CORRECTIVE ACTION REPORT

Property:

Eddy County Trunk A & Eddy County Trunk A #2 Releases
32.314966 N, 103.802581 W & 32.315501 N, 103.803016 W
SE¼ SW ¼, S8 T23S R31E
Eddy County, New Mexico
ECIRTS: 25812 & 26813
RP# 2RP-3187

August 2016
Apex Project No. 7250715054 & 7250715074

Prepared for:

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TABLE OF CONTENTS

LIST OF APPENDICES

CORRECTIVE ACTION REPORT

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1.0 INTRODUCTION

1.1 Site Description & Background

The Eddy County Trunk A and Eddy County Trunk A #2 release sites are located within the Enterprise Field Services, LLC (Enterprise) pipeline right-of-way (ROW) in the southeast (SE) ¼ of the southwest (SE) ¼ of Section 8 in Township 23 South and Range 31 East in rural Eddy County, New Mexico. The Eddy County Trunk A Release (32.314966 N, 103.802581 W) is referred to hereinafter as "Site A". The Eddy County Trunk A #2 Release (32.315501 N, 103.803016 W) is referred to hereinafter as the "Site B". Site A and Site B are located adjacent to a two-track bypass road owned by the Bureau of Land Management (BLM). Both Site A and Site B are surrounded by native vegetation rangeland and oil and gas production with adjacent gathering facilities, including the Enterprise Eddy County Trunk A natural gas gathering pipeline which traverses the area from northwest to southeast.

On April 29, 2015, Enterprise was notified of a release from the Eddy County Trunk A natural gas gathering pipeline by a third party (Site A). The release occurred within the pipeline ROW and followed the pipe-chase. Enterprise carried out remediation activities in accordance with Enterprise's General Release Notification, Response and Remediation Plan (dated March 9, 2015). Enterprise isolated the leaking portion of the pipeline and the pipeline section was blown down to carry out repair activities. Approximately five (5) barrels (bbls) of natural gas pipeline liquids was released from the pipeline and onto the ROW. A small area of "overspray" caused by the leaking pipeline was identified to the northwest of the excavation boundary. Enterprise initiated remediation excavation activities at Site A in an effort to repair the subsurface leak and treat the identified area of overspray. The leak was subsequently identified and repaired. The surface effects of the leak were treated with bioremediation.

Subsequent to the completion of remediation activities at the initial release Site A, Enterprise was notified of a second release from the Eddy County Trunk A line on July 30, 2015 (Site B). The release occurred within the pipeline ROW and followed the pipe-chase. Enterprise isolated the leaking portion of the pipeline and the pipeline section was blown down to carry out remediation activities. During initial response actions, it was estimated that approximately five (5) bbls of natural gas pipeline liquids was released from the pipeline and onto the ROW at Site B. The RP # 2RP-3187 was assigned by the New Mexico Oil Conservation Division (NMOCD) to the Eddy County Trunk A #2 release (Site B). Enterprise initiated excavation activities at Site B in an effort to locate and repair the subsurface leak. The leak was subsequently identified and repaired.

Subsequent to the completion of remediation activities, the release amount at Site B was revised to approximately 17 bbls based on the measured final dimensions of the excavation associated with the release.

A topographic map depicting the location of the Site A and Site B 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 ENMRD 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 Office of 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 A and Site B 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 greater than 50 feet but less than 99 feet at the Site.
- 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 April 29, 2015, Enterprise was informed of a pipeline leak detected by a third party on the Eddy County Trunk A pipeline (Site A). Enterprise isolated the leaking portion and the pipeline section was blown down to carry out repair activities in accordance to Enterprise's General Release Notification, Response and Remediation Plan. An estimated five (5) bbls of natural gas pipeline liquids was released from the pipeline within the ROW. A small area of overspray caused by the leaking pipeline was identified to the northwest of the excavation boundary.

The initial excavation at Site A was carried out on May 8, 2015, by Willbros Construction. Impacted soil was removed from below and surrounding the release point on the pipeline. Apex oversaw remediation activities and collected confirmation soil samples from the excavation sidewalls and floor.

The final excavation dimensions at Site A measured approximately 195 feet long by 15 feet wide, with a total depth of approximately four (4) feet below ground surface (bgs).

On June 12, 2015, Apex returned to the Site to conduct in-situ soil remediation activities in the vicinity of the identified area of overspray to the northwest of the excavation boundaries. Talon LPE (Talon) applied a microbial-decomposition product (Microblaze®) to introduce additional nonpathogenic bacterial strains designed to metabolize petroleum hydrocarbons to the area of overspray. Apex collected a confirmation soil sample approximately five (5) weeks after the application of Microblaze, allowing the bacterial strains in the Microblaze adequate time to metabolize petroleum hydrocarbons in the area of overspray. The dimensions of the overspray area measured approximately 40 feet long by 20 feet wide.

As noted by Enterprise, backfill of the excavation at Site A was completed during July 2015. The stockpiled material from the excavation was transported off-Site to a state approved disposal facility. The excavation was backfilled with clean fill material and the area was returned to approximate original surface grade.

On July 30, 2015, Enterprise discovered a second release on the Eddy County Trunk A pipeline (Site B). Enterprise isolated the leaking portion and the pipeline section was blown down to carry out repair activities in accordance to Enterprise's General Release Notification, Response and Remediation Plan. An estimated five (5) bbls of natural gas pipeline liquids were released from the pipeline within the ROW.

The initial excavation at Site B was carried out on August 4, 2015. Impacted soil was removed from below and surrounding the release point on the pipeline. Apex collected confirmation soil samples from the excavation sidewalls and floor. In addition, Apex collected composite soil samples from the stockpiled material on-Site for disposal purposes.

Based on the laboratory analytical results for the initial confirmation soil samples, the affected areas along the excavation walls and floor were over-excavated. On September 25, 2015, additional confirmation soil samples were collected subsequent to over-excavating the impacted soils along the excavation floor.

On January 14, 2016, additional impacted soils were removed at Site B from the southeastern floor of the excavation. Apex collected an additional confirmation soil sample subsequent to over-excavating the impacted soils.

The excavation dimensions at Site B measured approximately 68 feet long by 15 feet wide, with varying depths from approximately nine (9) feet bgs to 14 feet bgs.

The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated sand with calcium carbonate (caliche) when approaching the total depth of excavation.

As noted by Enterprise, backfill of the excavation at Site B was completed on February 1, 2016. The stockpiled material from the excavation was transported off-Site to a state approved disposal facility. The excavation was backfilled with clean fill material and the area was returned to original surface grade.

3.2 Soil Sampling Program

On May 8, 2015, Apex collected eight (8) confirmation soil samples (CS-1 through CS-4, North Side Wall, East Side Wall, West Side Wall, and South Side Wall) at Site A from each wall of the excavation and areas along the excavation floor, including directly under the point of release.

On July 15, 2015, Apex collected a soil sample (SS-1) from the overspray area located to the northwest of the former excavation boundaries.

Subsequent to the completion of the remediation activities at Site A and the discovery of a second release on the Eddy County Trunk A line at Site B, Apex collected five (5) confirmation soil samples (N-Wall, S-Wall, E-Wall, W-Wall and RP) at Site B from each wall of the excavation and directly under the point of release on August 4, 2015. In addition, Apex collected two (2) composite soil samples (STP-1 and STP-2) from the stockpiled material for disposal purposes.

Laboratory analytical results for the initial confirmation soil samples collected from Site B indicated additional soil removal was required from the excavation sidewalls. On September 25, 2015, additional confirmation soil samples (E-Wall RE, S-Wall-2, N-Wall-2 and BH-1) were collected at Site B subsequent to over-excavating impacted soils in the excavation. In addition, two (2) composite soil samples (Stp-1-RE and Stp-2-RE) were collected from the stockpiled material at Site B for disposal purposes.

Laboratory analytical results indicated additional soil removal was required at Site B along the excavation floor. On January 14, 2016, an additional confirmation soil sample (BH-1-RE) was collected from the excavation floor.

Soil samples were collected in laboratory supplied glass containers, cooled to approximately 4° C, transported under proper chain-of-custody procedures and documentation. Soil samples were submitted for analysis under chain-of-custody control to Trace Analysis laboratory in Midland, Texas and Xenco Laboratories in Midland, TX. Soil samples were analyzed for TPH, gasoline range organics and diesel range organics (GRO/DRO), by EPA Method 8015B, BTEX utilizing EPA Method 8021B, and chloride utilizing method 4500-Cl B and EPA Method 300.

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

Figure 3A and Figure 3B are Site Maps that indicate the approximate location of the excavated areas at Site A and Site B, respectively, in relation to pertinent land features (Appendix A).

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 New Mexico Administrative Code 19.15.29 *Remediation Plan*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

4.1 Site A Excavation Confirmation Soil Samples

Apex compared the benzene, total BTEX, TPH and chloride concentrations associated with the confirmation soil samples collected from the excavated areas at Site A and Site B to the OCD *Remediation Action Levels* (RALs) for sites having a total ranking score of "10".

The laboratory analyses of the initial confirmation soil samples (CS-1 through CS-4, North Side Wall, East Side Wall, West Side Wall and South Side Wall) collected at Site A indicated benzene concentrations ranging from below the laboratory reporting limit of 0.0200 mg/Kg to 0.0430 mg/Kg, which are below the OCD RRAL of 10 mg/Kg for a Site ranking of 10. Laboratory analyses of the initial confirmation soil samples (CS-1 through CS-4, North Side Wall, East Side Wall, West Side Wall and South Side Wall) collected at Site A indicated total BTEX concentrations ranging from below the laboratory reporting limits of 0.0200 mg/Kg to 0.0430 mg/Kg, which are below the OCD RRAL of 50 mg/Kg for a Site ranking of 10.

The laboratory analyses of the initial confirmation soil samples (CS-1 through CS-4, North Side Wall, East Side Wall, West Side Wall and South Side Wall) collected at Site A indicated combined TPH GRO/DRO concentrations ranging from below the laboratory reporting limits to 51.9 mg/Kg, which are below the OCD RRAL of 1,000 mg/Kg for a Site ranking of 10.

The laboratory analyses of the initial confirmation soil samples (CS-1 through CS-4, North Side Wall, East Side Wall, West Side Wall and South Side Wall) collected at Site A indicated chloride concentrations ranging less than the reporting limit of 20.0 mg/Kg to 388 mg/Kg, which are below the OCD RRAL of 500 mg/Kg for a Site ranking of 10.

The laboratory analyses of the soil sample (SS-1) collected from the area of overspray at Site A indicated a benzene concentration of less than the reporting limit of 0.00111 mg/Kg, a total BTEX concentration of less than the reporting limit of 0.00111 mg/Kg, a combined TPH GRO/DRO concentration below the laboratory reporting limit of 16.6 mg/Kg and a chloride concentration of 3.70 mg/Kg, which are below the OCD RRALs of 10 mg/Kg, 50 mg/Kg, 1,000 mg/Kg and 500 mg/Kg, respectively, for a Site ranking of 10.

4.2 Site B Excavation Confirmation Soil Samples

The laboratory analyses of the final confirmation soil samples (RP, BH-1 RE, S-Wall, S-Wall-2, W-Wall, E-Wall RE, N-Wall and N-Wall-2) collected at Site B indicate benzene concentrations ranging from below the laboratory reporting limits of 0.000998 mg/Kg to 0.0371 mg/Kg, which are below the OCD RRAL of 10 mg/Kg for a Site ranking of 10. Laboratory analyses of the final confirmation soil samples (RP, BH-1 RE, S-Wall, S-Wall-2, W-Wall, E-Wall RE, N-Wall and N-Wall-2) collected at Site B indicated total BTEX concentrations ranging from below the laboratory limits of 0.000998 mg/Kg to 0.0866 mg/Kg, which are below the OCD RRAL of 50 mg/Kg for a Site ranking of 10.

