Dry Weight
Seq Number:	993650			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**211**	11.1	mg/kg	05.04.16 01.10		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	9.59
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	16.6	mg/kg	05.01.16 01.29	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	16.6	mg/kg	05.01.16 01.29	U	1
Total TPH	PHC635	ND	16.6	mg/kg	05.01.16 01.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.01.16 01.29	
o-Terphenyl	84-15-1	87	%	70-135	05.01.16 01.29	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	9.59
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00166	mg/kg	05.03.16 12.01	U	1
Toluene	108-88-3	ND	0.00221	mg/kg	05.03.16 12.01	U	1
Ethylbenzene	100-41-4	ND	0.00221	mg/kg	05.03.16 12.01	U	1
m,p-Xylenes	179601-23-1	ND	0.00221	mg/kg	05.03.16 12.01	U	1
o-Xylene	95-47-6	ND	0.00331	mg/kg	05.03.16 12.01	U	1
Total Xylenes	1330-20-7	ND	0.00221	mg/kg	05.03.16 12.01	U	1
Total BTEX		ND	0.00166	mg/kg	05.03.16 12.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	80-120	05.03.16 12.01	
1,4-Difluorobenzene	540-36-3	108	%	80-120	05.03.16 12.01	

Certificate of Analytical Results 529282

GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 5A-S-9-160427**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-012	Date Collected:	04.27.16 14.05	Sample Depth:	9 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	6.89
Analyst:	DEP	Date Prep:	05.03.16 10.21	Basis:	Dry Weight
Seq Number:	993650			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**185**	10.6	mg/kg	05.04.16 01.25		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	6.89
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	16.1	mg/kg	05.01.16 01.54	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	16.1	mg/kg	05.01.16 01.54	U	1
Total TPH	PHC635	ND	16.1	mg/kg	05.01.16 01.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	05.01.16 01.54	
o-Terphenyl	84-15-1	99	%	70-135	05.01.16 01.54	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	6.89
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00161	mg/kg	05.02.16 19.41	U	1
Toluene	108-88-3	ND	0.00215	mg/kg	05.02.16 19.41	U	1
Ethylbenzene	100-41-4	ND	0.00215	mg/kg	05.02.16 19.41	U	1
m,p-Xylenes	179601-23-1	ND	0.00215	mg/kg	05.02.16 19.41	U	1
o-Xylene	95-47-6	ND	0.00322	mg/kg	05.02.16 19.41	U	1
Total Xylenes	1330-20-7	ND	0.00215	mg/kg	05.02.16 19.41	U	1
Total BTEX		ND	0.00161	mg/kg	05.02.16 19.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	80-120	05.02.16 19.41	
4-Bromofluorobenzene	460-00-4	106	%	80-120	05.02.16 19.41	

Certificate of Analytical Results 529282

GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 6A-S-4-160427**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-013	Date Collected:	04.27.16 14.40	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	8.28
Analyst:	DEP	Date Prep:	05.03.16 10.36	Basis:	Dry Weight
Seq Number:	993652			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**52.9**	10.8	mg/kg	05.04.16 05.01		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	8.28
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	16.3	mg/kg	05.01.16 02.18	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	16.3	mg/kg	05.01.16 02.18	U	1
Total TPH	PHC635	ND	16.3	mg/kg	05.01.16 02.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	05.01.16 02.18	
o-Terphenyl	84-15-1	100	%	70-135	05.01.16 02.18	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	8.28
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00163	mg/kg	05.03.16 12.18	U	1
Toluene	108-88-3	ND	0.00218	mg/kg	05.03.16 12.18	U	1
Ethylbenzene	100-41-4	ND	0.00218	mg/kg	05.03.16 12.18	U	1
m,p-Xylenes	179601-23-1	ND	0.00218	mg/kg	05.03.16 12.18	U	1
o-Xylene	95-47-6	ND	0.00326	mg/kg	05.03.16 12.18	U	1
Total Xylenes	1330-20-7	ND	0.00218	mg/kg	05.03.16 12.18	U	1
Total BTEX		ND	0.00163	mg/kg	05.03.16 12.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	80-120	05.03.16 12.18	
1,4-Difluorobenzene	540-36-3	107	%	80-120	05.03.16 12.18	

GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id:	**# 1A-S-4-160427**	Matrix:	Soil	Date Received:	04.28.16 11.00
Lab Sample Id:	529282-014	Date Collected:	04.27.16 16.15	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DEP			% Moisture:	3.24
Analyst:	DEP	Date Prep:	05.03.16 10.36	Basis:	Dry Weight
Seq Number:	993652			SUB:	E871002

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**200**	10.2	mg/kg	05.04.16 05.16		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	MNR			% Moisture:	3.24
Analyst:	PJB	Date Prep:	04.30.16 17.00	Basis:	Dry Weight
Seq Number:	993512				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.5	mg/kg	05.01.16 02.42	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.5	mg/kg	05.01.16 02.42	U	1
Total TPH	PHC635	ND	15.5	mg/kg	05.01.16 02.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	05.01.16 02.42	
o-Terphenyl	84-15-1	82	%	70-135	05.01.16 02.42	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	PJB			% Moisture:	3.24
Analyst:	PJB	Date Prep:	05.02.16 11.30	Basis:	Dry Weight
Seq Number:	993617				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00154	mg/kg	05.02.16 20.53	U	1
Toluene	108-88-3	ND	0.00205	mg/kg	05.02.16 20.53	U	1
Ethylbenzene	100-41-4	ND	0.00205	mg/kg	05.02.16 20.53	U	1
m,p-Xylenes	179601-23-1	ND	0.00205	mg/kg	05.02.16 20.53	U	1
o-Xylene	95-47-6	ND	0.00308	mg/kg	05.02.16 20.53	U	1
Total Xylenes	1330-20-7	ND	0.00205	mg/kg	05.02.16 20.53	U	1
Total BTEX		ND	0.00154	mg/kg	05.02.16 20.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	80-120	05.02.16 20.53	
4-Bromofluorobenzene	460-00-4	104	%	80-120	05.02.16 20.53	

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GHD Services, INC- Midland, Midland, TX

House # 1

Sample Id: **Trip Blank** Matrix: Water Date Received:04.28.16 11.00

Lab Sample Id: 529282-015 Date Collected: 04.27.16 00.00

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

Tech: PJB % Moisture:

Analyst: PJB Date Prep: 05.03.16 18.00

Seq Number: 993723

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00200	mg/L	05.03.16 20.17	U	1
Toluene	108-88-3	ND	0.00200	mg/L	05.03.16 20.17	U	1
Ethylbenzene	100-41-4	ND	0.00200	mg/L	05.03.16 20.17	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	05.03.16 20.17	U	1
o-Xylene	95-47-6	ND	0.00200	mg/L	05.03.16 20.17	U	1
Total Xylenes	1330-20-7	ND	0.00200	mg/L	05.03.16 20.17	U	1
Total BTEX		ND	0.00200	mg/L	05.03.16 20.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	80-120	05.03.16 20.17	
4-Bromofluorobenzene	460-00-4	94	%	80-120	05.03.16 20.17	

GHD Services, INC- Midland

House # 1

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Seq Number: 993650 Matrix: Solid Date Prep: 05.03.16
MB Sample Id: 708452-1-BLK LCS Sample Id: 708452-1-BKS LCSD Sample Id: 708452-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	100	102	102	102	102	90-110	0	20	mg/kg	05.03.16 18:45	

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Seq Number: 993652 Matrix: Solid Date Prep: 05.03.16
MB Sample Id: 708453-1-BLK LCS Sample Id: 708453-1-BKS LCSD Sample Id: 708453-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	100	103	103	103	103	90-110	0	20	mg/kg	05.04.16 03:13	

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Seq Number: 993650 Matrix: Soil Date Prep: 05.03.16
Parent Sample Id: 529288-006 MS Sample Id: 529288-006 S MSD Sample Id: 529288-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	32.2	98.8	134	103	134	103	80-120	0	20	mg/kg	05.03.16 19:31	

