CORRECTIVE ACTION REPORT

Property:

Lateral A-1 Release
32.313001 N, 104.230774 W
SE ¼ SW ¼, S7 T23S R27E
Eddy County, New Mexico
NMOCD RP#: 2RP-3433

October 2016
Apex Project No. 7250715105

Prepared for:

Enterprise Field Services, LLC
PO Box 4324
Houston, TX 77252
Attention: Dina Ferguson

Prepared by:

Karolanne Toby
Project Manager

Liz Scaggs, P.G.
Division Manager

TABLE OF CONTENTS

LIST OF APPENDICES

CORRECTIVE ACTION REPORT

Lateral A-1 Release
32.313001 N, 104.230774 W
SE ¼ SW ¼, S7 T23S R27E
Eddy County, New Mexico
NMOCD RP#: 2RP-3433

Apex Project No. 7250715105

1.0 INTRODUCTION

1.1 Site Description & Background

The Lateral A-1 Release Site is located within the Enterprise Field Services, LLC (Enterprise) pipeline right-of-way (ROW) in the southeast (SE) ¼ of the southwest (SW) ¼ of Section 7 in Township 23 South and Range 27 East in rural Eddy County, New Mexico (32.313001 N, 104.230774 W), referred to hereinafter as the "Site" or "subject Site". The Site is located to the east of an unpaved road on private property. The Site is surrounded by native vegetation rangeland periodically interrupted with oil and gas production and gathering facilities, including the Lateral A-1 natural gas gathering pipeline (Lateral A-1 line). The pipeline traverses the Site from north to south.

On November 30, 2015, Enterprise was notified of a pipeline leak on the Lateral A-1 line. Immediate response action was taken based on the Enterprise *General Release Notification Response and Remediation Plan* (dated March 2015). The release was identified by Enterprise on the ground surface and occurred within the Enterprise pipeline ROW. Enterprise isolated the leak and the pipeline section was blown down to carry out repair activities. It was originally estimated that approximately one (1) barrel (bbl) of natural gas pipeline liquids (NGPL) was released from the leaking portion of the pipeline onto the ground surface. Emergency response activities were conducted at the Site in order to repair the leak and mitigate the impact of NGPL in the subsurface from November 30, 2015 through December 3, 2015, and remediation activities began on December 4, 2015. The release amount was later re-calculated based on the size of the final excavation to be approximately 8.8 bbls of NGLP.

A topographic map depicting the location of the Site is included as Figure 1, and a Site Vicinity Map is included as Figure 2 in Appendix A.

1.2 Project Objective

The primary objective of the corrective actions was to reduce the concentration of constituents of concern (COCs) in the on-Site soils to below the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD) *Remediation Action Levels* using the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.

2.0 SITE RANKING

In accordance with the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*, Apex TITAN, Inc. (Apex) utilized the general site characteristics obtained during the completion of corrective action activities and information available from the New Mexico Office of the State Engineer (OSE) to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table:

Ranking Criteria			Ranking Score
Depth to Groundwater	<50 feet	20	**10**
	50 to 99 feet	10	
	>100 feet	0	
Wellhead Protection Area <1,000 feet from a water source, or; <200 feet from private domestic water source.	Yes	20	0
	No	0	
Distance to Surface Water Body	<200 feet	20	0
	200 to 1,000 feet	10	
	>1,000 feet	0	
Total Ranking Score			**10**

Based on Apex's evaluation of the scoring criteria, the Site would have a maximum Total Ranking Score of "10". This ranking is based on the following:

- The approximate depth to the initial groundwater-bearing zone is between 50 to 99 feet.
- No water source wells (municipal/community wells) were identified within 1,000 feet of the Site. No private domestic water sources were identified within 200 feet of the Site.
- The distance to the nearest surface water body is greater than 1,000 feet.

Based on a Total Ranking Score of "10", cleanup goals for soils remaining in place include: 10 milligrams per kilogram (mg/Kg) for benzene, 50 mg/Kg for total benzene, toluene, ethylbenzene and xylene (BTEX), 1,000 mg/Kg for total petroleum hydrocarbons (TPH) and 500 mg/Kg for chloride.

3.0 RESPONSE ACTIONS

3.1 Soil Excavation Activities

On November 30, 2015, Enterprise personnel were notified of a leak on the Lateral A-1 line. The leak occurred within the boundaries of the pipeline ROW. The pipeline segment was immediately isolated and blown down to carry out repairs associated with the leak.

Following emergency response activities, remediation excavation activities were carried out between December 4, 2015 and June 23, 2016. Impacted soil was removed from below and surrounding the release point on the pipeline and extended vertically and horizontally based on visual, olfactory and photoionization detector (PID) evidence of impairment. The final excavation dimensions measured approximately 62 feet long by approximately eight (8) to 19 feet wide, with varying depths ranging to approximately five (5) feet to ten (10) feet below ground surface (bgs). Impacted soil was removed and collected into four (4) stockpiles (STP-1 through STP-4), placed on poly sheet liners adjacent to the excavation, pending laboratory analysis to determine suitability for on–Site reuse.

Subsequent to receipt of laboratory analytical data, the stockpiled soils from STP-2 were used as fill material on June 23, 2016. Backfill of the remaining portion of the excavation was completed on July 21, 2016 utilizing clean purchased fill material. Subsequent to completion of the excavation backfill, the area was compacted utilizing on-Site equipment and was graded to properly drain stormwater.

The stockpiled impacted soils from STP-1, STP-3 and STP-4 (a total of approximately 289 tons) were transported and disposed of at Lea Land Disposal facility located approximately 30 miles east of Carlsbad, New Mexico. Copies of the associated waste manifests are provided in Appendix F.

3.2 Soil Sampling Program

Apex utilized a PID capable of detecting volatile organic compounds (VOCs) to assist in determining the extent of potential contamination and the approximate depth of the soil sample locations.

On December 4, 2015, Apex's soil sampling program consisted of collecting six confirmation soil samples (CS-1 through CS-6) from each excavation sidewalls and the floor of the excavation for laboratory analysis. In addition, composite soil samples were collected from two of the stockpiled impacted material (STP-1 and STP-2). Based on PID field readings collected on-Site, it was determined that additional soil removal was required in the southern portion of the excavation.

Subsequent to the receipt of the laboratory analysis of the initial confirmation soil samples on the northern portion of the excavation, additional excavation was required in the vicinity of confirmation soil sample CS-2. Apex returned to the Site on January 21, 2016 and noted that portions of the excavation had been pre-maturely backfilled with material from STP-2. The backfilled material was subsequently removed and placed in a stockpile (STP-2).

Subsequent to the completion of additional excavation activities, on April 13, 2016, Apex's soil sampling program consisted of collecting a total of 11 confirmation soil samples (CS-1(RE) through CS-6(RE) and CS-7 through CS-11) from the excavation sidewalls and floor for laboratory analysis. Soil samples CS-1(RE) through CS-6(RE) were collected from the same locations as previously, which were in the areas where the excavation had been pre-maturely backfilled and subsequently re-excavated. Soil samples CS-7 through CS-11 were collected from the southern portion of the excavation. In addition, additional composite soil samples were collected from two of the stockpiled impacted material (STP-1 and STP-2).

Subsequent to the receipt of the laboratory analysis of the samples collected in April 2016, additional excavation was required in the vicinity of confirmation soil samples CS-2(RE), located along the center of the excavation floor, and CS-10, located along the southwest portion of the excavation sidewall. Laboratory analysis of the composite soil sample collected from stockpile STP-2 indicated the stockpiled material was suitable for on-Site reuse.

Subsequent to the completion of additional excavation activities, on June 23, 2016, Apex's soil sampling program consisted of collecting two confirmation soil samples, CS-2(RE-2) and CS01-(RE), from the portion of the excavation where additional soils had been removed. In addition, composite soil samples were collected from the two newly generated stockpiles (STP-3 and STP-4).

Figure 3 is a Site Map that indicates the approximate location of the confirmation soil samples in relation to pertinent land features and general Site boundaries (Appendix A).

The soil samples were collected and placed in laboratory prepared glassware, labeled/sealed using laboratory supplied labels, and placed on ice in a cooler, which was secured with a custody seal. The sample cooler and completed chain-of-custody forms were relinquished to Xenco Laboratories in Midland, TX for analysis.

3.3 Laboratory Analytical Methods

The soil samples were submitted for laboratory analysis of BTEX utilizing EPA SW-846 Method #8021B, TPH gasoline range organics (GRO) and diesel range organics (DRO) utilizing EPA SW-846 Method #8015, and chloride utilizing EPA Method 300.

Executed chain-of-custody form and laboratory data sheets are provided in Appendix D. All samples were analyzed within specified holding times.

4.0 DATA EVALUATION

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to condensate releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the OCD rules, specifically NMAC 19.15.29 *Remediation Plan*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

Apex compared the benzene, BTEX, TPH and chloride concentrations, or laboratory reporting limits (RLs), associated with the confirmation soil samples (CS-1 through CS-11) collected from the excavated area and the composite soil samples (STP-1, STP-2, STP-3 & STP-4) collected from the stockpile to the OCD *Recommended Remediation Action Levels* (RRALs) for sites having a total ranking score of "10".

4.1 Confirmation Soil Samples

The laboratory analyses of the confirmation soil samples collected from the final excavation (CS-1(RE), CS-2(RE-2), CS-3(RE), CS-4(RE), CS-5(RE), CS-6(RE), CS-7, CS-8, CS-9, CS-10(RE), and CS-11) exhibited benzene concentrations ranging from below the laboratory RLs to 0.0217 mg/Kg, which are below the applicable OCD RRAL of 10 mg/Kg.