The laboratory analyses of the final confirmation soil samples (RP, BH-1 RE, S-Wall, S-Wall-2, W-Wall, E-Wall RE, N-Wall and N-Wall-2) collected from the excavation at Site B indicated combined TPH GRO/DRO concentrations ranging from below the laboratory reporting limits of 15.0 mg/Kg to 456 mg/Kg, which are below the OCD RRAL of 1,000 mg/Kg for a Site ranking of 10.

The laboratory analyses of the final confirmation soil samples (RP, BH-1 RE, S-Wall, S-Wall-2, W-Wall, E-Wall RE, N-Wall and N-Wall-2) collected at Site B indicated chloride concentrations ranging from below the laboratory reporting limits of 2.00 mg/Kg to 6.76 mg/Kg, which are below the OCD RRAL of 500 mg/Kg for a Site ranking of 10.

Soil sample results for Site A and Site B are provided in Table 1 in Appendix B.

5.0 FINDINGS AND RECOMMENDATIONS

The Eddy County Trunk A (Site A) and Eddy County Trunk A #2 (Site B) release sites are located within the Enterprise pipeline ROW in the SE ¼ of the SE ¼ of Section 8 in Township 23 South and Range 31 East in rural Eddy County, New Mexico. Site A and Site B are located adjacent to a two-track bypass road owned by the BLM. Both Site A and Site B are surrounded by native vegetation rangeland and oil and gas production with adjacent gathering facilities, including the Enterprise Eddy County Trunk A natural gas gathering pipeline, which traverses the area from northwest to southeast.

On April 29, 2015, Enterprise was notified of a release from the Eddy County Trunk A natural gas gathering pipeline by a third party (Site A). The release occurred within the pipeline ROW and followed the pipe-chase. Enterprise carried out remediation activities in accordance with Enterprise's General Release Notification, Response and Remediation Plan (dated March 9, 2015). Enterprise isolated the leaking portion of the pipeline and the pipeline section was blown down to carry out repair activities. Approximately five (5) barrels (bbls) of natural gas pipeline liquids was released from the pipeline and onto the ROW. A small area of overspray caused by the leaking pipeline was identified to the northwest of the excavation boundary. Enterprise initiated remediation excavation activities at Site A in an effort to repair the subsurface leak and treat the identified area of overspray. The leak was subsequently identified and repaired. The surface effects of the leak were treated with bioremediation.

Subsequent to the completion of remediation activities at the initial release Site A, Enterprise was notified of a second release from the Eddy County Trunk A line on July 30, 2015 (Site B). The release occurred within the pipeline ROW and followed the pipe-chase. Enterprise isolated the leaking portion of the pipeline and the pipeline section was blown down to carry out remediation activities. During initial response actions, it was estimated that approximately five (5) bbls of natural gas pipeline liquids was released from the pipeline and onto the ROW at Site B. The RP # 2RP-3187 was assigned by the NMOCD to the Eddy County Trunk A #2 release (Site B). Enterprise initiated excavation activities at Site B in an effort to locate and repair the subsurface leak. The leak was subsequently identified and repaired.

Subsequent to the completion of remediation activities, the release amount at Site B was revised to approximately 17 bbls based on the measured final dimensions of the excavation associated with the release.

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

- On-Site remediation included excavation of the affected area impacted by the release of natural gas pipeline liquids starting from the release point. The excavated area at Site A measured approximately 195 feet long by 15 feet wide, with a total depth of approximately four (4) feet below ground surface (bgs). The excavated area at Site B measured approximately 68 feet long by 15 feet wide, with varying depths from nine (9) feet bgs to 14 feet bgs.

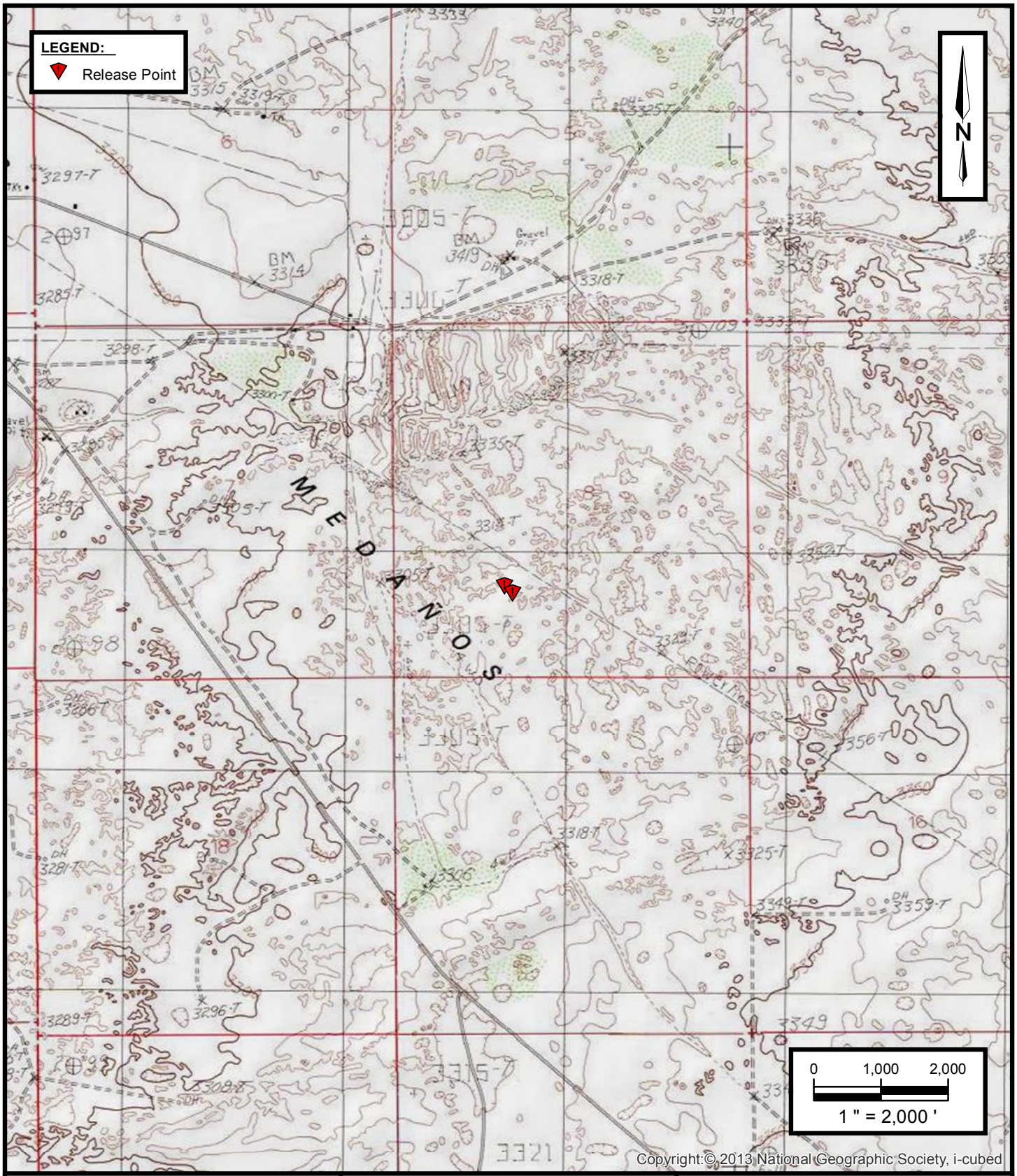
- Based on analytical results collected from Site A and Site B, soils remaining in place from both releases do not exhibit COC concentrations above the OCD *Remediation Action Levels* for a Site ranking of "10".

- As noted by Enterprise, backfill of the excavation at Site A was completed during July 2015. Backfill of the excavation at Site B was completed on February 1, 2016. The affected soils were transported to a state approved disposal facility. The excavation was backfilled with clean imported fill and contoured to approximate surrounding grade.

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

APPENDIX A

Figures



Enterprise Field Services, LLC
Eddy County Trunk A and
Eddy County Trunk A #2
Eddy County, New Mexico
32.315219 N, 103.802627 W
32.315501 N, 103.803016 W

Project Nos. 7250715054 and 7250715074

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FIGURE 1

Topographic Map

Los Medanos New Mexico Quadrangle
1985

P:\Drafting\Midland\2015\7250715074\Figure 1.mxd 2/17/2016 NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US Projected Coordinate System

Enterprise Field Services, LLC
Eddy County Trunk A and
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FIGURE 2

Site Vicinity Map

Aerial Photograph February 2014

P:\Drafting\Midland\2015\7250715074\Figure 2.mxd 2/17/2016 NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US Projected Coordinate System