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Seq Number: 993650 Matrix: Soil Date Prep: 05.03.16
Parent Sample Id: 529288-008 MS Sample Id: 529288-008 S MSD Sample Id: 529288-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	42.0	98.6	142	101	143	102	80-120	1	20	mg/kg	05.04.16 01:56	

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Seq Number: 993652 Matrix: Soil Date Prep: 05.03.16
Parent Sample Id: 529288-009 MS Sample Id: 529288-009 S MSD Sample Id: 529288-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	83.7	84.7	158	88	183	101	80-120	15	20	mg/kg	05.04.16 03:59	

Analytical Method: Percent Moisture by SM2540G
Seq Number: 993726 Matrix: Soil
Parent Sample Id: 529282-001 MD Sample Id: 529282-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	8.96	9.09	1	20	%	05.02.16 13:30	

GHD Services, INC- Midland

House # 1

Analytical Method: **Percent Moisture by SM2540G**

Seq Number: 993726 Matrix: Soil

Parent Sample Id: 529282-011 MD Sample Id: 529282-011 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	9.59	9.57	0	20	%	05.02.16 13:30	

Analytical Method: **TPH by SW 8015B** Prep Method: TX1005P

Seq Number: 993512 Matrix: Solid Date Prep: 04.30.16

MB Sample Id: 708362-1-BLK LCS Sample Id: 708362-1-BKS LCSD Sample Id: 708362-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	773	77	756	76	70-135	2	35	mg/kg	04.30.16 17:30	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	898	90	885	89	70-135	1	35	mg/kg	04.30.16 17:30	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		113		116		70-135	%	04.30.16 17:30
o-Terphenyl	91		91		90		70-135	%	04.30.16 17:30

Analytical Method: **TPH by SW 8015B** Prep Method: TX1005P

Seq Number: 993512 Matrix: Soil Date Prep: 04.30.16

Parent Sample Id: 529282-001 MS Sample Id: 529282-001 S MSD Sample Id: 529282-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<16.5	1100	822	75	924	85	70-135	12	35	mg/kg	04.30.16 20:20	
C10-C28 Diesel Range Hydrocarbons	<16.5	1100	941	86	1070	98	70-135	13	35	mg/kg	04.30.16 20:20	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		126		70-135	%	04.30.16 20:20
o-Terphenyl	81		97		70-135	%	04.30.16 20:20

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 993617 Matrix: Solid Date Prep: 05.02.16

MB Sample Id: 708397-1-BLK LCS Sample Id: 708397-1-BKS LCSD Sample Id: 708397-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00150	0.100	0.0960	96	0.0996	100	70-130	4	35	mg/kg	05.02.16 11:40	
Toluene	<0.00200	0.100	0.0976	98	0.101	101	70-130	3	35	mg/kg	05.02.16 11:40	
Ethylbenzene	<0.00200	0.100	0.102	102	0.106	106	71-129	4	35	mg/kg	05.02.16 11:40	
m,p-Xylenes	<0.00200	0.200	0.208	104	0.215	108	70-135	3	35	mg/kg	05.02.16 11:40	
o-Xylene	<0.00300	0.100	0.107	107	0.110	110	71-133	3	35	mg/kg	05.02.16 11:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		108		110		80-120	%	05.02.16 11:40
4-Bromofluorobenzene	111		114		115		80-120	%	05.02.16 11:40

GHD Services, INC- Midland

House # 1

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 993723 — Matrix: Water — Date Prep: 05.03.16
MB Sample Id: 708488-1-BLK — LCS Sample Id: 708488-1-BKS — LCSD Sample Id: 708488-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0896	90	0.0980	98	70-125	9	25	mg/L	05.03.16 18:08	
Toluene	<0.00200	0.100	0.0902	90	0.0985	99	70-125	9	25	mg/L	05.03.16 18:08	
Ethylbenzene	<0.00200	0.100	0.0913	91	0.100	100	71-129	9	25	mg/L	05.03.16 18:08	
m,p-Xylenes	<0.00200	0.200	0.190	95	0.208	104	70-131	9	25	mg/L	05.03.16 18:08	
o-Xylene	<0.00200	0.100	0.0920	92	0.101	101	71-133	9	25	mg/L	05.03.16 18:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		97		99		80-120	%	05.03.16 18:08
4-Bromofluorobenzene	92		99		100		80-120	%	05.03.16 18:08