The laboratory analyses of the confirmation soil samples collected from the final excavation (CS-1(RE), CS-2(RE-2), CS-3(RE), CS-4(RE), CS-5(RE), CS-6(RE), CS-7, CS-8, CS-9, CS-10(RE), and CS-11) exhibited total BTEX concentrations ranging from below the laboratory RLs to 0.864 mg/Kg, which are below the applicable OCD RRAL of 50 mg/Kg.

The laboratory analyses of the confirmation soil samples collected from the final excavation (CS-1(RE), CS-2(RE-2), CS-3(RE), CS-4(RE), CS-5(RE), CS-6(RE), CS-7, CS-8, CS-9, CS-10(RE), and CS-11) exhibited combined TPH GRO/DRO concentrations ranging from below the laboratory RLs to 80.4 mg/Kg, which are below the applicable OCD RRAL of 1,000 mg/Kg.

The laboratory analyses of the confirmation soil samples collected from the final excavation (CS-1(RE), CS-2(RE-2), CS-3(RE), CS-4(RE), CS-5(RE), CS-6(RE), CS-7, CS-8, CS-9, CS-10(RE), and CS-11) exhibited chloride concentrations ranging from 5.37 mg/kg to 441 mg/Kg, which are below the applicable OCD RRAL of 500 mg/Kg.

4.2 Stockpile Soil Samples

The laboratory analyses of the final composite soil sample collected from the stockpiled excavated soils contained in stockpile STP-2 did not exhibit benzene, total BTEX, TPH GRO/DRO or chloride concentrations above the laboratory RLs and/or the applicable OCD RRALs; therefore, the soils were suitable for on-Site reuse as backfill material.

The laboratory analyses of the final composite soil samples collected from the stockpiled excavated impacted soils contained in stockpile STP-1, STP-3 and STP-4 exhibited chloride, TPH GRO/DRO, and/or total BTEX concentrations in exceedance of the applicable OCD RRALs; therefore, the soils were not suitable for on-Site reuse.

The stockpiled impacted soils from STP-1, STP-3 and STP-4 were transported and disposed of at Lea Land Disposal facility located in Carlsbad, New Mexico.

Confirmation soil sample and composite soil stockpile sample results are provided in Table 1 in Appendix C.

5.0 FINDINGS AND RECOMMENDATIONS

The Lateral A-1 Release Site is located within the Enterprise Field Services, LLC (Enterprise) pipeline right-of-way (ROW) in the southeast (SE) ¼ of the southwest (SW) ¼ of Section 7 in Township 23 South and Range 27 East in rural Eddy County, New Mexico (32.313001 N, 104.230774 W). The Site is located to the east of an unpaved road on private property.

On November 30, 2015, Enterprise was notified of a pipeline leak on the Lateral A-1 line. Enterprise isolated the leaking portion and the pipeline section was blown down to carry out repair activities. It was originally estimated that approximately one (1) bbl of NGPL was released from the leaking portion of the pipeline onto the ground surface. The release was identified by Enterprise on the ground surface and occurred within the Enterprise pipeline ROW. Emergency response activities were conducted at the Site in order to repair the leak and mitigate the impact of NGPL in the subsurface from November 30, 2015 through December 3, 2015, and remediation activities began on December 4, 2015. The release amount was later re-calculated based on the size of the final excavation to be approximately 8.8 bbls of NGLP.

The primary objective of the corrective actions was to reduce the concentration of COCs in the on-Site soils to below the New Mexico EMNRD OCD RRALs using the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.

- The Site was excavated utilizing heavy equipment to remove surface soils affected by the release. The final excavation dimensions measured approximately 62 feet long by dominantly 8 feet wide, with varying depths ranging to approximately five (5) feet to ten (10) feet below ground surface (bgs).

- A total of eleven (11) final confirmation soil samples were collected from the final excavation. Based on laboratory analytical results, soils remaining in place do not exhibit COC concentrations above the applicable OCD *Remediation Action Levels* for a Site ranking of "10".

- Based on laboratory analytical data, the stockpiled excavated soils from stockpile STP-2 were suitable for on-Site reuse. Subsequent to receipt of all confirmation laboratory analytical data, the excavation was backfilled with the stockpiles soils from STP-2 and clean purchased fill material. The stockpiled impacted soils from stockpiles STP-1, STP-3 and STP-4 (a total of approximately 289 tons) were transported and disposed of at Lea Land Disposal facility located in Carlsbad, New Mexico.

Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

6.0 STANDARD OF CARE, LIMITATIONS, AND RELIANCE

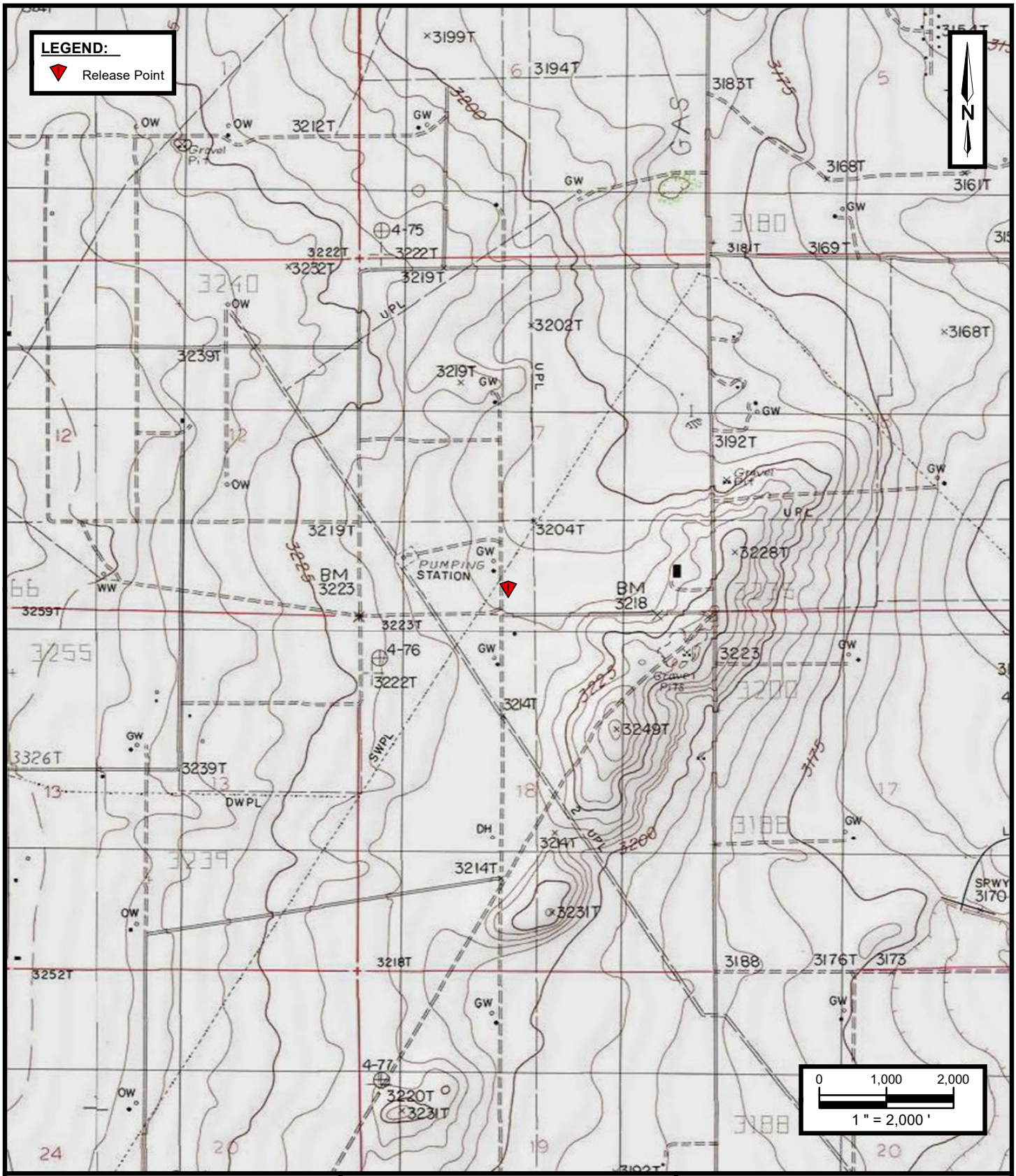
Apex's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client.

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Apex cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this scope of services. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Apex's findings and recommendations are based solely upon data available to Apex at the time of these services.

This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, the report, and Apex's Agreement. The limitation of liability defined in the agreement is the aggregate limit of Apex's liability to the client.