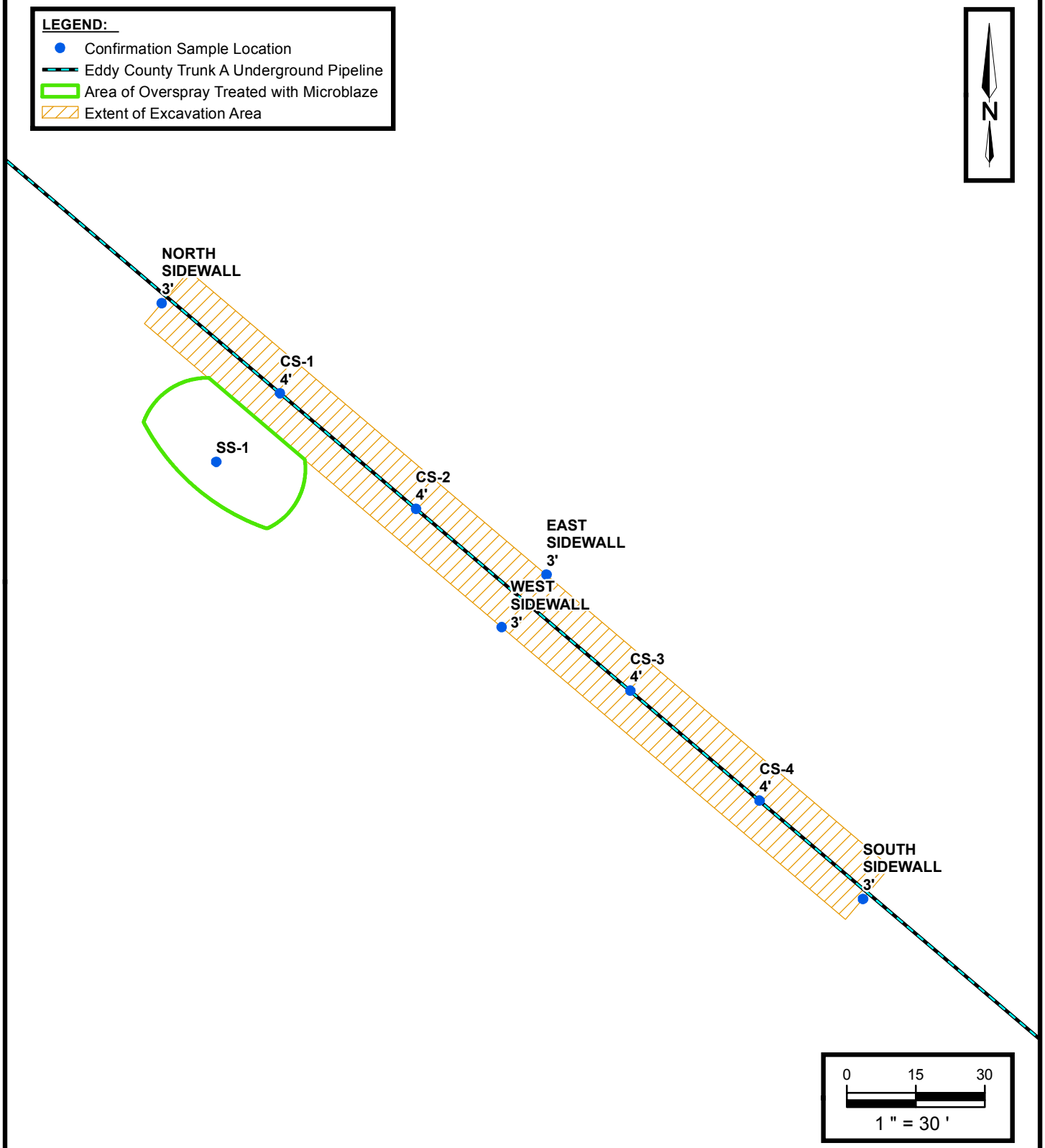

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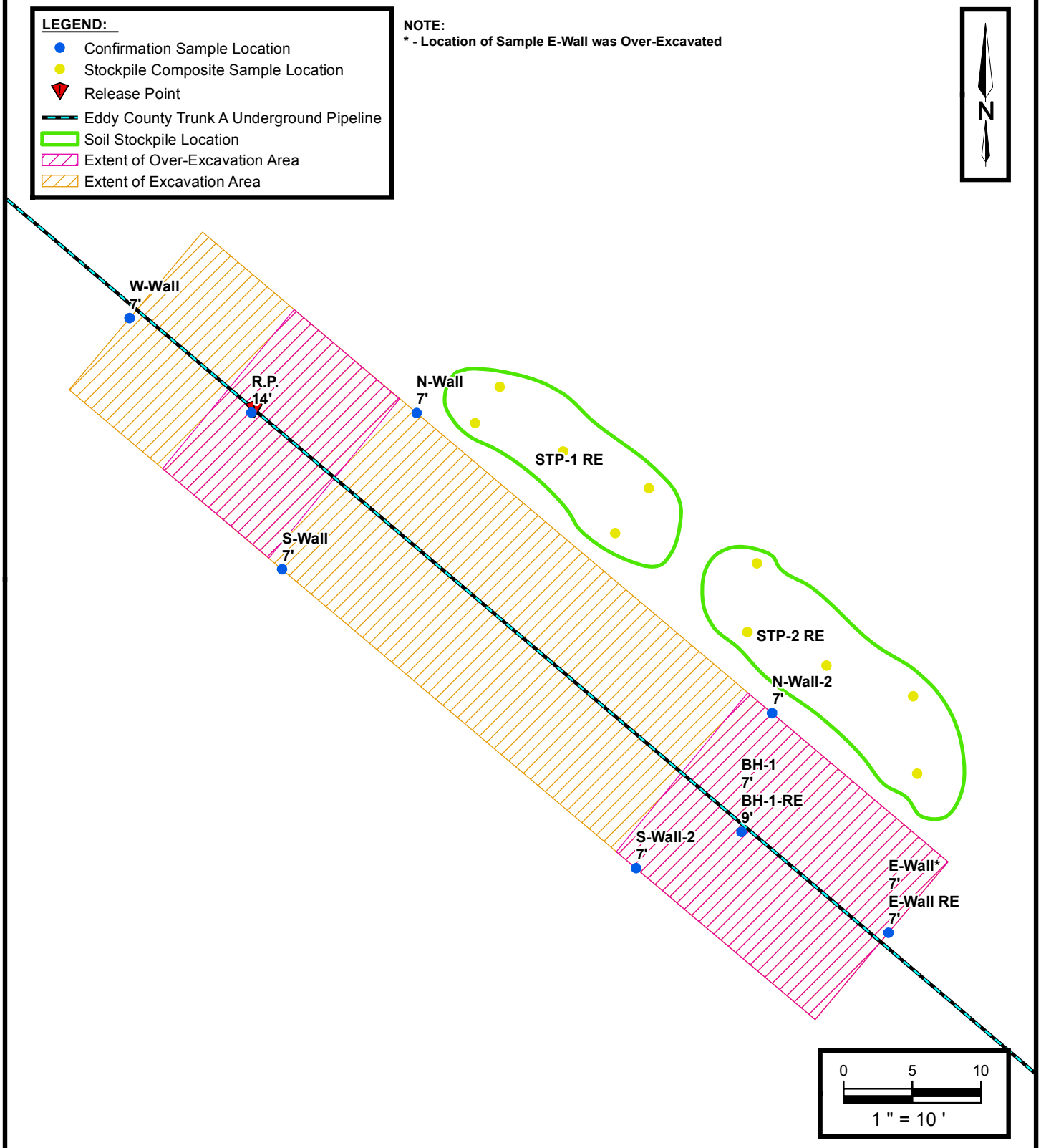
FIGURE 3A

Site A Map

P:\Drafting\Midland\2015\7250715074\Figure 3A.mxd 2/17/2016 NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US Projected Coordinate System



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Eddy County Trunk A #2
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FIGURE 3B

Site B Map

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APPENDIX B

Analytical Tables

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS

Eddy County Trunk A and Eddy County Trunk A #2

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH GRO (mg/Kg)	TPH DRO (mg/Kg)	TPH GRO/DRO (mg/Kg)	Chloride (mg/Kg)
New Mexico Oil Conservation Division (NMOCD) Recommended 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
EDDY COUNTY TRUNK A (SITE A) CONFIRMATION SAMPLE ANALYTICAL RESULTS											
CS-1	5/8/2015	4	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<54.0	**291**
CS-2	5/8/2015	4	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	**51.9**	**51.9**	**388**
CS-3	5/8/2015	4	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<54.0	**97.0**
CS-4	5/8/2015	4	**0.0430**	<0.0200	<0.0200	<0.0200	**0.0430**	<4.00	<50.0	<54.0	**291**
North Side Wall	5/8/2015	3	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<54.0	**97.0**
East Side Wall	5/8/2015	3	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<54.0	<20.0
West Side Wall	5/8/2015	3	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<54.0	<20.0
South Side Wall	5/8/2015	3	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<54.0	<20.0
SS-1	7/15/2015	surface	<0.00111	<0.00221	<0.00111	<0.00111	<0.00111	<27.5	<27.5	<27.5	3.70
EDDY COUNTY TRUNK A #2 (SITE B) CONFIRMATION SAMPLE ANALYTICAL RESULTS											
RP	8/4/2015	14	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<54.0	<20.0
BH-1	9/25/2015	7	**13.3**	**82.6**	**24.0**	**97.6**	**218**	**8,520**	**1,320**	**9,840**	**130**
BH-1-RE	1/14/2016	9	**0.0371**	**0.00542**	**0.0881**	**0.0866**	**0.217**	**86.9**	**369**	**456**	NS
S-Wall	8/4/2015	7	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<54.0	<20.0
S-Wall-2	9/25/2015	7	<0.000998	<0.00200	<0.000998	<0.000998	<0.000998	<15.0	<15.0	<15.0	<2.00
W-Wall	8/4/2015	7	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<54.0	<20.0
E-Wall	8/4/2015	7	**0.0435**	**2.90**	**11.3**	**20.9**	**35.1**	**960**	**193**	**1,153**	**98.0**
E-Wall RE	9/25/2015	7	NS	NS	NS	NS	NS	<14.9	<14.9	<14.9	NS
N-Wall	8/4/2015	7	<0.0200	<0.0200	**0.0404**	**0.0211**	**0.0615**	**8.00**	<50.0	**8.00**	<20.0
N-Wall-2	9/25/2015	7	<0.00100	<0.00201	<0.00100	**0.00223**	**0.00223**	<15.0	<15.0	<15.0	**6.76**
EDDY COUNTY TRUNK A #2 (SITE B) STOCKPILE SAMPLE ANALYTICAL RESULTS											
STP-1	8/4/2015	NA	<0.0200	<0.0200	<0.0200	**0.0366**	**0.0366**	**4.92**	<50.0	**4.92**	<20.0
Stp-1-RE	9/25/2015	NA	<0.00101	<0.00202	<0.00101	<0.00101	<0.00101	<15.0	<15.0	<15.0	**601**
STP-2	8/4/2015	NA	**2.36**	**10.70**	**9.95**	**19.4**	**42.4**	**2,400**	<50.0	**2,400**	**293**
Stp-2-RE	9/25/2015	NA	<0.000996	**0.00293**	**0.00628**	**0.0897**	**0.0989**	**52.2**	**50.2**	**102**	**340**

- indicates over-excavation

*Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level*

mg/Kg- milligrams per Kilograms

NE: Not Established

NA: Not Applicable

NS: Not Sampled

APPENDIX C

Photo Documentation

Site A Photos

Area before response action activities.

Exposed release point.

Northern extent of excavation.

Excavation facing south.

Stockpiled soil.

Area after response action activities.

APEX

Site B Photos

View of excavation facing north

Exposed release point.

Southeastern extent of excavation, facing north

View of stockpiles facing north

APPENDIX D

Laboratory Analytical Results & Chain of Custody Documentation

TRACEANALYSIS, INC.

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Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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Report Date: May 15, 2015

Work Order: 15050841

Project Name: Enterprise-Eddy Co Trunk A Line
Project Number: 7250715054

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
392874	CS-1	soil	2015-05-08	00:00	2015-05-08
392875	CS-2	soil	2015-05-08	00:00	2015-05-08
392876	CS-3	soil	2015-05-08	00:00	2015-05-08
392877	CS-4	soil	2015-05-08	00:00	2015-05-08
392878	North Side Wall	soil	2015-05-08	00:00	2015-05-08
392879	East Side Wall	soil	2015-05-08	00:00	2015-05-08
392880	West Side Wall	soil	2015-05-08	00:00	2015-05-08
392881	South Side Wall	soil	2015-05-08	00:00	2015-05-08

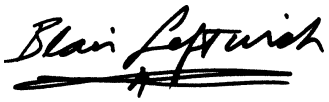
Notes

- **Work Order 15050841:** Straight from the fields, not on ice

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TraceAnalysis, Inc. uses the attached chain of custody (COC) as the laboratory check-in documentation which includes sample receipt, temperature, sample preservation method and condition, collection date and time, testing requested, company, sampler, contacts and any special remarks.