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 993617 — Matrix: Soil — Date Prep: 05.02.16
Parent Sample Id: 529282-001 — MS Sample Id: 529282-001 S — MSD Sample Id: 529282-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00164	0.109	0.103	94	0.108	98	70-130	5	35	mg/kg	05.02.16 12:14	
Toluene	<0.00218	0.109	0.105	96	0.110	100	70-130	5	35	mg/kg	05.02.16 12:14	
Ethylbenzene	<0.00218	0.109	0.111	102	0.116	105	71-129	4	35	mg/kg	05.02.16 12:14	
m,p-Xylenes	<0.00218	0.218	0.225	103	0.235	107	70-135	4	35	mg/kg	05.02.16 12:14	
o-Xylene	<0.00328	0.109	0.116	106	0.121	110	71-133	4	35	mg/kg	05.02.16 12:14	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		110		80-120	%	05.02.16 12:14
4-Bromofluorobenzene	114		120		80-120	%	05.02.16 12:14

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 993723 — Matrix: Water — Date Prep: 05.03.16
Parent Sample Id: 529334-001 — MS Sample Id: 529334-001 S — MSD Sample Id: 529334-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0988	99	0.0944	94	70-125	5	25	mg/L	05.04.16 10:54	
Toluene	<0.00200	0.100	0.0988	99	0.0956	96	70-125	3	25	mg/L	05.04.16 10:54	
Ethylbenzene	<0.00200	0.100	0.0994	99	0.0966	97	71-129	3	25	mg/L	05.04.16 10:54	
m,p-Xylenes	<0.00200	0.200	0.207	104	0.201	101	70-131	3	25	mg/L	05.04.16 10:54	
o-Xylene	<0.00200	0.100	0.0994	99	0.0978	98	71-133	2	25	mg/L	05.04.16 10:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		101		80-120	%	05.04.16 10:54
4-Bromofluorobenzene	99		112		80-120	%	05.04.16 10:54

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

CHAIN OF CUSTODY

Page 1 Of 2

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 # 529282

Client / Reporting Information

Company Name / Branch: GHD / Midland

Company Address: 2135 S Loop 250W Midland, TX 79703

Email: Bernie.Bockrish@GHD.com Phone No: 432-686-0086

Project Contact: Bernie Bockrish

Samplers's Name: Justin Nixon

Project Information

Project Name/Number: 11121230 Hawk #1

Project Location: Eunice, NM

Invoice To:

PO Number:

Analytical Information

Chlorides 300.0

TPH SW 8015

BTEX 8021

% Solids Sm 2540 G

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

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	Field Comments
1	#1-5-10.5-160426	10.5'	4-26-16	1430	S	1								X	
2	#2-5-4-160426	4'		1030											
3	#3-5-4-160426	4'		1230											
4	#4-5-4-160426	4'		1345											
5	#7-5-4-160426	4'		1620											
6	#8-5-4-160426	4'		1700											
7	#11-5-12-160427	12'	4-27-16	900											
8	#10-5-12-160427	12'		945											
9	#9-5-12-160427	12'		1030											
10	#5-5-12-160427	12'		1050											

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [x] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

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		4-28-16 11:00	1	2		2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp.

C/F:0

Corrected Temp: 3.2°C

3.2°

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 previou

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CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

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Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)
www.xenco.com

Xenco Quote #: | Xenco Job #: 529282

Client / Reporting Information

Company Name / Branch: GHP/Midland
Company Address: 2135 S. Loop 250W Midland, Tx 79703
Email: Bernie.Bockin@GHP.com Phone No: 432-687-0336
Project Contact: Bernie Bockin
Samplers's Name: Justin Nixon

Project Information

Project Name/Number: Hoover #1 7112230
Project Location: Eunice, NM
Invoice To:
PO Number:

Analytical Information

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chlorides SW8015 Mod	BTEX 8021	TPH SW8015	% solids SM2540 G	Field Comments
1	#6-S-12-160427	8'12"	4-27-16	1135	S	1									X	X	X	X	
2	#5A-S-9-160427	9'		1405											X	X	X	X	
3	#6A-S-4-160427	4'		1440											X	X	X	X	
4	#1A-S-4-160427	4'		1615											X	X	X	X	
5	Trip Blank			-	W	2										X			
6																			
7																			
8																			
9																			
10																			

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

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- [ ] 5 Day TAT
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- [ ] 2 Day EMERGENCY
- [x] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

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		4-27-16 1120	1	2		2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: [x]

Temp: 3.2°C IR ID:R-8
C/F:0
Corrected Temp: 3.2°C

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.

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XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 04/28/2016 11:00:00 AM

Work Order #: 529282

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)?	3.2	
#2 *Shipping container in good condition?	**N/A**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seal present on shipping container/ cooler?	**N/A**	
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#6 Custody Seals intact on sample bottles?	**N/A**	
#7 *Custody Seals Signed and dated?	**N/A**	
#8 *Chain of Custody present?	**Yes**	
#9 Sample instructions complete on Chain of Custody?	**Yes**	
#10 Any missing/extra samples?	**No**	
#11 Chain of Custody signed when relinquished/ received?	**Yes**	
#12 Chain of Custody agrees with sample label(s)?	**Yes**	
#13 Container label(s) legible and intact?	**Yes**	
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#15 Samples in proper container/ bottle?	**Yes**	
#16 Samples properly preserved?	**Yes**	
#17 Sample container(s) intact?	**Yes**	
#18 Sufficient sample amount for indicated test(s)?	**Yes**	
#19 All samples received within hold time?	**Yes**	
#20 Subcontract of sample(s)?	**Yes**	Subcontract Houston
#21 VOC samples have zero headspace (less than 1/4 inch bubble)?	**N/A**	
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**N/A**	
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Mary Alexis Negron Date: 04/29/2016
Mary Negron

Checklist reviewed by: Kelsey Brooks Date: 04/29/2016
Kelsey Brooks

Attachment B
Form C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Chevron U.S.A.	Contact Kegan Boyer
2401 Avenue O, Eunice, NM 88231	Telephone No. 713-372-7705
Facility Name Howse #1	Facility Type Former Saltwater Disposal Well

Surface Owner Chevron U.S.A.	Mineral Owner	API No. 30-025-36226

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	17	20-S	39-E	1960	South	390	West	Lea

Latitude 32.571190° **Longitude** -103.075300°

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release Unknown	Volume Recovered None
Source of Release Unknown	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 5/6/2016
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
During decommissioning and demolition activities in March 2016, soils beneath the former tank battery location were removed to a depth ranging from 1 to 3 feet below ground surface in an approximately 50 ft x 120 ft area. Three 3 ft x 6 ft x 10 ft test pits were advanced down the center of the excavation and a soil sample was collected from the bottom of each pit. Analytical data results indicate that chloride concentrations exceeded the New Mexico RRAL's in all three soil samples.

Describe Area Affected and Cleanup Action Taken.*
The affected area is located below the pad of a former tank battery. The perimeter of the excavation has been secured with barbed wire fencing. The site is a former oil production and salt water disposal well site that contained a tank battery and flare. The tank battery and flare have been removed and the well has been plugged. Following the results of the initial investigation in March 2016, additional samples were collected in late April 2016 to determine the extent of impacted soil. Analytical results indicated chloride concentrations exceeded the New Mexico RRAL's in four soil samples. Future remediation of the affected soils is planned for the near future.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Kegan Boyer	Approved by Environmental Specialist:	
Title: Environmental Project Manager	Approval Date: 06/13/2016	Expiration Date: 08/13/2016
E-mail Address: Kegan.boyer@chevron.com	Conditions of Approval: Discrete samples only. Delineate and remediate per NMOCD guidelines.	Attached ☐ 1RP 4311
Date: June 9, 2016 Phone: 713-372-7705		

* Attach Additional Sheets If Necessary

nJXK1616554410
pJXK1616554532