APPENDIX A

Figures



Enterprise Field Services, LLC
Lateral A-1
Section 7, Township 23 South, Range 27 East
Eddy County, New Mexico
32.312978 N, 104.230634 W

Project No. 7250715105

Apex TITAN, Inc.
12100 Ford Road, Suite 401
Dallas, Texas 75234
Phone: (469) 365-1100
www.apexcos.com
A Subsidiary of Apex Companies, LLC

FIGURE 1

Topographic Map

Z:\Dallas South\Drafting\Midland\2015\7250715105\Figure 1.mxd Modified 10/5/2016 by JSimpson NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US Coordinate System

Enterprise Field Services, LLC
Lateral A-1
Section 7, Township 23 South, Range 27 East
Eddy County, New Mexico
32.312978 N, 104.230634 W

Project No. 7250715105

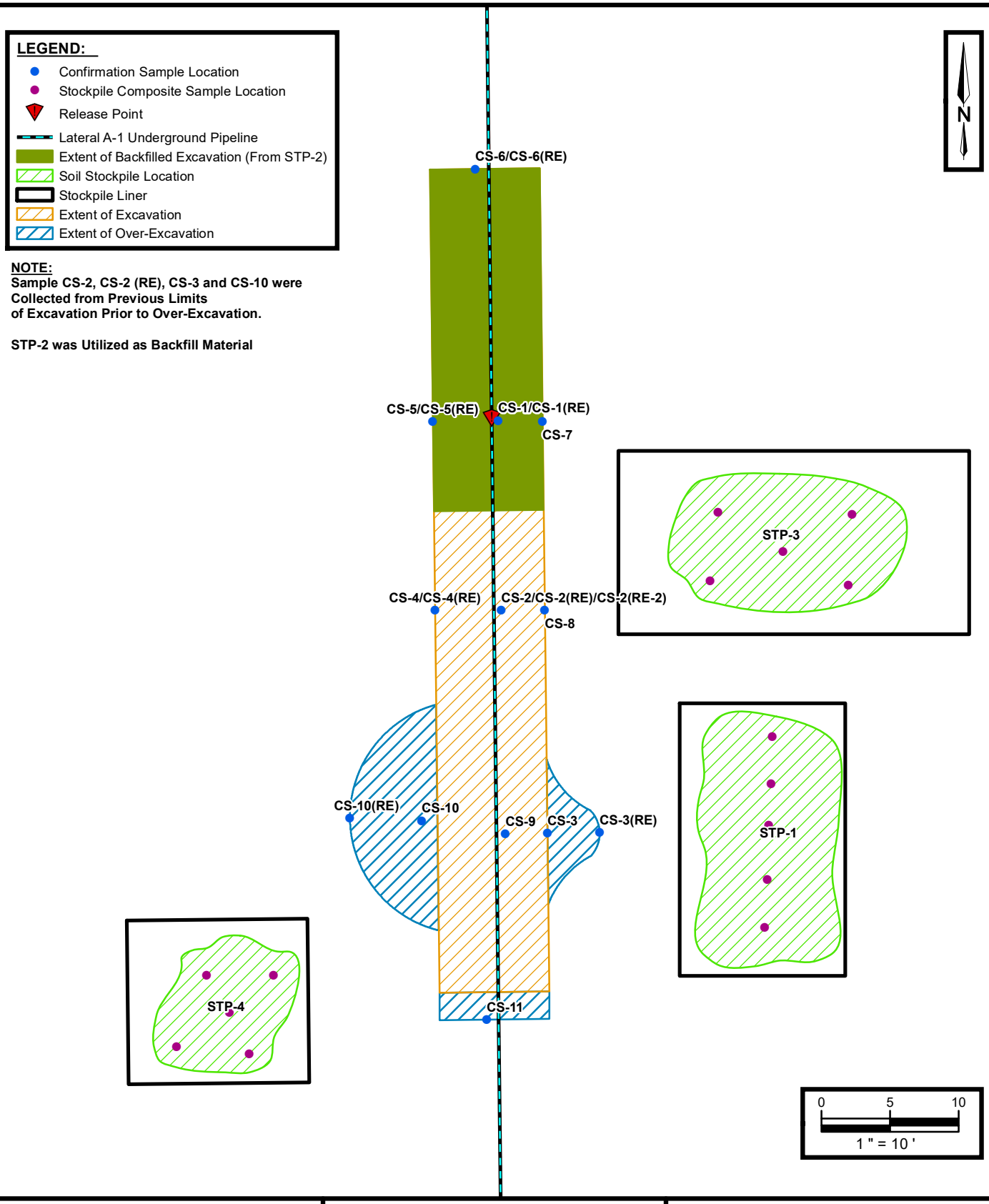
Apex TITAN, Inc.
12100 Ford Road, Suite 401
Dallas, Texas 75234
Phone: (469) 365-1100
www.apexcos.com
A Subsidiary of Apex Companies, LLC

FIGURE 2

Site Vicinity Map

Service Layer Credits:
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, Aerial Photograph March 2016

P:\Drafting\Midland\2015\7250715105\Figure 2.mxd Modified 10/5/2016 by JSimpson NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US Coordinate System



Enterprise Field Services, LLC
Lateral A-1
Section 7, Township 23 South, Range 27 East
Eddy County, New Mexico
32.312978 N, 104.230634 W

Project No. 7250715105

Apex TITAN, Inc.
12100 Ford Road, Suite 401
Dallas, Texas 75234
Phone: (469) 365-1100
www.apexcos.com
A Subsidiary of Apex Companies, LLC

FIGURE 3

Site Map

P:\Drafting\Midland\2015\7250715105\Figure 3.mxd Modified 10/5/2016 by JSimpson NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US Coordinate System

APPENDIX B

Photo Documentation

View of initial excavation facing south

View of initial excavation facing north

View of initial excavation facing southeast in the vicinity of the release point

View of final excavation facing south

View of deeper portions of the final excavation facing southeast

View of final excavation facing north

APPENDIX C

Tables

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS
Lateral A-1

Sample I.D.	Sample Date	Sample Depth (feet BGS)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	BTEX (mg/Kg)	TPH GRO (mg/Kg)	TPH DRO (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)
New Mexico Oil Conservation Division (NMOCD) Recomended Remediation Action Levels (RRALs) (Total Ranking Score: 10)											
New Mexico Oil Conservation Division (NMOCD) Recommended Remediation Action Level			10	NE	NE	NE	50	NE	NE	1,000	500
EXCAVATION CONFIRMATION SAMPLE ANALYTICAL RESULTS											
CS-1	12/4/2015	4	<0.000990	<0.00198	<0.000990	<0.000990	<0.000990	<15.0	<15.0	<15.0	**43.1**
CS-1 (RE)	4/13/2016	5	<0.00150	<0.00200	<0.00200	<0.00200	<0.00150	<15.0	<15.0	<15.0	**30.7**
CS-2	12/4/2015	4	**0.367**	**11.0**	**3.78**	**47.7**	**62.9**	**1,720**	**217**	**2,020**	**714**
CS-2 (RE)	4/13/2016	5	<0.00149	<0.00199	<0.00199	0.00443	0.00433	<15.0	<15.0	<15.0	**1,370**
CS-2 (RE-2)	6/23/2016	10	NS	NS	NS	NS	NS	NS	NS	NS	**419**
CS-3	12/4/2015	3	<0.000998	0.00225	<0.000998	0.00661	0.00886	<15.0	<15.0	<15.0	**95.6**
CS-3 (RE)	4/13/2016	4	<0.00150	**0.113**	**0.0386**	**0.712**	**0.864**	**80.4**	<15.0	**80.4**	**183**
CS-4	12/4/2015	3	<0.000990	<0.00198	<0.000990	0.00400	0.00400	<15.0	<15.0	<15.0	**4.08**
CS-4 (RE)	4/13/2016	4	<0.00149	<0.00199	<0.00199	<0.00199	<0.00149	<15.0	<15.0	<15.0	**5.37**
CS-5	12/4/2015	3	<0.00100	0.0102	<0.00100	0.0358	0.0460	<15.0	<15.0	<15.0	**10.1**
CS-5 (RE)	4/13/2016	4	<0.00150	<0.00200	<0.00200	<0.00200	<0.00150	<15.0	<15.0	<15.0	**6.48**
CS-6	12/4/2015	3	<0.00172	<0.00345	<0.00172	<0.00172	<0.00172	<14.9	<14.9	<14.9	**3.78**
CS-6 (RE)	4/13/2016	4	<0.00149	<0.00198	<0.00198	<0.00198	<0.00149	<15.0	<15.0	<15.0	**90.5**
CS-7	4/13/2016	4	<0.00150	<0.00200	<0.00200	<0.00200	<0.00150	<15.0	<15.0	<15.0	**305**
CS-8	4/13/2016	4	<0.00149	<0.00199	<0.00199	<0.00199	<0.00149	<15.0	<15.0	<15.0	**441**
CS-9	4/13/2016	6	<0.00150	<0.00200	<0.00200	<0.00200	<0.00150	<14.9	<14.9	<14.9	**51.8**
CS-10	4/13/2016	4	**0.0217**	**0.0262**	**<0.00200**	**0.0115**	**0.0594**	**29.4**	<15.0	**29.4**	**640**
CS-10(RE)	6/23/2016	4	NS	NS	NS	NS	NS	NS	NS	NS	**45.7**
CS-11	4/13/2016	4	**0.00599**	**0.0216**	<0.00198	**0.0162**	**0.0438**	**15.2**	<15.0	**15.2**	**294**
STOCKPILE SAMPLE ANALYTICAL RESULTS											
STP-1	12/4/2015	NA	**15.1**	**79.5**	**9.77**	**114**	**218**	**11,600**	**1,180**	**12,800**	**1,860**
	4/13/2016	NA	<0.00149	0.0278	<0.00199	**0.103**	**0.131**	**85.1**	**592**	**667**	**2,860**
STP-1 (RE)	6/23/2016	NA	<0.00150	**0.0363**	**0.0162**	**0.188**	**0.241**	**46.5**	**106**	**153**	**1,910**
STP-2	12/4/2015	NA	**9.23**	74.1	9.76	112	**205**	9,830	174	**10,000**	**722**
	4/13/2016	NA	<0.00150	<0.0200	<0.0200	<0.0200	<0.00150	<15.0	<15.0	<15.0	**231**
STP-3	6/23/2016	NA	<0.0150	<0.0200	**0.127**	**4.14**	**4.27**	**213**	**22.0**	**235**	**724**
STP-4	6/23/2016	NA	<0.0750	**14.5**	**3.67**	**49.8**	**68.0**	**1,860**	**699**	**2,560**	**1,930**

*Note: Concentrations in **bold** and yellow exceed the applicable NMOCD RRALs*

- indicates overexcavation and/or resample

mg/Kg- milligrams per Kilogram

NE - Not Established

NA - Not Applicable

BGS - below ground surface

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

Analytical Report 520627

for

APEX/Titan

Project Manager: Karolanne Toby

Lateral A-1

7250715105

08-DEC-15

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

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

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)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

08-DEC-15

Project Manager: **Karolanne Toby**
APEX/Titan
505 N. Big Spring Ste. 301 A
Midland, TX 79701