This report consists of a total of 34 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
James Taylor, Assistant Director
Brian Pellam, Operations Manager

Report Contents

Case Narrative

Samples for project Enterprise-Eddy Co Trunk A Line were received by TraceAnalysis, Inc. on 2015-05-08 and assigned to work order 15050841. Samples for work order 15050841 were received intact at a temperature of 30.9 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	102695	2015-05-08 at 10:01	121396	2015-05-11 at 07:43
BTEX	S 8021B	102792	2015-05-13 at 15:07	121501	2015-05-14 at 09:32
Chloride (Titration)	SM 4500-Cl B	102735	2015-05-11 at 14:43	121415	2015-05-11 at 14:44
Chloride (Titration)	SM 4500-Cl B	102800	2015-05-13 at 20:17	121498	2015-05-13 at 20:18
TPH DRO - NEW	S 8015 D	102740	2015-05-11 at 18:46	121470	2015-05-13 at 10:13
TPH GRO	S 8015 D	102727	2015-05-11 at 11:22	121435	2015-05-12 at 10:39
TPH GRO	S 8015 D	102792	2015-05-13 at 15:07	121502	2015-05-14 at 09:34

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 15050841 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 392874 - CS-1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121396	Date Analyzed:	2015-05-11	Analyzed By:	AK
Prep Batch:	102695	Sample Preparation:	2015-05-08	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.24	mg/Kg	1	2.00	112	70 - 130
4-Bromofluorobenzene (4-BFB)			2.12	mg/Kg	1	2.00	106	70 - 130

Sample: 392874 - CS-1

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	121415	Date Analyzed:	2015-05-11	Analyzed By:	EM
Prep Batch:	102735	Sample Preparation:	2015-05-11	Prepared By:	EM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**291**	mg/Kg	5	4.00

Sample: 392874 - CS-1

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	121470	Date Analyzed:	2015-05-13	Analyzed By:	SC
Prep Batch:	102740	Sample Preparation:	2015-05-11	Prepared By:	SC

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Jb	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			79.3	mg/Kg	1	100	79	70 - 130

Sample: 392874 - CS-1

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	121435	Date Analyzed:	2015-05-12	Analyzed By:	AK
Prep Batch:	102727	Sample Preparation:	2015-05-11	Prepared By:	AK

Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	U	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.72	mg/Kg	1	2.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)			1.67	mg/Kg	1	2.00	84	70 - 130

Sample: 392875 - CS-2

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121396	Date Analyzed:	2015-05-11	Analyzed By:	AK
Prep Batch:	102695	Sample Preparation:	2015-05-08	Prepared By:	AK

Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.47	mg/Kg	1	2.00	124	70 - 130
4-Bromofluorobenzene (4-BFB)			2.02	mg/Kg	1	2.00	101	70 - 130

Sample: 392875 - CS-2

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	121415	Date Analyzed:	2015-05-11	Analyzed By:	EM
Prep Batch:	102735	Sample Preparation:	2015-05-11	Prepared By:	EM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**388**	mg/Kg	5	4.00

Sample: 392875 - CS-2

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	121470	Date Analyzed:	2015-05-13	Analyzed By:	SC
Prep Batch:	102740	Sample Preparation:	2015-05-11	Prepared By:	SC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	B	1	**51.9**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			84.3	mg/Kg	1	100	84	70 - 130

Sample: 392875 - CS-2

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	121435	Date Analyzed:	2015-05-12	Analyzed By:	AK
Prep Batch:	102727	Sample Preparation:	2015-05-11	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	U	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.75	mg/Kg	1	2.00	88	70 - 130
4-Bromofluorobenzene (4-BFB)			1.75	mg/Kg	1	2.00	88	70 - 130

Sample: 392876 - CS-3

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121396	Date Analyzed:	2015-05-11	Analyzed By:	AK
Prep Batch:	102695	Sample Preparation:	2015-05-08	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.08	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			2.02	mg/Kg	1	2.00	101	70 - 130

Sample: 392876 - CS-3

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	121415	Date Analyzed:	2015-05-11	Analyzed By:	EM
Prep Batch:	102735	Sample Preparation:	2015-05-11	Prepared By:	EM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**97.0**	mg/Kg	5	4.00

Sample: 392876 - CS-3

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	121470	Date Analyzed:	2015-05-13	Analyzed By:	SC
Prep Batch:	102740	Sample Preparation:	2015-05-11	Prepared By:	SC

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Jb	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			93.5	mg/Kg	1	100	94	70 - 130

Sample: 392876 - CS-3

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	121435	Date Analyzed:	2015-05-12	Analyzed By:	AK
Prep Batch:	102727	Sample Preparation:	2015-05-11	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	U	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.81	mg/Kg	1	2.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)			1.78	mg/Kg	1	2.00	89	70 - 130

Sample: 392877 - CS-4

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121501	Date Analyzed:	2015-05-14	Analyzed By:	AK
Prep Batch:	102792	Sample Preparation:	2015-05-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.0430**	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.24	mg/Kg	1	2.00	112	70 - 130
4-Bromofluorobenzene (4-BFB)			1.99	mg/Kg	1	2.00	100	70 - 130

Sample: 392877 - CS-4

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	121415	Date Analyzed:	2015-05-11	Analyzed By:	EM
Prep Batch:	102735	Sample Preparation:	2015-05-11	Prepared By:	EM

continued ...

sample 392877 continued . . .

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**291**	mg/Kg	5	4.00

Sample: 392877 - CS-4

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	121470	Date Analyzed:	2015-05-13	Analyzed By:	SC
Prep Batch:	102740	Sample Preparation:	2015-05-11	Prepared By:	SC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Jb	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			93.6	mg/Kg	1	100	94	70 - 130

Sample: 392877 - CS-4

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	121502	Date Analyzed:	2015-05-14	Analyzed By:	AK
Prep Batch:	102792	Sample Preparation:	2015-05-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qs,U	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.79	mg/Kg	1	2.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)			1.86	mg/Kg	1	2.00	93	70 - 130

Sample: 392878 - North Side Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121501	Date Analyzed:	2015-05-14	Analyzed By:	AK
Prep Batch:	102792	Sample Preparation:	2015-05-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.31	mg/Kg	1	2.00	116	70 - 130
4-Bromofluorobenzene (4-BFB)			2.07	mg/Kg	1	2.00	104	70 - 130

Sample: 392878 - North Side Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	121415	Date Analyzed:	2015-05-11	Analyzed By:	EM
Prep Batch:	102735	Sample Preparation:	2015-05-11	Prepared By:	EM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**97.0**	mg/Kg	5	4.00

Sample: 392878 - North Side Wall

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	121470	Date Analyzed:	2015-05-13	Analyzed By:	SC
Prep Batch:	102740	Sample Preparation:	2015-05-11	Prepared By:	SC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			93.8	mg/Kg	1	100	94	70 - 130

Sample: 392878 - North Side Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	121502	Date Analyzed:	2015-05-14	Analyzed By:	AK
Prep Batch:	102792	Sample Preparation:	2015-05-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qs,U	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.88	mg/Kg	1	2.00	94	70 - 130
4-Bromofluorobenzene (4-BFB)			1.86	mg/Kg	1	2.00	93	70 - 130

Sample: 392879 - East Side Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121501	Date Analyzed:	2015-05-14	Analyzed By:	AK
Prep Batch:	102792	Sample Preparation:	2015-05-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.00	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			1.96	mg/Kg	1	2.00	98	70 - 130

Sample: 392879 - East Side Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	121415	Date Analyzed:	2015-05-11	Analyzed By:	EM
Prep Batch:	102735	Sample Preparation:	2015-05-11	Prepared By:	EM

continued ...

sample 392879 continued . . .

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 392879 - East Side Wall

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	121470	Date Analyzed:	2015-05-13	Analyzed By:	SC
Prep Batch:	102740	Sample Preparation:	2015-05-11	Prepared By:	SC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			94.7	mg/Kg	1	100	95	70 - 130

Sample: 392879 - East Side Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	121502	Date Analyzed:	2015-05-14	Analyzed By:	AK
Prep Batch:	102792	Sample Preparation:	2015-05-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qs,U	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.78	mg/Kg	1	2.00	89	70 - 130
4-Bromofluorobenzene (4-BFB)			1.79	mg/Kg	1	2.00	90	70 - 130

Sample: 392880 - West Side Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121501	Date Analyzed:	2015-05-14	Analyzed By:	AK
Prep Batch:	102792	Sample Preparation:	2015-05-13	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.17	mg/Kg	1	2.00	108	70 - 130
4-Bromofluorobenzene (4-BFB)			2.01	mg/Kg	1	2.00	100	70 - 130

Sample: 392880 - West Side Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	121498	Date Analyzed:	2015-05-13	Analyzed By:	EM
Prep Batch:	102800	Sample Preparation:	2015-05-13	Prepared By:	EM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 392880 - West Side Wall

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	121470	Date Analyzed:	2015-05-13	Analyzed By:	SC
Prep Batch:	102740	Sample Preparation:	2015-05-11	Prepared By:	SC

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			88.5	mg/Kg	1	100	88	70 - 130

Sample: 392880 - West Side Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	121502	Date Analyzed:	2015-05-14	Analyzed By:	AK
Prep Batch:	102792	Sample Preparation:	2015-05-13	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qs,U	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.92	mg/Kg	1	2.00	96	70 - 130

Sample: 392881 - South Side Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121501	Date Analyzed:	2015-05-14	Analyzed By:	AK
Prep Batch:	102792	Sample Preparation:	2015-05-13	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.94	mg/Kg	1	2.00	97	70 - 130

Sample: 392881 - South Side Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	121498	Date Analyzed:	2015-05-13	Analyzed By:	EM
Prep Batch:	102800	Sample Preparation:	2015-05-13	Prepared By:	EM

continued ...

sample 392881 continued . . .

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 392881 - South Side Wall

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	121470	Date Analyzed:	2015-05-13	Analyzed By:	SC
Prep Batch:	102740	Sample Preparation:	2015-05-11	Prepared By:	SC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			83.0	mg/Kg	1	100	83	70 - 130

Sample: 392881 - South Side Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	121502	Date Analyzed:	2015-05-14	Analyzed By:	AK
Prep Batch:	102792	Sample Preparation:	2015-05-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qs,U	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.79	mg/Kg	1	2.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)			1.80	mg/Kg	1	2.00	90	70 - 130

Method Blanks

Method Blank (1) QC Batch: 121396

QC Batch:	121396	Date Analyzed:	2015-05-11	Analyzed By:	AK
Prep Batch:	102695	QC Preparation:	2015-05-08	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.00533	mg/Kg	0.02
Toluene		1	<0.00645	mg/Kg	0.02
Ethylbenzene		1	<0.0116	mg/Kg	0.02
Xylene		1	<0.00874	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.29	mg/Kg	1	2.00	114	70 - 130
4-Bromofluorobenzene (4-BFB)			2.30	mg/Kg	1	2.00	115	70 - 130

Method Blank (1) QC Batch: 121415

QC Batch:	121415	Date Analyzed:	2015-05-11	Analyzed By:	EM
Prep Batch:	102735	QC Preparation:	2015-05-11	Prepared By:	EM

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 121435

QC Batch:	121435	Date Analyzed:	2015-05-12	Analyzed By:	AK
Prep Batch:	102727	QC Preparation:	2015-05-11	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<2.32	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.90	mg/Kg	1	2.00	95	70 - 130

Method Blank (1) QC Batch: 121470

QC Batch: 121470 Date Analyzed: 2015-05-13 Analyzed By: SC
Prep Batch: 102740 QC Preparation: 2015-05-11 Prepared By: SC

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	10.0	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			93.0	mg/Kg	1	100	93	70 - 130

Method Blank (1) QC Batch: 121498

QC Batch: 121498 Date Analyzed: 2015-05-13 Analyzed By: EM
Prep Batch: 102800 QC Preparation: 2015-05-13 Prepared By: EM

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 121501

QC Batch: 121501 Date Analyzed: 2015-05-14 Analyzed By: AK
Prep Batch: 102792 QC Preparation: 2015-05-13 Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.00533	mg/Kg	0.02
Toluene		1	<0.00645	mg/Kg	0.02
Ethylbenzene		1	<0.0116	mg/Kg	0.02
Xylene		1	<0.00874	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.28	mg/Kg	1	2.00	114	70 - 130
4-Bromofluorobenzene (4-BFB)			2.04	mg/Kg	1	2.00	102	70 - 130

Method Blank (1) QC Batch: 121502

QC Batch:	121502	Date Analyzed:	2015-05-14	Analyzed By:	AK
Prep Batch:	102792	QC Preparation:	2015-05-13	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<2.32	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.90	mg/Kg	1	2.00	95	70 - 130
4-Bromofluorobenzene (4-BFB)			1.90	mg/Kg	1	2.00	95	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 121396 | Date Analyzed: 2015-05-11 | Analyzed By: AK
Prep Batch: 102695 | QC Preparation: 2015-05-08 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.29	mg/Kg	1	2.00	<0.00533	114	70 - 130
Toluene		1	2.09	mg/Kg	1	2.00	<0.00645	104	70 - 130
Ethylbenzene		1	2.14	mg/Kg	1	2.00	<0.0116	107	70 - 130
Xylene		1	6.36	mg/Kg	1	6.00	<0.00874	106	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.19	mg/Kg	1	2.00	<0.00533	110	70 - 130	4	20
Toluene		1	2.03	mg/Kg	1	2.00	<0.00645	102	70 - 130	3	20
Ethylbenzene		1	2.02	mg/Kg	1	2.00	<0.0116	101	70 - 130	6	20
Xylene		1	6.02	mg/Kg	1	6.00	<0.00874	100	70 - 130	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.00	2.10	mg/Kg	1	2.00	100	105	70 - 130
4-Bromofluorobenzene (4-BFB)	2.24	2.24	mg/Kg	1	2.00	112	112	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 121415 | Date Analyzed: 2015-05-11 | Analyzed By: EM
Prep Batch: 102735 | QC Preparation: 2015-05-11 | Prepared By: EM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2430	mg/Kg	5	2500	<19.2	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2520	mg/Kg	5	2500	<19.2	101	85 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 121435 | Date Analyzed: 2015-05-12 | Analyzed By: AK
Prep Batch: 102727 | QC Preparation: 2015-05-11 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		[1]	15.6	mg/Kg	1	20.0	<2.32	78	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		[1]	15.4	mg/Kg	1	20.0	<2.32	77	70 - 130	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.84	1.88	mg/Kg	1	2.00	92	94	70 - 130
4-Bromofluorobenzene (4-BFB)	1.99	1.96	mg/Kg	1	2.00	100	98	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 121470 | Date Analyzed: 2015-05-13 | Analyzed By: SC
Prep Batch: 102740 | QC Preparation: 2015-05-11 | Prepared By: SC

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		[1]	220	mg/Kg	1	250	10	84	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		[1]	222	mg/Kg	1	250	10	85	70 - 130	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	110	112	mg/Kg	1	100	110	112	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 121498 | Date Analyzed: 2015-05-13 | Analyzed By: EM
Prep Batch: 102800 | QC Preparation: 2015-05-13 | Prepared By: EM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2270	mg/Kg	5	2500	<19.2	91	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2460	mg/Kg	5	2500	<19.2	98	85 - 115	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 121501 | Date Analyzed: 2015-05-14 | Analyzed By: AK
Prep Batch: 102792 | QC Preparation: 2015-05-13 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		[1]	2.26	mg/Kg	1	2.00	<0.00533	113	70 - 130
Toluene		[1]	1.99	mg/Kg	1	2.00	<0.00645	100	70 - 130
Ethylbenzene		[1]	1.94	mg/Kg	1	2.00	<0.0116	97	70 - 130
Xylene		[1]	5.76	mg/Kg	1	6.00	<0.00874	96	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.23	mg/Kg	1	2.00	<0.00533	112	70 - 130	1	20
Toluene		1	2.01	mg/Kg	1	2.00	<0.00645	100	70 - 130	1	20
Ethylbenzene		1	1.96	mg/Kg	1	2.00	<0.0116	98	70 - 130	1	20
Xylene		1	5.75	mg/Kg	1	6.00	<0.00874	96	70 - 130	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.20	2.12	mg/Kg	1	2.00	110	106	70 - 130
4-Bromofluorobenzene (4-BFB)	1.94	1.92	mg/Kg	1	2.00	97	96	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 121502 | Date Analyzed: 2015-05-14 | Analyzed By: AK
Prep Batch: 102792 | QC Preparation: 2015-05-13 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	14.5	mg/Kg	1	20.0	<2.32	72	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	15.2	mg/Kg	1	20.0	<2.32	76	70 - 130	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.72	1.79	mg/Kg	1	2.00	86	90	70 - 130
4-Bromofluorobenzene (4-BFB)	1.85	1.92	mg/Kg	1	2.00	92	96	70 - 130

Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 392631

QC Batch: 121396 | Date Analyzed: 2015-05-11 | Analyzed By: AK
Prep Batch: 102695 | QC Preparation: 2015-05-08 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.04	mg/Kg	1	2.00	<0.00533	102	70 - 130
Toluene		1	1.88	mg/Kg	1	2.00	<0.00645	94	70 - 130
Ethylbenzene		1	1.91	mg/Kg	1	2.00	<0.0116	96	70 - 130
Xylene		1	5.69	mg/Kg	1	6.00	<0.00874	95	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.32	mg/Kg	1	2.00	<0.00533	116	70 - 130	13	20
Toluene		1	2.12	mg/Kg	1	2.00	<0.00645	106	70 - 130	12	20
Ethylbenzene		1	2.13	mg/Kg	1	2.00	<0.0116	106	70 - 130	11	20
Xylene		1	6.40	mg/Kg	1	6.00	<0.00874	107	70 - 130	12	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.08	2.16	mg/Kg	1	2	104	108	70 - 130
4-Bromofluorobenzene (4-BFB)	2.22	2.26	mg/Kg	1	2	111	113	70 - 130

Matrix Spike (MS-1) Spiked Sample: 392879

QC Batch: 121415 | Date Analyzed: 2015-05-11 | Analyzed By: EM
Prep Batch: 102735 | QC Preparation: 2015-05-11 | Prepared By: EM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2430	mg/Kg	5	2500	<19.2	97	78.9 - 121

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2520	mg/Kg	5	2500	<19.2	101	78.9 - 121	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 392610

QC Batch: 121435 | Date Analyzed: 2015-05-12 | Analyzed By: AK
Prep Batch: 102727 | QC Preparation: 2015-05-11 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	35.3	mg/Kg	2	40.0	<4.64	88	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	36.0	mg/Kg	2	40.0	<4.64	90	70 - 130	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	3.63	3.59	mg/Kg	2	4	91	90	70 - 130
4-Bromofluorobenzene (4-BFB)	4.00	3.85	mg/Kg	2	4	100	96	70 - 130

Matrix Spike (xMS-1) Spiked Sample: 392870

QC Batch: 121470 | Date Analyzed: 2015-05-13 | Analyzed By: SC
Prep Batch: 102740 | QC Preparation: 2015-05-11 | Prepared By: SC

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	198	mg/Kg	1	250	17.9	72	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		[1]	197	mg/Kg	1	250	17.9	72	70 - 130	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	91.8	92.4	mg/Kg	1	100	92	92	70 - 130

Matrix Spike (MS-1) Spiked Sample: 391842

QC Batch: 121498 | Date Analyzed: 2015-05-13 | Analyzed By: EM
Prep Batch: 102800 | QC Preparation: 2015-05-13 | Prepared By: EM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2560	mg/Kg	5	2500	<19.2	102	78.9 - 121

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2460	mg/Kg	5	2500	<19.2	98	78.9 - 121	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 393011

QC Batch: 121501 | Date Analyzed: 2015-05-14 | Analyzed By: AK
Prep Batch: 102792 | QC Preparation: 2015-05-13 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		[1]	2.07	mg/Kg	1	2.00	<0.00533	104	70 - 130
Toluene		[1]	1.88	mg/Kg	1	2.00	<0.00645	94	70 - 130
Ethylbenzene		[1]	1.88	mg/Kg	1	2.00	<0.0116	94	70 - 130
Xylene		[1]	5.69	mg/Kg	1	6.00	<0.00874	95	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.03	mg/Kg	1	2.00	<0.00533	102	70 - 130	2	20
Toluene		1	1.86	mg/Kg	1	2.00	<0.00645	93	70 - 130	1	20
Ethylbenzene		1	1.91	mg/Kg	1	2.00	<0.0116	96	70 - 130	2	20
Xylene		1	5.61	mg/Kg	1	6.00	<0.00874	94	70 - 130	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.93	1.66	mg/Kg	1	2	96	83	70 - 130
4-Bromofluorobenzene (4-BFB)	1.95	1.71	mg/Kg	1	2	98	86	70 - 130

Matrix Spike (MS-1) Spiked Sample: 393011

QC Batch: 121502 | Date Analyzed: 2015-05-14 | Analyzed By: AK
Prep Batch: 102792 | QC Preparation: 2015-05-13 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	Qs	Qs 1	11.4	mg/Kg	1	20.0	<2.32	57	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qs	Qs 1	12.8	mg/Kg	1	20.0	<2.32	64	70 - 130	12	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.77	1.74	mg/Kg	1	2	88	87	70 - 130
4-Bromofluorobenzene (4-BFB)	1.86	1.91	mg/Kg	1	2	93	96	70 - 130

Calibration Standards

Standard (CCV-2)

QC Batch: 121396 Date Analyzed: 2015-05-11 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.112	112	80 - 120	2015-05-11
Toluene		1	mg/kg	0.100	0.100	100	80 - 120	2015-05-11
Ethylbenzene		1	mg/kg	0.100	0.0962	96	80 - 120	2015-05-11
Xylene		1	mg/kg	0.300	0.283	94	80 - 120	2015-05-11

Standard (CCV-3)

QC Batch: 121396 Date Analyzed: 2015-05-11 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.113	113	80 - 120	2015-05-11
Toluene		1	mg/kg	0.100	0.102	102	80 - 120	2015-05-11
Ethylbenzene		1	mg/kg	0.100	0.0972	97	80 - 120	2015-05-11
Xylene		1	mg/kg	0.300	0.294	98	80 - 120	2015-05-11

Standard (ICV-1)

QC Batch: 121415 Date Analyzed: 2015-05-11 Analyzed By: EM

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	101	101	85 - 115	2015-05-11

Standard (CCV-1)

QC Batch: 121415 Date Analyzed: 2015-05-11 Analyzed By: EM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.0	99	85 - 115	2015-05-11

Standard (CCV-2)

QC Batch: 121435 Date Analyzed: 2015-05-12 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.835	84	80 - 120	2015-05-12

Standard (CCV-3)

QC Batch: 121435 Date Analyzed: 2015-05-12 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.995	100	80 - 120	2015-05-12

Standard (CCV-1)

QC Batch: 121470 Date Analyzed: 2015-05-13 Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	210	84	80 - 120	2015-05-13

Standard (CCV-2)

QC Batch: 121470 Date Analyzed: 2015-05-13 Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	229	92	80 - 120	2015-05-13

Standard (CCV-3)

QC Batch: 121470 Date Analyzed: 2015-05-13 Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	214	86	80 - 120	2015-05-13

Standard (ICV-1)

QC Batch: 121498 Date Analyzed: 2015-05-13 Analyzed By: EM

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2015-05-13

Standard (CCV-1)