Reference: XENCO Report No(s): **520627**
Lateral A-1
Project Address: TX and NM

Karolanne Toby:

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) 520627. 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. 520627 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 520627

APEX/Titan, Midland, TX

Lateral A-1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 520627

APEX/Titan, Midland, TX

Project Name: Lateral A-1

Project Id: 7250715105
Contact: Karolanne Toby
Project Location: TX and NM

Date Received in Lab: Fri Dec-04-15 05:41 pm
Report Date: 08-DEC-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	520627-001		520627-002		520627-003		520627-004		520627-005		520627-006	
	Field Id:	CS-1		CS-2		CS-3		CS-4		CS-6		CS-5	
	Depth:	4 ft		4 ft		3 ft		3 ft		3 ft		3 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Dec-04-15 13:15		Dec-04-15 13:17		Dec-04-15 13:24		Dec-04-15 13:43		Dec-04-15 14:01		Dec-04-15 13:45	
BTEX by EPA 8021B	***Extracted:***	Dec-07-15 09:00		Dec-07-15 09:00		Dec-07-15 09:00		Dec-07-15 09:00		Dec-07-15 09:00		Dec-07-15 09:00	
	Analyzed:	Dec-07-15 10:47		Dec-07-15 17:00		Dec-07-15 11:04		Dec-07-15 11:20		Dec-07-15 14:13		Dec-07-15 11:53	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.000990	0.367	0.0998	ND	0.000998	ND	0.000990	ND	0.00172	ND	0.00100
Toluene		ND	0.00198	11.0	0.200	0.00225	0.00200	ND	0.00198	ND	0.00345	0.0102	0.00200
Ethylbenzene		ND	0.000990	3.78	0.0998	ND	0.000998	ND	0.000990	ND	0.00172	ND	0.00100
m,p-Xylenes		ND	0.00198	39.2	0.200	0.00516	0.00200	ND	0.00198	ND	0.00345	0.0293	0.00200
o-Xylene		ND	0.000990	8.51	0.0998	0.00145	0.000998	0.00400	0.000990	ND	0.00172	0.00648	0.00100
Total Xylenes		ND	0.000990	47.7	0.0998	0.00661	0.000998	0.00400	0.000990	ND	0.00172	0.0358	0.00100
Total BTEX		ND	0.000990	62.9	0.0998	0.00886	0.000998	0.00400	0.000990	ND	0.00172	0.0460	0.00100
Inorganic Anions by EPA 300/300.1	***Extracted:***	Dec-07-15 10:00		Dec-07-15 10:00		Dec-07-15 10:00		Dec-07-15 10:00		Dec-07-15 10:00		Dec-07-15 10:00	
	Analyzed:	Dec-07-15 15:19		Dec-07-15 16:05		Dec-07-15 16:27		Dec-07-15 16:50		Dec-07-15 17:13		Dec-07-15 17:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		43.1	10.0	714	40.0	95.6	10.0	4.08	2.00	3.78	2.00	10.1	2.00
TPH by SW 8015B	***Extracted:***	Dec-04-15 18:00		Dec-04-15 18:00		Dec-04-15 18:00		Dec-04-15 18:00		Dec-04-15 18:00		Dec-04-15 18:00	
	Analyzed:	Dec-05-15 17:29		Dec-05-15 18:01		Dec-05-15 18:40		Dec-05-15 19:14		Dec-05-15 19:48		Dec-05-15 20:28	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	1720	15.0	ND	15.0	ND	15.0	ND	14.9	ND	15.0
C10-C28 Diesel Range Organics		ND	15.0	217	15.0	ND	15.0	ND	15.0	ND	14.9	ND	15.0
Total TPH		ND	15.0	2020	15.0	ND	15.0	ND	15.0	ND	14.9	ND	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 520627

APEX/Titan, Midland, TX

Project Name: Lateral A-1

Project Id: 7250715105
Contact: Karolanne Toby
Project Location: TX and NM

Date Received in Lab: Fri Dec-04-15 05:41 pm
Report Date: 08-DEC-15
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	520627-007		520627-008					
	Field Id:	STP-1		STP-2					
	Depth:								
	Matrix:	SOIL		SOIL					
	Sampled:	Dec-04-15 14:20		Dec-04-15 14:23					
BTEX by EPA 8021B	***Extracted:***	Dec-07-15 09:00		Dec-07-15 09:00					
	Analyzed:	Dec-07-15 17:16		Dec-08-15 12:47					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		15.1	0.200	9.23	0.199				
Toluene		79.5	0.399	74.1	0.398				
Ethylbenzene		9.77	0.200	9.76	0.199				
m,p-Xylenes		88.0	0.399	89.4	0.398				
o-Xylene		25.7	0.200	22.6	0.199				
Total Xylenes		114	0.200	112	0.199				
Total BTEX		218	0.200	205	0.199				
Inorganic Anions by EPA 300/300.1	***Extracted:***	Dec-07-15 10:00		Dec-07-15 10:00					
	Analyzed:	Dec-07-15 18:44		Dec-07-15 19:06					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		1860	100	722	40.0				
TPH by SW 8015B	***Extracted:***	Dec-04-15 18:00		Dec-04-15 18:00					
	Analyzed:	Dec-07-15 12:29		Dec-07-15 13:08					
	Units/RL:	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		11600	75.0	9830	74.7				
C10-C28 Diesel Range Organics		1180	75.0	174	74.7				
Total TPH		12800	75.0	10000	74.7				

Kelsey Brooks
Project Manager

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

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 520627,

Project ID: 7250715105

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Lateral A-1

Work Order #: 520627

Project ID: 7250715105

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Lateral A-1

Work Order #: 520627

Project ID: 7250715105

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Lateral A-1

Work Order # : 520627 **Project ID:** 7250715105

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

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

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

CHAIN OF CUSTODY RECORD

APEX

Office Location Midland, TX

Project Manager

Laboratory: XENCO

Address: Midland, TX

Contact:

Phone:

PO/SO #:

Lab use only
Due Date:

Temp. of coolers when received (C°): 3.2°C

1	2	3	4	5

Page 1 of 1

Sampler's Name: Georgiana McSwane

Sampler's Signature:

Proj. No.: 7250715105

Project Name: Lateral A-1

No/Type of Containers: 8

ANALYSIS REQUESTED: BTEX 8021B; TPH GRO/DRO; Chlorides

Lab Sample ID (Lab Use Only): 520627

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O
S	12/4/15	1315		X	CS-1		4'				X	
		1317			CS-2		4'					
		1324			CS-3		3'					
		1343			CS-4		3'					
		1401			CS-6		3'					
		1345		X	CS-5		3'					
		1420	X		STP-1		—					
S	12/4/15	1423	X		STP-2		—				X	

N.F.E.

Turn around time: ☐ Normal ☐ 25% Rush ☐ 50% Rush ☑ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	12/4/15	17:41		12/4	17:41
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:
* NM samples *
* 24 hour rush *

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: APEX/Titan

Date/ Time Received: 12/04/2015 05:41:00 PM

Work Order #: 520627

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

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.2
#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 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**No**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**N/A**
#21 <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**
#22 >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: Carley Owens — Date: 12/04/2015

Checklist reviewed by: Kelsey Brooks — Date: 12/07/2015

Analytical Report 528471

for

APEX/Titan

Project Manager: Karolanne Toby

Lateral A-1

7250715105

25-APR-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)

25-APR-16

Project Manager: **Karolanne Toby**
APEX/Titan
505 N. Big Spring Ste. 301 A
Midland, TX 79701

Reference: XENCO Report No(s): **528471**
Lateral A-1
Project Address: NM

Karolanne Toby:

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) 528471. 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. 528471 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 528471

APEX/Titan, Midland, TX

Lateral A-1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-1 (RE)	S	04-13-16 09:40	- 5 ft	528471-001
CS-4 (RE)	S	04-13-16 09:46	- 4 ft	528471-002
CS-5 (RE)	S	04-13-16 09:48	- 4 ft	528471-003
CS-6 (RE)	S	04-13-16 09:50	- 4 ft	528471-004
CS-7	S	04-13-16 09:52		528471-005
CS-8	S	04-13-16 09:54		528471-006
CS-9	S	04-13-16 10:00		528471-007
CS-2 (RE)	S	04-13-16 10:45		528471-008
CS-10	S	04-13-16 11:05		528471-009
CS-11	S	04-13-16 11:28		528471-010
CS-3 (RE)	S	04-13-16 11:37		528471-011
STP-1	S	04-13-16 12:05		528471-012
STP-2	S	04-13-16 12:10		528471-013

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-992563 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected;
Samples affected are: 528471-001 S,528471-001 SD,

Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample. Samples affected are: 528471-001,528471-005.