QC Batch: 121498 Date Analyzed: 2015-05-13 Analyzed By: EM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2015-05-13

Standard (CCV-1)

QC Batch: 121501 Date Analyzed: 2015-05-14 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.111	111	80 - 120	2015-05-14
Toluene		1	mg/kg	0.100	0.0985	98	80 - 120	2015-05-14
Ethylbenzene		1	mg/kg	0.100	0.0972	97	80 - 120	2015-05-14
Xylene		1	mg/kg	0.300	0.284	95	80 - 120	2015-05-14

Standard (CCV-2)

QC Batch: 121501 Date Analyzed: 2015-05-14 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.109	109	80 - 120	2015-05-14
Toluene		1	mg/kg	0.100	0.0970	97	80 - 120	2015-05-14
Ethylbenzene		1	mg/kg	0.100	0.0955	96	80 - 120	2015-05-14
Xylene		1	mg/kg	0.300	0.281	94	80 - 120	2015-05-14

Standard (CCV-1)

QC Batch: 121502 Date Analyzed: 2015-05-14 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.913	91	80 - 120	2015-05-14

Standard (CCV-2)

QC Batch: 121502 Date Analyzed: 2015-05-14 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.904	90	80 - 120	2015-05-14

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-14-8	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

WO#: 15050841

CHAIN OF CUSTODY RECORD

APEX

Office Location: Midland

Project Manager: Karolanne Toby

Laboratory: Trace

Address: Midland

Contact:

Phone:

PO/SO #:

Sampler's Name: Ryan Reid

Sampler's Signature:

Proj. No.: 725071505 4

Project Name: Enterprise - Eddy Co Trunk A Line

No/Type of Containers: 4oz soil Jar

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

Lab use only
Due Date:

Temp. of coolers when received (C°): 30.9

1	2	3	4	5

Page 1 of 1

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	5/8/15			X	CS-1						X		392874
				X	CS-2						X		392875
				X	CS-3						X		392876
				X	CS-4						X		392877
				X	North Side Wall						X		392878
				X	East Side Wall						X		392879
				X	West Side Wall						X		392880
				X	South Side Wall						X		392881

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

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	5/8/15	1430		5/8/15	14:30
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:
* Samples Straight from Field
* Bill Enterprise

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 _____

Analytical Report 511593

for

APEX/Titan

Project Manager: Karolanne Toby

Eddy County Trunk A

7250715054

03-SEP-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)

03-SEP-15

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

Reference: XENCO Report No(s): **511593**
Eddy County Trunk A
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) 511593. 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. 511593 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 511593

APEX/Titan, Midland, TX

Eddy County Trunk A

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS-1	S	07-15-15 12:30		511593-001

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 511593

APEX/Titan, Midland, TX

Project Name: Eddy County Trunk A

Project Id: 7250715054
Contact: Karolanne Toby
Project Location:

Date Received in Lab: Wed Jul-15-15 03:00 pm
Report Date: 03-SEP-15
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	511593-001					
	Field Id:	SS-1					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Jul-15-15 12:30					
BTEX by EPA 8021B	***Extracted:***	Jul-20-15 18:00					
	Analyzed:	Jul-21-15 12:10					
	Units/RL:	mg/kg RL					
Benzene		ND 0.00111					
Toluene		ND 0.00221					
Ethylbenzene		ND 0.00111					
m_p-Xylenes		ND 0.00221					
o-Xylene		ND 0.00111					
Total Xylenes		ND 0.00111					
Total BTEX		ND 0.00111					
Inorganic Anions by EPA 300/300.1	***Extracted:***	Jul-17-15 12:00					
	Analyzed:	Jul-17-15 16:14					
	Units/RL:	mg/kg RL					
Chloride		3.70 2.21					
Percent Moisture	***Extracted:***						
	Analyzed:	Jul-15-15 17:30					
	Units/RL:	% RL					
Percent Moisture		9.59 1.00					
TPH By SW8015B Mod	***Extracted:***	Jul-19-15 14:00					
	Analyzed:	Jul-19-15 20:03					
	Units/RL:	mg/kg RL					
C6-C10 Gasoline Range Hydrocarbons		ND 16.6					
C10-C28 Diesel Range Hydrocarbons		ND 16.6					
Total TPH		ND 16.6					

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: Eddy County Trunk A

Work Orders : 511593,

Project ID: 7250715054

Lab Batch #: 976113 **Sample:** 511593-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/19/15 20:03

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	44.2	50.0	88	70-135	

Lab Batch #: 972728 **Sample:** 511593-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/21/15 12:10

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	0.0328	0.0300	109	80-120	

Lab Batch #: 976113 **Sample:** 697641-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/19/15 18:57

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.7	100	98	70-135	
o-Terphenyl	41.6	50.0	83	70-135	

Lab Batch #: 972728 **Sample:** 695452-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/20/15 23:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 976113 **Sample:** 697641-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/19/15 19:20

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-135	
o-Terphenyl	57.3	50.0	115	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: Eddy County Trunk A

Work Orders : 511593,

Project ID: 7250715054

Lab Batch #: 972728 **Sample:** 695452-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/20/15 22:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0323	0.0300	108	80-120	

Lab Batch #: 976113 **Sample:** 697641-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/19/15 19:42

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	100	130	70-135	
o-Terphenyl	59.1	50.0	118	70-135	

Lab Batch #: 972728 **Sample:** 695452-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/20/15 22:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	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: Eddy County Trunk A

Work Order #: 511593 **Project ID:** 7250715054

Analyst: PJB **Date Prepared:** 07/20/2015 **Date Analyzed:** 07/20/2015

Lab Batch ID: 972728 **Sample:** 695452-1-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	<0.00100	0.100	0.0972	97	0.100	0.0948	95	3	70-130	35	
Toluene	<0.00200	0.100	0.100	100	0.100	0.0973	97	3	70-130	35	
Ethylbenzene	<0.00100	0.100	0.105	105	0.100	0.102	102	3	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.217	109	0.200	0.213	107	2	70-135	35	
o-Xylene	<0.00100	0.100	0.107	107	0.100	0.106	106	1	71-133	35	

Analyst: JUM **Date Prepared:** 07/17/2015 **Date Analyzed:** 07/17/2015

Lab Batch ID: 972556 **Sample:** 695317-1-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	50.4	101	50.0	51.0	102	1	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: Eddy County Trunk A

Work Order #: 511593 **Project ID:** 7250715054

Analyst: PJB **Date Prepared:** 07/19/2015 **Date Analyzed:** 07/19/2015

Lab Batch ID: 976113 **Sample:** 697641-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod 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	947	95	1000	978	98	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1010	101	1000	1020	102	1	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: Eddy County Trunk A

Work Order #: 511593

Lab Batch #: 972556 **Project ID:** 7250715054

Date Analyzed: 07/17/2015 **Date Prepared:** 07/17/2015 **Analyst:** JUM

QC- Sample ID: 511722-001 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	2.73	53.2	56.9	102	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

Sample Duplicate Recovery

Project Name: Eddy County Trunk A

Work Order #: 511593

Lab Batch #: 972402 **Project ID:** 7250715054

Date Analyzed: 07/15/2015 17:30 **Date Prepared:** 07/15/2015 **Analyst:** WRU

QC- Sample ID: 511593-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	9.59	9.12	5	20	

Lab Batch #: 972402

Date Analyzed: 07/15/2015 17:30 **Date Prepared:** 07/15/2015 **Analyst:** WRU

QC- Sample ID: 511604-005 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	12.2	12.0	2	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

CHAIN OF CUSTODY

Page ___ Of ___

XENCO LABORATORIES

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Service Center - San Antonio, Texas (210-509-3334) | www.xenco.com

Xenco Quote # | Xenco Job # 511593

Client / Reporting Information

Company Name / Branch: APEX TITAN

Company Address: 505 N. Big Spring Ste 301A, Midland TX

Email: Ktoby@apexcos.com | Phone No:

Project Contact: Karolanne Toby

Samplers's Name: Karolanne Toby

Project Information

Project Name/Number: Eddy County Trunk A

Project Location: Eddy County, NM

Invoice To: Apex Titan

PO Number: ~~Reference~~ 7250715054

Analytical Information

Matrix Codes

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

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021 B	TPH GRO/DRO	Chloride	Field Comments
1	SS-1		7/15/15	12:30	S	1								X	X	X	X	
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

NFE KT 7/15/15

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		7/15/15 15:00	1	2	7/15/15 1500	2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp. | Thermo. Corr. Factor: 0

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: APEX/Titan

Date/ Time Received: 07/15/2015 03:00:00 PM

Work Order #: 511593

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)?	6
#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: Kelsey Brooks Date: 07/15/2015

Checklist reviewed by: Kelsey Brooks Date: 07/15/2015

TRACEANALYSIS, INC.

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5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972•242•7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Karolanne Toby
APEX/Titan
2351 W. Northwest Hwy.
Suite 3321
Dallas, Tx, 75220

Report Date: August 17, 2015

Work Order: 15080549

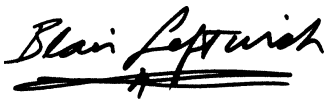
Project Name: Eddy County Trunk A #2
Project Number: 7250715074

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
401077	RP	soil	2015-08-04	16:19	2015-08-05
401078	S-Wall	soil	2015-08-04	16:38	2015-08-05
401079	W-Wall	soil	2015-08-04	16:46	2015-08-05
401080	E-Wall	soil	2015-08-04	16:52	2015-08-05
401081	N-Wall	soil	2015-08-04	16:59	2015-08-05
401082	STP-1	soil	2015-08-04	17:16	2015-08-05
401083	STP-2	soil	2015-08-04	17:18	2015-08-05

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TraceAnalysis, Inc. uses the attached chain of custody (COC) as the laboratory check-in documentation which includes sample receipt, temperature, sample preservation method and condition, collection date and time, testing requested, company, sampler, contacts and any special remarks.



Dr. Blair Leftwich, Director
James Taylor, Assistant Director
Brian Pellam, Operations Manager

Report Contents

Case Narrative

Samples for project Eddy County Trunk A #2 were received by TraceAnalysis, Inc. on 2015-08-05 and assigned to work order 15080549. Samples for work order 15080549 were received intact at a temperature of 4.8 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	104864	2015-08-13 at 07:04	124056	2015-08-14 at 15:13
Chloride (Titration)	SM 4500-Cl B	104746	2015-08-10 at 13:47	123881	2015-08-10 at 13:48
Chloride (Titration)	SM 4500-Cl B	104919	2015-08-17 at 10:10	124084	2015-08-17 at 10:12
TPH DRO	S 8015 D	104775	2015-08-11 at 13:44	123918	2015-08-11 at 13:44
TPH GRO	S 8015 D	104864	2015-08-13 at 07:04	124059	2015-08-14 at 15:35

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 15080549 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 401077 - RP

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124056	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	Qr,U	1	<0.0200	mg/Kg	1	0.0200
Toluene	Qr,U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	Qr,U	1	<0.0200	mg/Kg	1	0.0200
Xylene	Qr,U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.09	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			2.02	mg/Kg	1	2.00	101	70 - 130

Sample: 401077 - RP

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	124084	Date Analyzed:	2015-08-17	Analyzed By:	AK
Prep Batch:	104919	Sample Preparation:	2015-08-17	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 401077 - RP

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	123918	Date Analyzed:	2015-08-11	Analyzed By:	AK
Prep Batch:	104775	Sample Preparation:	2015-08-11	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Jb	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			62.5	mg/Kg	1	50.0	125	70 - 130

Sample: 401077 - RP

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124059	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			2.06	mg/Kg	1	2.00	103	70 - 130

Sample: 401078 - S-Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124056	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,U	1	<0.0200	mg/Kg	1	0.0200
Toluene	Qr,U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	Qr,U	1	<0.0200	mg/Kg	1	0.0200
Xylene	Qr,U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.94	mg/Kg	1	2.00	97	70 - 130
4-Bromofluorobenzene (4-BFB)			1.89	mg/Kg	1	2.00	94	70 - 130

Sample: 401078 - S-Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	123881	Date Analyzed:	2015-08-10	Analyzed By:	AK
Prep Batch:	104746	Sample Preparation:	2015-08-10	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 401078 - S-Wall

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	123918	Date Analyzed:	2015-08-11	Analyzed By:	AK
Prep Batch:	104775	Sample Preparation:	2015-08-11	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Jb	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			56.0	mg/Kg	1	50.0	112	70 - 130

Sample: 401078 - S-Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124059	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	U	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.81	mg/Kg	1	2.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)			1.78	mg/Kg	1	2.00	89	70 - 130

Sample: 401079 - W-Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124056	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	Qr,U	1	<0.0200	mg/Kg	1	0.0200
Toluene	Qr,U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	Qr,U	1	<0.0200	mg/Kg	1	0.0200
Xylene	Qr,U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.10	mg/Kg	1	2.00	105	70 - 130
4-Bromofluorobenzene (4-BFB)			1.93	mg/Kg	1	2.00	96	70 - 130

Sample: 401079 - W-Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	123881	Date Analyzed:	2015-08-10	Analyzed By:	AK
Prep Batch:	104746	Sample Preparation:	2015-08-10	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 401079 - W-Wall

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	123918	Date Analyzed:	2015-08-11	Analyzed By:	AK
Prep Batch:	104775	Sample Preparation:	2015-08-11	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Jb	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane Qsr	Qsr		66.8	mg/Kg	1	50.0	134	70 - 130

Sample: 401079 - W-Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124059	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	U	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.81	mg/Kg	1	2.00	90	70 - 130

Sample: 401080 - E-Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124056	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr	1	**0.0435**	mg/Kg	1	0.0200
Toluene	Qr	1	**2.90**	mg/Kg	1	0.0200
Ethylbenzene	Je,Qr	1	**11.3**	mg/Kg	1	0.0200
Xylene	Qr	1	**20.9**	mg/Kg	1	0.0200

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	Qsr		1.26	mg/Kg	1	2.00	63	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr		9.01	mg/Kg	1	2.00	450	70 - 130

Sample: 401080 - E-Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	123881	Date Analyzed:	2015-08-10	Analyzed By:	AK
Prep Batch:	104746	Sample Preparation:	2015-08-10	Prepared By:	AK

continued ...

sample 401080 continued . . .

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**98.0**	mg/Kg	5	4.00

Sample: 401080 - E-Wall

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	123918	Date Analyzed:	2015-08-11	Analyzed By:	AK
Prep Batch:	104775	Sample Preparation:	2015-08-11	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	**193**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			54.0	mg/Kg	1	50.0	108	70 - 130

Sample: 401080 - E-Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124059	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Je	1	**960**	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.48	mg/Kg	1	2.00	74	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	18.9	mg/Kg	1	2.00	945	70 - 130

Sample: 401081 - N-Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124056	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	Qr,U	1	<0.0200	mg/Kg	1	0.0200
Toluene	Qr	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	Qr	1	**0.0404**	mg/Kg	1	0.0200
Xylene	Qr	1	**0.0211**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.04	mg/Kg	1	2.00	102	70 - 130
4-Bromofluorobenzene (4-BFB)			2.11	mg/Kg	1	2.00	106	70 - 130

Sample: 401081 - N-Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	123881	Date Analyzed:	2015-08-10	Analyzed By:	AK
Prep Batch:	104746	Sample Preparation:	2015-08-10	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 401081 - N-Wall

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	123918	Date Analyzed:	2015-08-11	Analyzed By:	AK
Prep Batch:	104775	Sample Preparation:	2015-08-11	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Jb	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane Qsr	Qsr		68.8	mg/Kg	1	50.0	138	70 - 130

Sample: 401081 - N-Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124059	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**8.00**	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	70 - 130
4-Bromofluorobenzene (4-BFB)			1.92	mg/Kg	1	2.00	96	70 - 130

Sample: 401082 - STP-1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124056	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,U	1	<0.0200	mg/Kg	1	0.0200
Toluene	Qr	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	Qr,U	1	<0.0200	mg/Kg	1	0.0200
Xylene	Qr	1	**0.0366**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.07	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			2.06	mg/Kg	1	2.00	103	70 - 130

Sample: 401082 - STP-1

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	123881	Date Analyzed:	2015-08-10	Analyzed By:	AK
Prep Batch:	104746	Sample Preparation:	2015-08-10	Prepared By:	AK

continued ...

sample 401082 continued . . .

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 401082 - STP-1

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	123918	Date Analyzed:	2015-08-11	Analyzed By:	AK
Prep Batch:	104775	Sample Preparation:	2015-08-11	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Jb	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			58.3	mg/Kg	1	50.0	117	70 - 130

Sample: 401082 - STP-1

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124059	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**4.92**	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	70 - 130
4-Bromofluorobenzene (4-BFB)			1.84	mg/Kg	1	2.00	92	70 - 130

Sample: 401083 - STP-2

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124056	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,Qs	1	**2.36**	mg/Kg	1	0.0200
Toluene	Je,Qr,Qs	1	**10.7**	mg/Kg	1	0.0200
Ethylbenzene	Je,Qr,Qs	1	**9.95**	mg/Kg	1	0.0200
Xylene	Qr,Qs	1	**19.4**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.52	mg/Kg	1	2.00	76	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	7.53	mg/Kg	1	2.00	376	70 - 130

Sample: 401083 - STP-2

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	123881	Date Analyzed:	2015-08-10	Analyzed By:	AK
Prep Batch:	104746	Sample Preparation:	2015-08-10	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**293**	mg/Kg	5	4.00

Sample: 401083 - STP-2

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	123918	Date Analyzed:	2015-08-11	Analyzed By:	AK
Prep Batch:	104775	Sample Preparation:	2015-08-11	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Jb	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			54.5	mg/Kg	1	50.0	109	70 - 130

Sample: 401083 - STP-2

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124059	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	Sample Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qs	1	**2400**	mg/Kg	50	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			97.2	mg/Kg	50	100	97	70 - 130
4-Bromofluorobenzene (4-BFB)			110	mg/Kg	50	100	110	70 - 130

Method Blanks

Method Blank (1) QC Batch: 123881

QC Batch: 123881 | Date Analyzed: 2015-08-10 | Analyzed By: AK
Prep Batch: 104746 | QC Preparation: 2015-08-10 | Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 123918

QC Batch: 123918 | Date Analyzed: 2015-08-11 | Analyzed By: AK
Prep Batch: 104775 | QC Preparation: 2015-08-11 | Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		[1]	13.9	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			62.7	mg/Kg	1	50.0	125	70 - 130

Method Blank (1) QC Batch: 124056

QC Batch: 124056 | Date Analyzed: 2015-08-14 | Analyzed By: AK
Prep Batch: 104864 | QC Preparation: 2015-08-13 | Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		[1]	<0.00533	mg/Kg	0.02
Toluene		[1]	<0.00645	mg/Kg	0.02
Ethylbenzene		[1]	<0.0116	mg/Kg	0.02
Xylene		[1]	<0.00874	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.05	mg/Kg	1	2.00	102	70 - 130

continued ...

method blank continued ...

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)			1.76	mg/Kg	1	2.00	88	70 - 130

Method Blank (1) QC Batch: 124059

QC Batch:	124059	Date Analyzed:	2015-08-14	Analyzed By:	AK
Prep Batch:	104864	QC Preparation:	2015-08-13	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<2.32	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.84	mg/Kg	1	2.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)			1.62	mg/Kg	1	2.00	81	70 - 130

Method Blank (1) QC Batch: 124084

QC Batch:	124084	Date Analyzed:	2015-08-17	Analyzed By:	AK
Prep Batch:	104919	QC Preparation:	2015-08-17	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 123881 | Date Analyzed: 2015-08-10 | Analyzed By: AK
Prep Batch: 104746 | QC Preparation: 2015-08-10 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2540	mg/Kg	5	2500	<19.2	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2340	mg/Kg	5	2500	<19.2	94	85 - 115	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 123918 | Date Analyzed: 2015-08-11 | Analyzed By: AK
Prep Batch: 104775 | QC Preparation: 2015-08-11 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		[1]	279	mg/Kg	1	250	13.9	106	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		[1]	284	mg/Kg	1	250	13.9	108	70 - 130	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	63.4	64.5	mg/Kg	1	50.0	127	129	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 124056 | Date Analyzed: 2015-08-14 | Analyzed By: AK
Prep Batch: 104864 | QC Preparation: 2015-08-13 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.10	mg/Kg	1	2.00	<0.00533	105	70 - 130
Toluene		1	2.04	mg/Kg	1	2.00	<0.00645	102	70 - 130
Ethylbenzene		1	2.02	mg/Kg	1	2.00	<0.0116	101	70 - 130
Xylene		1	6.09	mg/Kg	1	6.00	<0.00874	102	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.08	mg/Kg	1	2.00	<0.00533	104	70 - 130	1	20
Toluene		1	2.05	mg/Kg	1	2.00	<0.00645	102	70 - 130	0	20
Ethylbenzene		1	2.03	mg/Kg	1	2.00	<0.0116	102	70 - 130	0	20
Xylene		1	6.16	mg/Kg	1	6.00	<0.00874	103	70 - 130	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.93	1.88	mg/Kg	1	2.00	96	94	70 - 130
4-Bromofluorobenzene (4-BFB)	1.94	1.85	mg/Kg	1	2.00	97	92	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 124059 | Date Analyzed: 2015-08-14 | Analyzed By: AK
Prep Batch: 104864 | QC Preparation: 2015-08-13 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	15.5	mg/Kg	1	20.0	<2.32	78	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	14.4	mg/Kg	1	20.0	<2.32	72	70 - 130	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.91	1.89	mg/Kg	1	2.00	96	94	70 - 130
4-Bromofluorobenzene (4-BFB)	1.92	1.77	mg/Kg	1	2.00	96	88	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 124084 | Date Analyzed: 2015-08-17 | Analyzed By: AK
Prep Batch: 104919 | QC Preparation: 2015-08-17 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2340	mg/Kg	5	2500	<19.2	94	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2440	mg/Kg	5	2500	<19.2	98	85 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 401223

QC Batch: 123881 | Date Analyzed: 2015-08-10 | Analyzed By: AK
Prep Batch: 104746 | QC Preparation: 2015-08-10 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			3020	mg/Kg	5	2500	683	93	78.9 - 121

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			3120	mg/Kg	5	2500	683	97	78.9 - 121	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 401376

QC Batch: 123918 | Date Analyzed: 2015-08-11 | Analyzed By: AK
Prep Batch: 104775 | QC Preparation: 2015-08-11 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		[1]	313	mg/Kg	1	250	15.4	119	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		[1]	297	mg/Kg	1	250	15.4	113	70 - 130	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	60.8	63.2	mg/Kg	1	50	122	126	70 - 130

Matrix Spike (MS-1) Spiked Sample: 401083

QC Batch: 124056 | Date Analyzed: 2015-08-14 | Analyzed By: AK
Prep Batch: 104864 | QC Preparation: 2015-08-13 | Prepared By: AK

Param		F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	Qs	Qs	1	6.62	mg/Kg	1	2.00	2.36	213	70 - 130
Toluene			1	13.0	mg/Kg	1	2.00	10.7	115	70 - 130
Ethylbenzene			1	12.2	mg/Kg	1	2.00	9.95	112	70 - 130
Xylene			1	27.2	mg/Kg	1	6.00	19.4	130	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	Qr,Qs	Qr,Qs	1	10.9	mg/Kg	1	2.00	2.36	427	70 - 130	49	20
Toluene	Qr,Qs	Qr,Qs	1	35.5	mg/Kg	1	2.00	10.7	1240	70 - 130	93	20
Ethylbenzene	Qr,Qs	Qr,Qs	1	22.1	mg/Kg	1	2.00	9.95	608	70 - 130	58	20
Xylene	Qr,Qs	Qr,Qs	1	61.9	mg/Kg	1	6.00	19.4	708	70 - 130	78	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate			MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	Qsr	Qsr	1.18	0.00	mg/Kg	1	2	59	0	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	7.76	11.1	mg/Kg	1	2	388	555	70 - 130

Matrix Spike (MS-1) Spiked Sample: 401083

QC Batch: 124059 | Date Analyzed: 2015-08-14 | Analyzed By: AK
Prep Batch: 104864 | QC Preparation: 2015-08-13 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	3660	mg/Kg	50	1000	2400	126	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qs	Qs	1	4220	mg/Kg	50	1000	2400	182	70 - 130	14	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued . . .

matrix spikes continued ...