Certificate of Analysis Summary 528471

APEX/Titan, Midland, TX

Project Name: Lateral A-1

Project Id: 7250715105
Contact: Karolanne Toby
Project Location: NM

Date Received in Lab: Wed Apr-13-16 04:50 pm
Report Date: 25-APR-16
Project Manager: Kelsey Brooks

Analysis Requested	*Lab Id:*	528471-001		528471-002		528471-003		528471-004		528471-005		528471-006	
	Field Id:	CS-1 (RE)		CS-4 (RE)		CS-5 (RE)		CS-6 (RE)		CS-7		CS-8	
	Depth:	5 ft		4 ft		4 ft		4 ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-13-16 09:40		Apr-13-16 09:46		Apr-13-16 09:48		Apr-13-16 09:50		Apr-13-16 09:52		Apr-13-16 09:54	
BTEX by EPA 8021B	*Extracted:*	Apr-14-16 13:30		Apr-14-16 13:30		Apr-14-16 13:30		Apr-14-16 13:30		Apr-14-16 13:30		Apr-14-16 13:30	
	Analyzed:	Apr-15-16 12:03		Apr-15-16 12:20		Apr-14-16 17:59		Apr-15-16 12:36		Apr-15-16 12:53		Apr-15-16 13:09	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00150	ND	0.00149	ND	0.00150	ND	0.00149	ND	0.00150	ND	0.00149
Toluene		ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00198	ND	0.00200	ND	0.00199
Ethylbenzene		ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00198	ND	0.00200	ND	0.00199
m,p-Xylenes		ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00198	ND	0.00200	ND	0.00199
o-Xylene		ND	0.00299	ND	0.00298	ND	0.00300	ND	0.00298	ND	0.00299	ND	0.00298
Total Xylenes		ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00198	ND	0.00200	ND	0.00199
Total BTEX		ND	0.00150	ND	0.00149	ND	0.00150	ND	0.00149	ND	0.00150	ND	0.00149
Inorganic Anions by EPA 300/300.1	*Extracted:*	Apr-22-16 09:00		Apr-22-16 09:00		Apr-22-16 09:00		Apr-22-16 09:00		Apr-22-16 09:00		Apr-22-16 09:00	
	Analyzed:	Apr-22-16 14:21		Apr-22-16 15:22		Apr-22-16 15:42		Apr-22-16 16:02		Apr-22-16 16:23		Apr-22-16 17:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		30.7	10.0	5.37	2.00	6.48	2.00	90.5	10.0	305	20.0	441	20.0
TPH by SW 8015B	*Extracted:*	Apr-14-16 14:00		Apr-14-16 14:00		Apr-14-16 14:00		Apr-14-16 14:00		Apr-14-16 14:00		Apr-14-16 14:00	
	Analyzed:	Apr-14-16 18:59		Apr-15-16 05:57		Apr-14-16 20:40		Apr-14-16 21:05		Apr-14-16 21:29		Apr-14-16 21:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0
C10-C28 Diesel Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0
Total TPH		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 528471

APEX/Titan, Midland, TX

Project Name: Lateral A-1

Project Id: 7250715105
Contact: Karolanne Toby
Project Location: NM

Date Received in Lab: Wed Apr-13-16 04:50 pm
Report Date: 25-APR-16
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	528471-007		528471-008		528471-009		528471-010		528471-011		528471-012	
	Field Id:	CS-9		CS-2 (RE)		CS-10		CS-11		CS-3 (RE)		STP-1	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-13-16 10:00		Apr-13-16 10:45		Apr-13-16 11:05		Apr-13-16 11:28		Apr-13-16 11:37		Apr-13-16 12:05	
BTEX by EPA 8021B	***Extracted:***	Apr-14-16 13:30		Apr-14-16 13:30		Apr-14-16 13:30		Apr-14-16 13:30		Apr-14-16 13:30		Apr-14-16 13:30	
	Analyzed:	Apr-14-16 19:04		Apr-14-16 19:21		Apr-15-16 13:26		Apr-15-16 13:42		Apr-15-16 13:59		Apr-14-16 20:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00150	ND	0.00149	0.0217	0.00150	0.00599	0.00149	ND	0.00150	ND	0.00149
Toluene		ND	0.00200	ND	0.00199	0.0262	0.00200	0.0216	0.00198	0.113	0.00200	0.0278	0.00199
Ethylbenzene		ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00198	0.0386	0.00200	ND	0.00199
m,p-Xylenes		ND	0.00200	0.00443	0.00199	0.0115	0.00200	0.0125	0.00198	0.556	0.00200	0.0511	0.00199
o-Xylene		ND	0.00299	ND	0.00298	ND	0.00299	0.00366	0.00298	0.156	0.00299	0.0521	0.00298
Total Xylenes		ND	0.00200	0.00443	0.00199	0.0115	0.00200	0.0162	0.00198	0.712	0.00200	0.103	0.00199
Total BTEX		ND	0.00150	0.00443	0.00149	0.0594	0.00150	0.0438	0.00149	0.864	0.00150	0.131	0.00149
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-22-16 09:00		Apr-22-16 09:00		Apr-22-16 09:00		Apr-22-16 09:00		Apr-22-16 09:00		Apr-22-16 09:00	
	Analyzed:	Apr-22-16 17:44		Apr-22-16 18:04		Apr-22-16 18:24		Apr-22-16 18:44		Apr-22-16 19:05		Apr-22-16 20:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		51.8	10.0	1370	100	640	40.0	294	20.0	183	10.0	2860	200
TPH by SW 8015B	***Extracted:***	Apr-14-16 14:00		Apr-14-16 14:00		Apr-14-16 14:00		Apr-14-16 14:00		Apr-14-16 14:00		Apr-14-16 14:00	
	Analyzed:	Apr-14-16 22:20		Apr-14-16 22:45		Apr-14-16 23:10		Apr-14-16 23:35		Apr-15-16 00:27		Apr-15-16 07:14	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	14.9	ND	15.0	29.4	15.0	15.2	15.0	80.4	15.0	85.1	15.0
C10-C28 Diesel Range Hydrocarbons		ND	14.9	ND	15.0	ND	15.0	ND	15.0	ND	15.0	592	15.0
Total TPH		ND	14.9	ND	15.0	29.4	15.0	15.2	15.0	80.4	15.0	677	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 528471

APEX/Titan, Midland, TX

Project Name: Lateral A-1

Project Id: 7250715105
Contact: Karolanne Toby
Project Location: NM

Date Received in Lab: Wed Apr-13-16 04:50 pm
Report Date: 25-APR-16
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	528471-013					
	Field Id:	STP-2					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Apr-13-16 12:10					
BTEX by EPA 8021B	***Extracted:***	Apr-14-16 13:30					
	Analyzed:	Apr-14-16 21:14					
	Units/RL:	mg/kg	RL				
Benzene		ND	0.00150				
Toluene		ND	0.00200				
Ethylbenzene		ND	0.00200				
m,p-Xylenes		ND	0.00200				
o-Xylene		ND	0.00299				
Total Xylenes		ND	0.00200				
Total BTEX		ND	0.00150				
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-22-16 09:00					
	Analyzed:	Apr-22-16 20:26					
	Units/RL:	mg/kg	RL				
Chloride		231	10.0				
TPH by SW 8015B	***Extracted:***	Apr-14-16 14:00					
	Analyzed:	Apr-15-16 01:18					
	Units/RL:	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		ND	15.0				
C10-C28 Diesel Range Hydrocarbons		ND	15.0				
Total TPH		ND	15.0				

Kelsey Brooks
Project Manager

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

	Phone	Fax
4147 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282	(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 528471,

Project ID: 7250715105

Lab Batch #: 992563 **Sample:** 528471-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 17:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 992554 **Sample:** 528471-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 18:59

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.8	107	70-135	
o-Terphenyl	55.0	49.9	110	70-135	

Lab Batch #: 992563 **Sample:** 528471-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 19:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 992563 **Sample:** 528471-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 19:21

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0342	0.0300	114	80-120	

Lab Batch #: 992554 **Sample:** 528471-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 20:40

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.9	109	70-135	
o-Terphenyl	54.1	50.0	108	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 528471,

Project ID: 7250715105

Lab Batch #: 992563 **Sample:** 528471-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 20:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 992554 **Sample:** 528471-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 21:05

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.9	105	70-135	
o-Terphenyl	54.5	50.0	109	70-135	

Lab Batch #: 992563 **Sample:** 528471-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 21:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 992554 **Sample:** 528471-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 21:29

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.7	105	70-135	
o-Terphenyl	53.7	49.9	108	70-135	

Lab Batch #: 992554 **Sample:** 528471-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 21:55

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.8	110	70-135	
o-Terphenyl	58.3	49.9	117	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 528471,

Project ID: 7250715105

Lab Batch #: 992554 **Sample:** 528471-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 22:20

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	99.6	127	70-135	
o-Terphenyl	64.4	49.8	129	70-135	

Lab Batch #: 992554 **Sample:** 528471-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 22:45

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.8	104	70-135	
o-Terphenyl	54.6	49.9	109	70-135	

Lab Batch #: 992554 **Sample:** 528471-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 23:10

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.8	107	70-135	
o-Terphenyl	55.7	49.9	112	70-135	

Lab Batch #: 992554 **Sample:** 528471-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 23:35

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.8	105	70-135	
o-Terphenyl	51.2	49.9	103	70-135	

Lab Batch #: 992554 **Sample:** 528471-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/15/16 00:27

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	55.3	50.0	111	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 528471,

Project ID: 7250715105

Lab Batch #: 992554 **Sample:** 528471-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/15/16 01:18

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.9	105	70-135	
o-Terphenyl	54.8	50.0	110	70-135	

Lab Batch #: 992554 **Sample:** 528471-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/15/16 05:57

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.7	108	70-135	
o-Terphenyl	58.5	49.9	117	70-135	

Lab Batch #: 992554 **Sample:** 528471-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/15/16 07:14

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	99.7	118	70-135	
o-Terphenyl	57.8	49.9	116	70-135	

Lab Batch #: 992563 **Sample:** 528471-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/15/16 12:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0349	0.0300	116	80-120	
4-Bromofluorobenzene	0.0490	0.0300	163	80-120	**

Lab Batch #: 992563 **Sample:** 528471-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/15/16 12:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0335	0.0300	112	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 528471,

Project ID: 7250715105

Lab Batch #: 992563 **Sample:** 528471-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/15/16 12:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

Lab Batch #: 992563 **Sample:** 528471-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/15/16 12:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0329	0.0300	110	80-120	
4-Bromofluorobenzene	0.0459	0.0300	153	80-120	**

Lab Batch #: 992563 **Sample:** 528471-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/15/16 13:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 992563 **Sample:** 528471-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/15/16 13:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0343	0.0300	114	80-120	

Lab Batch #: 992563 **Sample:** 528471-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/15/16 13:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0258	0.0300	86	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 528471,

Project ID: 7250715105

Lab Batch #: 992563 **Sample:** 528471-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/15/16 13:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0256	0.0300	85	80-120	
4-Bromofluorobenzene	0.0353	0.0300	118	80-120	

Lab Batch #: 992563 **Sample:** 707774-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/14/16 14:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 992554 **Sample:** 707754-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/14/16 17:44

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	100	127	70-135	
o-Terphenyl	64.4	50.0	129	70-135	

Lab Batch #: 992563 **Sample:** 707774-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/14/16 13:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 992554 **Sample:** 707754-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/14/16 18:09

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	100	129	70-135	
o-Terphenyl	59.2	50.0	118	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 528471,

Project ID: 7250715105

Lab Batch #: 992563 **Sample:** 707774-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/14/16 14:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0336	0.0300	112	80-120	

Lab Batch #: 992554 **Sample:** 707754-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/15/16 06:22

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	56.2	50.0	112	70-135	

Lab Batch #: 992563 **Sample:** 528471-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 16:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0419	0.0300	140	80-120	**

Lab Batch #: 992554 **Sample:** 528471-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 19:24

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	99.8	125	70-135	
o-Terphenyl	57.9	49.9	116	70-135	

Lab Batch #: 992563 **Sample:** 528471-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 16:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0334	0.0300	111	80-120	
4-Bromofluorobenzene	0.0521	0.0300	174	80-120	**

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 528471, **Project ID:** 7250715105

Lab Batch #: 992554 **Sample:** 528471-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/14/16 19:49

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	100	126	70-135	
o-Terphenyl	58.5	50.0	117	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lateral A-1

Work Order #: 528471 **Project ID:** 7250715105

Analyst: PJB **Date Prepared:** 04/14/2016 **Date Analyzed:** 04/14/2016

Lab Batch ID: 992563 **Sample:** 707774-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00150	0.100	0.0970	97	0.100	0.0999	100	3	70-130	35	
Toluene	<0.00200	0.100	0.0952	95	0.100	0.0993	99	4	70-130	35	
Ethylbenzene	<0.00200	0.100	0.0965	97	0.100	0.0994	99	3	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.197	99	0.200	0.204	102	3	70-135	35	
o-Xylene	<0.00300	0.100	0.0982	98	0.100	0.105	105	7	71-133	35	

Analyst: MNR **Date Prepared:** 04/22/2016 **Date Analyzed:** 04/22/2016

Lab Batch ID: 993026 **Sample:** 708012-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	48.6	97	50.0	45.7	91	6	90-110	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Lateral A-1

Work Order #: 528471 **Project ID:** 7250715105

Analyst: ARM **Date Prepared:** 04/14/2016 **Date Analyzed:** 04/14/2016

Lab Batch ID: 992554 **Sample:** 707754-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	855	86	1000	943	94	10	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1040	104	1000	996	100	4	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Lateral A-1

Work Order #: 528471

Lab Batch #: 993026 **Project ID:** 7250715105

Date Analyzed: 04/22/2016 **Date Prepared:** 04/22/2016 **Analyst:** MNR

QC- Sample ID: 528471-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	30.7	250	267	95	80-120	

Lab Batch #: 993026

Date Analyzed: 04/22/2016 **Date Prepared:** 04/22/2016 **Analyst:** MNR

QC- Sample ID: 528471-011 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	183	250	440	103	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Lateral A-1

Work Order # : 528471 **Project ID:** 7250715105

Lab Batch ID: 992563 **QC- Sample ID:** 528471-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/14/2016 **Date Prepared:** 04/14/2016 **Analyst:** PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00149	0.0992	0.0875	88	0.0998	0.0981	98	11	70-130	35	
Toluene	<0.00198	0.0992	0.0843	85	0.0998	0.0954	96	12	70-130	35	
Ethylbenzene	<0.00198	0.0992	0.0867	87	0.0998	0.0993	99	14	71-129	35	
m,p-Xylenes	<0.00198	0.198	0.184	93	0.200	0.211	106	14	70-135	35	
o-Xylene	<0.00298	0.0992	0.101	102	0.0998	0.116	116	14	71-133	35	

Lab Batch ID: 992554 **QC- Sample ID:** 528471-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/14/2016 **Date Prepared:** 04/14/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	998	917	92	1000	1100	110	18	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	998	959	96	1000	1130	113	16	70-135	35	

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

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

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

Sample Duplicate Recovery

Project Name: Lateral A-1

Work Order #: 528471

Lab Batch #: 993026 **Project ID:** 7250715105

Date Analyzed: 04/22/2016 15:01 **Date Prepared:** 04/22/2016 **Analyst:** MNR

QC- Sample ID: 528471-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300/300.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	30.7	31.3	2	20	

Lab Batch #: 993026

Date Analyzed: 04/22/2016 19:45 **Date Prepared:** 04/22/2016 **Analyst:** MNR

QC- Sample ID: 528471-011 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300/300.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	183	184	1	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

528471

CHAIN OF CUSTODY RECORD

APEX

Office Location: Midland

Project Manager: Karolanne Toby

Laboratory: XENCO

Address: Midland, TX

Contact:

Phone:

PO/SO #: 725071510S

Lab use only
Due Date:

Temp. of coolers when received (C°): 3.2

1	2	3	4	5

Page 1 of 2

Sampler's Name: Georgiana McSwane

Sampler's Signature:

Proj. No: 725071510S

Project Name: Lateral A-1

No/Type of Containers: 13

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	Chloride	TPH GRO/DRO	BTEX	Lab Sample ID (Lab Use Only)
S	4/13/16	0940		X	CS-1 (RE)		5'				X		X	X	X	
		0946			CS-4 (RE)		4'									
		0948			CS-5 (RE)		4'									
		0950			CS-6 (RE)		4'									
		0952			CS-7		4'									
		0954			CS-8		4'									
		1000			CS-9		6'									
		1045			CS-2 (RE)		5'									
		1105			CS-10		4'									
S	4/13/16	1128		X	CS-11		4'				X		X	X	X	

Turn around time: ☑ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	4/13/16	1650		4/13/16	1650
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:

* NM Samples

* Normal time

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil

Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other _____

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

528471

CHAIN OF CUSTODY RECORD

APEX

Office Location: Midland

Project Manager: Karolanne Toby

Laboratory: XENCO

Address: Midland TX

Contact:

Phone:

PO/SO #: 7250715105

Lab use only
Due Date:

Temp. of coolers when received (C°): 3.2

1	2	3	4	5

Page 2 of 2

Sampler's Name: Georgiana McSwane

Sampler's Signature:

Proj. No.: 7250715105

Project Name: Lateral A-1

No/Type of Containers: 13

ANALYSIS REQUESTED: Chloride; TPH GRO/DRO; BTEX

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	Lab Sample ID (Lab Use Only)
S	4/13/16	1137		X	CS-3 (RE)		4'				X		
I	"	1205	X		STP-1		—				X		
S	4/13/16	1210	X		STP-2		—				X		

N.F.E 4/13/16

Turn around time: ☒ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	4/13/16	1650		4/13/16	1650
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:

* NM Samples
* Normal time

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil

Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

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

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: APEX/Titan

Date/ Time Received: 04/13/2016 04:50:00 PM

Work Order #: 528471

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)?	**No**
#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
Mary Negron
Date: 04/14/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 04/14/2016

Analytical Report 532336

for

APEX/Titan

Project Manager: Karolanne Toby

Lateral A-1

7250715105

05-JUL-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), 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)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

05-JUL-16

Project Manager: **Karolanne Toby**
APEX/Titan
505 N. Big Spring Ste. 301 A
Midland, TX 79701

Reference: XENCO Report No(s): **532336**
Lateral A-1
Project Address:

Karolanne Toby:

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) 532336. 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. 532336 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 532336

APEX/Titan, Midland, TX

Lateral A-1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-2(RE-2)	S	06-23-16 11:35	- 10 ft	532336-001
CS-10(RE)	S	06-23-16 13:13	- 4 ft	532336-004
STP-3	S	06-23-16 14:15		532336-006
STP-4	S	06-23-16 14:20		532336-007
STP-1 (RE)	S	06-23-16 14:25		532336-008
CS-2(RE-3)	S	06-23-16 11:50	- 11 ft	Not Analyzed
CS-2(RE-4)	S	06-23-16 12:05	- 12 ft	Not Analyzed
CS-10(RE-2)	S	06-23-16 13:34	- 4 ft	Not Analyzed

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 532336

APEX/Titan, Midland, TX

Project Name: Lateral A-1

Project Id: 7250715105
Contact: Karolanne Toby
Project Location:

Date Received in Lab: Fri Jun-24-16 10:45 am
Report Date: 05-JUL-16
Project Manager: Kelsey Brooks

Analysis Requested												
	Lab Id:	532336-001		532336-004		532336-006		532336-007		532336-008		
	Field Id:	CS-2(RE-2)		CS-10(RE)		STP-3		STP-4		STP-1 (RE)		
	Depth:	10 ft		4 ft								
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	Jun-23-16 11:35		Jun-23-16 13:13		Jun-23-16 14:15		Jun-23-16 14:20		Jun-23-16 14:25		
BTEX by EPA 8021B	***Extracted:***					Jun-29-16 16:30		Jun-29-16 16:30		Jun-29-16 16:30		
	Analyzed:					Jun-30-16 17:24		Jun-30-16 19:52		Jun-30-16 17:08		
	Units/RL:					mg/kg	RL	mg/kg	RL	mg/kg	RL	
Benzene						BRL	0.0150	BRL	0.0750	BRL	0.00150	
Toluene						BRL	0.0200	14.5	0.100	0.0363	0.00200	
Ethylbenzene						0.127	0.0200	3.67	0.100	0.0162	0.00200	
m,p-Xylenes						3.07	0.0200	38.8	0.100	0.0889	0.00200	
o-Xylene						1.07	0.0300	11.0	0.150	0.0993	0.00299	
Total Xylenes						4.14	0.0200	49.8	0.100	0.188	0.00200	
Total BTEX						4.27	0.0150	68.0	0.0750	0.241	0.00150	
Inorganic Anions by EPA 300	***Extracted:***	Jun-30-16 17:00		Jun-30-16 17:00		Jun-30-16 17:00		Jun-30-16 17:00		Jun-30-16 17:00		
	Analyzed:	Jun-30-16 19:22		Jun-30-16 19:37		Jun-30-16 19:45		Jun-30-16 19:53		Jun-30-16 20:01		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		419	10.0	45.7	10.0	724	50.0	1930	100	1910	100	
TPH by SW 8015B	***Extracted:***					Jun-28-16 11:00		Jun-28-16 11:00		Jun-28-16 11:00		
	Analyzed:					Jun-28-16 14:43		Jun-28-16 15:53		Jun-28-16 16:17		
	Units/RL:					mg/kg	RL	mg/kg	RL	mg/kg	RL	
C6-C10 Gasoline Range Hydrocarbons						213	15.0	1860	15.0	46.5	15.0	
C10-C28 Diesel Range Hydrocarbons						22.0	15.0	699	15.0	106	15.0	
Total TPH						235	15.0	2560	15.0	153	15.0	

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

	Phone	Fax
4147 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282	(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 532336,

Project ID: 7250715105

Lab Batch #: 997172 **Sample:** 532336-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/28/16 14:43

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	50.8	50.0	102	70-135	

Lab Batch #: 997172 **Sample:** 532336-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/28/16 15:53

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.9	109	70-135	
o-Terphenyl	47.1	50.0	94	70-135	

Lab Batch #: 997172 **Sample:** 532336-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/28/16 16:17

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.8	99.7	98	70-135	
o-Terphenyl	46.6	49.9	93	70-135	

Lab Batch #: 997365 **Sample:** 532336-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/30/16 17:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0348	0.0300	116	80-120	

Lab Batch #: 997365 **Sample:** 532336-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/30/16 17:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0356	0.0300	119	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 532336,

Project ID: 7250715105

Lab Batch #: 997365 **Sample:** 532336-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/30/16 19:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0248	0.0300	83	80-120	

Lab Batch #: 997172 **Sample:** 710459-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/28/16 13:32

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	51.8	50.0	104	70-135	

Lab Batch #: 997365 **Sample:** 710521-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/29/16 18:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 997172 **Sample:** 710459-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/28/16 13:56

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-135	
o-Terphenyl	61.9	50.0	124	70-135	

Lab Batch #: 997365 **Sample:** 710521-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/29/16 16:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0315	0.0300	105	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 532336,

Project ID: 7250715105

Lab Batch #: 997172 **Sample:** 710459-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/28/16 14:20

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	100	117	70-135	
o-Terphenyl	59.6	50.0	119	70-135	

Lab Batch #: 997365 **Sample:** 710521-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/29/16 17:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 997172 **Sample:** 532336-006 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/28/16 15:06

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	99.9	127	70-135	
o-Terphenyl	57.7	50.0	115	70-135	

Lab Batch #: 997365 **Sample:** 532377-044 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 17:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0316	0.0300	105	80-120	

Lab Batch #: 997172 **Sample:** 532336-006 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/28/16 15:30

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	55.1	50.0	110	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Lateral A-1

Work Orders : 532336, **Project ID:** 7250715105

Lab Batch #: 997365 **Sample:** 532377-044 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 17:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Lateral A-1

Work Order #: 532336 **Project ID:** 7250715105

Analyst: PJB **Date Prepared:** 06/29/2016 **Date Analyzed:** 06/29/2016

Lab Batch ID: 997365 **Sample:** 710521-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00150	0.100	0.105	105	0.100	0.100	100	5	70-130	35	
Toluene	<0.00200	0.100	0.102	102	0.100	0.0977	98	4	70-130	35	
Ethylbenzene	<0.00200	0.100	0.108	108	0.100	0.103	103	5	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.221	111	0.200	0.212	106	4	70-135	35	
o-Xylene	<0.00300	0.100	0.108	108	0.100	0.105	105	3	71-133	35	

Analyst: MNR **Date Prepared:** 06/30/2016 **Date Analyzed:** 06/30/2016

Lab Batch ID: 997412 **Sample:** 710538-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	250	262	105	250	262	105	0	90-110	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

BS / BSD Recoveries

Project Name: Lateral A-1

Work Order #: 532336 **Project ID:** 7250715105

Analyst: ARM **Date Prepared:** 06/28/2016 **Date Analyzed:** 06/28/2016

Lab Batch ID: 997172 **Sample:** 710459-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	966	97	1000	903	90	7	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	997	100	1000	962	96	4	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

Form 3 - MS Recoveries

Project Name: Lateral A-1

Work Order #: 532336

Lab Batch #: 997412 **Project ID:** 7250715105

Date Analyzed: 06/30/2016 **Date Prepared:** 06/30/2016 **Analyst:** MNR

QC- Sample ID: 532336-008 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1910	2500	4260	94	80-120	

Lab Batch #: 997412

Date Analyzed: 06/30/2016 **Date Prepared:** 06/30/2016 **Analyst:** MNR

QC- Sample ID: 532377-043 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	44.4	305	326	92	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Version: 1.%

Form 3 - MS / MSD Recoveries

Project Name: Lateral A-1

Work Order # : 532336 **Project ID:** 7250715105

Lab Batch ID: 997365 **QC- Sample ID:** 532377-044 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/29/2016 **Date Prepared:** 06/29/2016 **Analyst:** PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00176	0.117	0.126	108	0.118	0.105	89	18	70-130	35	
Toluene	<0.00235	0.117	0.122	104	0.118	0.103	87	17	70-130	35	
Ethylbenzene	<0.00235	0.117	0.130	111	0.118	0.108	92	18	71-129	35	
m,p-Xylenes	<0.00235	0.235	0.267	114	0.236	0.221	94	19	70-135	35	
o-Xylene	<0.00352	0.117	0.131	112	0.118	0.108	92	19	71-133	35	

Lab Batch ID: 997172 **QC- Sample ID:** 532336-006 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/28/2016 **Date Prepared:** 06/28/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	213	999	1040	83	1000	1060	85	2	70-135	35	
C10-C28 Diesel Range Hydrocarbons	22.0	999	972	95	1000	966	94	1	70-135	35	

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

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

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

Sample Duplicate Recovery

Project Name: Lateral A-1

Work Order #: 532336

Lab Batch #: 997412 **Project ID:** 7250715105

Date Analyzed: 06/30/2016 20:08 **Date Prepared:** 06/30/2016 **Analyst:** MNR

QC- Sample ID: 532336-008 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	1910	1910	0	20	

Lab Batch #: 997412

Date Analyzed: 06/30/2016 18:11 **Date Prepared:** 06/30/2016 **Analyst:** MNR

QC- Sample ID: 532377-043 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	44.4	37.4	17	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Version: 1.%

mBM 532325 532336

CHAIN OF CUSTODY RECORD

APEX

Office Location Midland, TX

Project Manager Karolanne Toby

Laboratory: XENCO

Address:

Contact:

Phone:

PO/SO #: 7250715105

Lab use only
Due Date:

Temp. of coolers when received (C°): 1.1°C

1	2	3	4	5

Page 1 of 1

Sampler's Name: Georgiana McSwane

Sampler's Signature: Georgiana McSwane

Proj. No.: 7250715105

Project Name: Lateral A-1

No/Type of Containers: 8

ANALYSIS REQUESTED: BTEX 8021B; TPH DRO/GRO; Chloride; Hold chloride

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	Lab Sample ID (Lab Use Only)
S	6/23/16	1135		X	CS-2 (RE-2)		10'				X		
		1150			CS-2 (RE-3)		11'			4oz			
		1205			CS-2 (RE-4)		12'						
		1313			CS-10 (RE)		4'						
		1334		X	CS-10 (RE-2)		4'						
		1415	X		STP-3		—						
		1420			STP-4		—						
S	6/23/16	1425	X		STP-1 (RE)		—						

N.E. 6/23/2016

Turn around time: ☑ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Georgiana McSwane	6/24/16	10 45	M A Tm	6/24/16	10:45
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:

* N.M samples

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil

Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

Temp: 1.1°C IR ID:R-8
C/F:0
Corrected Temp: 1.1°C

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: APEX/Titan

Date/ Time Received: 06/24/2016 10:45:00 AM

Work Order #: 532336

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)?	1.1
#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)?	**No**
#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
Mary Negron
Date: 06/27/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 06/27/2016

APPENDIX E

Initial and Final C-141

NM OIL CONSERVATION
ARTESIA DISTRICT
DEC 04 2015

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

RECEIVED

Form C-141
Revised August 8, 2011

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

fAB1534427451
nAB1534358108

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company *Enterprise Field Services LLC*	Contact *Alena Polk*
PO Box 4324, Houston, TX 77210	Telephone No. *575-706-4926*
Facility Name *Pipeline ROW, Lateral A-1*	Facility Type: *Gas Gathering Pipeline*

Surface Owner *Donald Sanders*	Mineral Owner *NA - Pipeline*	Lease No. *NA*

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	*7*	*23S*	*27E*	*370*	*South*	*456*	*East*	*Eddy*

Latitude: *N32.313001* **Longitude:** *W-104.230774*

NATURE OF RELEASE

Type of Release *Natural Gas and pipeline liquids*	Volume of Release: *158 MCF gas and 1bbl liquid*	Volume Recovered: *N/A*
Source of Release *Pipeline Leak.*	Date and Hour of Occurrence *11/30/2015 @ 11:15 MST*	Date and Hour of Discovery *11/30/2015 @ 11:15 MST*
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.*

Describe Cause of Problem and Remedial Action Taken.*

Pipeline leak was detected by a pumper. Pipeline segment was isolated, blown down, repaired following standard one-call. About 1 bbl of liquid noted on ROW.

Describe Area Affected and Cleanup Action Taken.*

A liquid spill of about 1bbl occurred as part of the leak. Remediation actions will follow the Enterprise Products, General Release Notification, Response and Remediation Plan (March 9, 2015).

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: Jon E. Fields	OIL CONSERVATION DIVISION
Printed Name: *Jon E. Fields*	Approved by District Supervisor: Signed By Mike Bratcher
Title: *Director, Field Environmental*	Approval Date: 12/9/15 Expiration Date: N/A
E-mail Address: *jefields@eprod.com*	Conditions of Approval: Remediation per O.C.D. Rules & Guidelines SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 1/15/16 Attached ☐
Date: *12-3-15* Phone: *713-381-6684*	

* Attach Additional Sheets If Necessary

2RP-3433

Revision
Received 9/26/2016

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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 *Enterprise Field Services LLC*	Contact *Alena Miro*
PO Box 4324, Houston, TX 77210	Telephone No. *575-628-6802*
Facility Name *Pipeline ROW, Lateral A-1-2RP-3433*	Facility Type: *Gas Gathering Pipeline*

Surface Owner *Donald Sanders*	Mineral Owner *NA - Pipeline*	Lease No. *NA*

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	*7*	*23S*	*27E*	*370*	*South*	*456*	*East*	*Eddy*

Latitude: *N32.313001* **Longitude:** *W-104.230774*

NATURE OF RELEASE

Type of Release *Natural Gas and pipeline liquids*	Volume of Release: *158 MCF gas and 9bbl liquid (REVISED)*	Volume Recovered: *N/A*
Source of Release *Pipeline Leak.*	Date and Hour of Occurrence *11/30/2015 @ 11:15 MST*	Date and Hour of Discovery *11/30/2015 @ 11:15 MST*
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.*

Describe Cause of Problem and Remedial Action Taken.*

2RP-3433: Pipeline leak was detected by a pumper. Pipeline segment was isolated, blown down, repaired following standard one-call. About 1 bbl of liquid was originally estimated, however, upon excavation and remediation of the affected soil, the total volume of pipeline liquids released is estimated to be about 9 bbl.

Describe Area Affected and Cleanup Action Taken.*

A liquid spill of approximately 9bbls occurred as part of the leak. Remediation actions followed the Enterprise Products, General Release Notification, Response and Remediation Plan (March 9, 2015).

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: Jon E. Fields	OIL CONSERVATION DIVISION
Printed Name: *Jon E. Fields*	Approved by District Supervisor: Accepted for Record
Title: *Director, Field Environmental*	Approval Date: 9/26/16 Expiration Date: N/A
E-mail Address: *jefields@eprod.com*	Conditions of Approval: 2RP-3433 Revision Attached ☐
Date: 9/23/2016 Phone: *713-381-6684*	

* Attach Additional Sheets If Necessary

APPENDIX F

Waste Manifests

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

B + B

NON-HAZARDOUS WASTE MANIFEST NO 115222 | 1. PAGE ___ OF ___ | 2. TRAILER NO. #56

GENERATOR

3. COMPANY NAME: Enterprise Field Services
PHONE NO.: (575) 885-7235

4. ADDRESS: PO Box 1508
CITY: Carlsbad STATE: NM ZIP: 88221

5. PICK-UP DATE: 8/5/2016

6. TNRCC I.D. NO.:

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. 50,780 43,860 49,780					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
LATERAL A-4 N 23411 T@ 144,420

13. WASTE PROFILE NO.: 708582

TREATOR

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE
CO. MAN: ALBERTO MADRID		

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: B & R TRUCKING	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: TREY HUGHES	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (575) 361-3217	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME: Carlos Delgado Jr.	PRINTED/TYPED NAME:
SIGNATURE:	SIGNATURE:
DATE: 8/5/2016	DATE:

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO.: WM-01-035 - New Mexico

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
Santos Gonzalez		8/5/2016	7:50

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

B+B

NON-HAZARDOUS WASTE MANIFEST NO 115224 | 1. PAGE ___ OF ___ | 2. TRAILER NO. #59

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Enterprise Field Services	P.O. Box 1508	8/5/2016
PHONE NO. (515) 885-7235	CITY Carlsbad STATE NM ZIP 88221	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. 50,740 52,200					

12. COMMENTS OR SPECIAL INSTRUCTIONS: LATERAL A-1 N 23411 T@ 102,940

13. WASTE PROFILE NO. 708582

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME: Kin Slaughter PHONE NO: 575-887-4048

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME: CO. MAN: ALBERTO MADRID SIGNATURE:

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: B &R TRUCKING	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: TREY HUGHES	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (575) 361-3217	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of recei
PRINTED/TYPED NAME: Amanda S	PRINTED/TYPED NAME:
SIGNATURE: Amanda S DATE: 8/5/2016	SIGNATURE: DATE:

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	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
Santos Gonzalez		8/5/2016	8:25

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPI TRANSPOR

COPY

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

B+R

NON-HAZARDOUS WASTE MANIFEST NO 115215 | 1. PAGE __ OF __ | 2. TRAILER NO. #29

GENERATOR

3. COMPANY NAME: Enterprise ~~Products~~ Field Services
PHONE NO.: (432) 230-1414

4. ADDRESS: 2162 Commerce
CITY: Midland STATE: TX ZIP: 79703

5. PICK-UP DATE: 8/4/2016
6. TNRCC I.D. NO.:

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non-Hazardous Waste	1	CM			
b.					
c.					
d. 52,020 53,020					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
LATERAL A-1 N 23411 T@ ID5,040

13. WASTE PROFILE NO.: 708582

TRANSPORTER

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**
NAME: Kin Slaughter PHONE NO: 575-887-4048 24-HOUR EMERGENCY NO.:

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME: CO. MAN: ALBERTO MADRID
SIGNATURE: DATE:

TRANSPORTERS

16. **TRANSPORTER (1)**
NAME: B & R TRUCKING
TEXAS I.D. NO.:
IN CASE OF EMERGENCY CONTACT: TREY HUGHES
EMERGENCY PHONE: (575) 361-3217

17. **TRANSPORTER (2)**
NAME:
TEXAS I.D. NO.:
IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:

18. **TRANSPORTER (1):** Acknowledgment of receipt of material
PRINTED/TYPED NAME: Carlos Delgado Jr.
SIGNATURE: DATE: 8/4/2016

19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME:
SIGNATURE: DATE:

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO.: WM-01-035 - New Mexico

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
Santos Gonzalez		8/4/2016	12:35

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

B&B

NON-HAZARDOUS WASTE MANIFEST NO 115216 | 1. PAGE__OF__ | 2. TRAILER NO. #59

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Enterprise ~~Products~~ Field Services	2162 Commerce	8/4/2016
PHONE NO. (432) 230-1414	CITY Midland STATE TX ZIP 79703	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. 47,200 50,720					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
LATERAL A-1 N 23411 T@ 97920

13. WASTE PROFILE NO. 708582

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**
NAME Kin Slaughter PHONE NO 575-887-4048 24-HOUR EMERGENCY NO.

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME CO. MAN: ALBERTO MADRID | SIGNATURE | DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: B & R TRUCKING	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: TREY HUGHES	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (575) 361-3217	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Amanda S.	PRINTED/TYPED NAME
SIGNATURE Amanda S. DATE 8/4/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO. WM-01-035 - New Mexico | 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
Santos Gonzalez		8/4/2016	1:30

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Sotelo

NON-HAZARDOUS WASTE MANIFEST NO 115112 | 1. PAGE __ OF __ | 2. TRAILER NO. #28

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Enterprise Field Services LLC	P.O BOX 1508	7/21/2016
PHONE NO. (575) 885-7236	CITY Carlsbad STATE NM 88221 ZIP	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. ~~Non-Regulated, Non Hazardous Waste~~	1	CM			
b.					
c. WT:					
d. 43420 40960					

12. COMMENTS OR SPECIAL INSTRUCTIONS: LATERAL A-1 T@ 84,380

13. WASTE PROFILE NO. 708582

TREATOR

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME Kin Slaughter | PHONE NO 575-887-4048 | 24-HOUR EMERGENCY NO.

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME ATTN: JEREMIAH HANWAY | SIGNATURE | DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: SOTELO TRUCKING	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: JOSE SOTELO	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (575) 706-3842	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Jose Sotelo Sr	PRINTED/TYPED NAME
SIGNATURE Jose Sotelo Jr DATE 7/21/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

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 7/21/2016	TIME
Santos Gonzalez			10:15

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Sotelo #28

NON-HAZARDOUS WASTE MANIFEST NO 115115 | 1. PAGE __ OF __ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Enterprise Field Services LLC	P.O BOX 1508	7/21/2016
PHONE NO. (575) 885-7236	CITY Carlsbad STATE NM ZIP 88221	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste					
b.					
c. WT:					
d. 45,380					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
LATERAL A-1	708582

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME Kin Slaughter PHONE NO 575-887-4048

15. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME ATTN: JEREMIAH HANWAY SIGNATU

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: SOTELO TRUCKING	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: JOSE SOTELO	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (575) 706-3842	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	19. TRA SPORTER (2): Acknowledgment of receipt
PRINTED/TYPED NAME Jose Sotelo Sr	PRINTE /TYPED NAME
SIGNATURE DATE 7/21/2016	SIGNAT RE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

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		TIME
Carlos Gonzalez			3:00

GENERATOR: COPIES 1 & 6 COPIES

V.1