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	95.4	92.9	mg/Kg	50	100	95	93	70 - 130
4-Bromofluorobenzene (4-BFB)	123	121	mg/Kg	50	100	123	121	70 - 130

Matrix Spike (MS-1) Spiked Sample: 401077

QC Batch: 124084 | Date Analyzed: 2015-08-17 | Analyzed By: AK
Prep Batch: 104919 | QC Preparation: 2015-08-17 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2540	mg/Kg	5	2500	<19.2	102	78.9 - 121

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2440	mg/Kg	5	2500	<19.2	98	78.9 - 121	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Calibration Standards

Standard (ICV-1)

QC Batch: 123881 | Date Analyzed: 2015-08-10 | Analyzed By: AK

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2015-08-10

Standard (CCV-1)

QC Batch: 123881 | Date Analyzed: 2015-08-10 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2015-08-10

Standard (CCV-1)

QC Batch: 123918 | Date Analyzed: 2015-08-11 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	272	109	80 - 120	2015-08-11

Standard (CCV-2)

QC Batch: 123918 | Date Analyzed: 2015-08-11 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	278	111	80 - 120	2015-08-11

Standard (CCV-3)

QC Batch: 123918 | Date Analyzed: 2015-08-11 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	257	103	80 - 120	2015-08-11

Standard (CCV-1)

QC Batch: 124056 | Date Analyzed: 2015-08-14 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.0991	99	80 - 120	2015-08-14
Toluene		1	mg/kg	0.100	0.0972	97	80 - 120	2015-08-14
Ethylbenzene		1	mg/kg	0.100	0.0956	96	80 - 120	2015-08-14
Xylene		1	mg/kg	0.300	0.293	98	80 - 120	2015-08-14

Standard (CCV-2)

QC Batch: 124056 | Date Analyzed: 2015-08-14 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.103	103	80 - 120	2015-08-14
Toluene		1	mg/kg	0.100	0.100	100	80 - 120	2015-08-14
Ethylbenzene		1	mg/kg	0.100	0.0999	100	80 - 120	2015-08-14
Xylene		1	mg/kg	0.300	0.301	100	80 - 120	2015-08-14

Standard (CCV-3)

QC Batch: 124056 | Date Analyzed: 2015-08-14 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.0853	85	80 - 120	2015-08-14

continued ...

standard continued ...

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		1	mg/kg	0.100	0.0875	88	80 - 120	2015-08-14
Ethylbenzene		1	mg/kg	0.100	0.0902	90	80 - 120	2015-08-14
Xylene		1	mg/kg	0.300	0.273	91	80 - 120	2015-08-14

Standard (CCV-1)

QC Batch: 124059 Date Analyzed: 2015-08-14 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.926	93	80 - 120	2015-08-14

Standard (CCV-2)

QC Batch: 124059 Date Analyzed: 2015-08-14 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.805	80	80 - 120	2015-08-14

Standard (CCV-3)

QC Batch: 124059 Date Analyzed: 2015-08-14 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.866	87	80 - 120	2015-08-14

Standard (ICV-1)

QC Batch: 124084 Date Analyzed: 2015-08-17 Analyzed By: AK

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2015-08-17

Standard (CCV-1)

QC Batch: 124084 Date Analyzed: 2015-08-17 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2015-08-17

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-14-8	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

WO#: 1508054 9

CHAIN OF CUSTODY RECORD

APEX

Office Location: Midland, TX

Project Manager: Kanalanne Toby

Laboratory: Trace Analysis

Address: 5002 Basin St
Midland, TX

Contact:

Phone:

PO/SO #:

Sampler's Name: Kanalanne Toby
Georgiana Meshware

Sampler's Signature:

Lab use only
Due Date:

Temp. of coolers when received (C°): 4.8

1 2 3 4 5

Page 1 of 1

Proj. No.: 72507150 74

Project Name: Eddy County Trunk A #2

No/Type of Containers: 7/40z

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	BTEX 8021B	TPH GRO/DRO	Chloride	Lab Sample ID (Lab Use Only)
S	8/4/15	16:19		X	RP		14'						X	X	X	401077
		16:38			S-wall		7'									401078
		16:46			W-wall		7'									401079
		16:52			E-wall		7'									401080
		16:59			N-wall		7'									401081
		17:16			STP-1											401082
S	8/4/15	17:18		X	STP-2								X	X	X	401083

KT 8/4/15

NFE

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

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	8/5/15	810		8/5/15	810
	8/5/15	1347	TA	8/5/15	13:47

NOTES:

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

Analytical Report 516318

for

APEX/Titan

Project Manager: Karolanne Toby

Eddy County Trunk A #2

7250715074

02-OCT-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)

02-OCT-15

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

Reference: XENCO Report No(s): **516318**
Eddy County Trunk A #2
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) 516318. 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. 516318 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 516318

APEX/Titan, Midland, TX

Eddy County Trunk A #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
E-Wall RE	S	09-25-15 12:47		516318-001
N-Wall-2	S	09-25-15 13:56		516318-002
S-Wall-2	S	09-25-15 14:00		516318-003
BH-1	S	09-25-15 14:10		516318-004
Stp-1-RE	S	09-25-15 14:17		516318-005
Stp-2-RE	S	09-25-15 14:20		516318-006

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 516318

APEX/Titan, Midland, TX

Project Name: Eddy County Trunk A #2

Project Id: 7250715074
Contact: Karolanne Toby
Project Location: TX and NM

Date Received in Lab: Fri Sep-25-15 04:51 pm
Report Date: 02-OCT-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	516318-001		516318-002		516318-003		516318-004		516318-005		516318-006	
	Field Id:	E-Wall RE		N-Wall-2		S-Wall-2		BH-1		Stp-1-RE		Stp-2-RE	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-25-15 12:47		Sep-25-15 13:56		Sep-25-15 14:00		Sep-25-15 14:10		Sep-25-15 14:17		Sep-25-15 14:20	
BTEX by EPA 8021B	*Extracted:*			Sep-30-15 09:00		Sep-30-15 09:00		Sep-30-15 09:00		Sep-28-15 08:00		Sep-28-15 08:00	
	Analyzed:			Sep-30-15 17:30		Sep-30-15 17:47		Oct-01-15 16:31		Sep-28-15 12:54		Sep-28-15 13:10	
	Units/RL:			mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene				ND	0.00100	ND	0.000998	13.3	5.01	ND	0.00101	ND	0.000996
Toluene				ND	0.00201	ND	0.00200	82.6	10.0	ND	0.00202	0.00293	0.00199
Ethylbenzene				ND	0.00100	ND	0.000998	24.0	5.01	ND	0.00101	0.00628	0.000996
m,p-Xylenes				0.00223	0.00201	ND	0.00200	71.5	10.0	ND	0.00202	0.0562	0.00199
o-Xylene				ND	0.00100	ND	0.000998	26.1	5.01	ND	0.00101	0.0335	0.000996
Total Xylenes				0.00223	0.00100	ND	0.000998	97.6	5.01	ND	0.00101	0.0897	0.000996
Total BTEX				0.00223	0.00100	ND	0.000998	218	5.01	ND	0.00101	0.0989	0.000996
Inorganic Anions by EPA 300	*Extracted:*			Oct-01-15 08:00		Oct-01-15 08:00		Oct-01-15 08:00		Sep-26-15 10:00		Sep-26-15 10:00	
	Analyzed:			Oct-01-15 12:58		Oct-01-15 13:21		Oct-01-15 13:43		Sep-26-15 23:46		Sep-27-15 00:08	
	Units/RL:			mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride				6.76	2.00	ND	2.00	130	2.00	601	40.0	340	20.0
TPH by SW 8015B	*Extracted:*	Sep-28-15 18:30		Sep-28-15 18:30		Sep-28-15 18:30		Sep-28-15 18:30		Sep-28-15 18:30		Sep-28-15 18:30	
	Analyzed:	Sep-29-15 10:32		Sep-29-15 10:57		Sep-29-15 11:21		Sep-29-15 14:40		Sep-29-15 15:05		Sep-29-15 12:34	
	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	ND	15.0	8520	75.0	ND	15.0	52.2	15.0
C10-C28 Diesel Range Organics		ND	14.9	ND	15.0	ND	15.0	1320	75.0	ND	15.0	50.2	15.0
Total TPH		ND	14.9	ND	15.0	ND	15.0	9840	75.0	ND	15.0	102	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

Form 2 - Surrogate Recoveries

Project Name: Eddy County Trunk A #2

Work Orders : 516318, **Project ID:** 7250715074

Lab Batch #: 977796 **Sample:** 516318-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/28/15 12:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	80-120	

Lab Batch #: 977796 **Sample:** 516318-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/28/15 13:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0257	0.0300	86	80-120	

Lab Batch #: 977899 **Sample:** 516318-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/29/15 10:32

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.5	99.6	94	70-135	
o-Terphenyl	46.6	49.8	94	70-135	

Lab Batch #: 977899 **Sample:** 516318-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/29/15 10:57

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	50.0	50.0	100	70-135	

Lab Batch #: 977899 **Sample:** 516318-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/29/15 11:21

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.4	99.9	87	70-135	
o-Terphenyl	43.5	50.0	87	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: Eddy County Trunk A #2

Work Orders : 516318,

Project ID: 7250715074

Lab Batch #: 977899 **Sample:** 516318-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/29/15 12:34

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.0	99.8	88	70-135	
o-Terphenyl	43.8	49.9	88	70-135	

Lab Batch #: 977899 **Sample:** 516318-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/29/15 14:40

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	47.5	50.0	95	70-135	

Lab Batch #: 977899 **Sample:** 516318-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/29/15 15:05

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.8	99.9	91	70-135	
o-Terphenyl	45.8	50.0	92	70-135	

Lab Batch #: 978032 **Sample:** 516318-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/30/15 17:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 978032 **Sample:** 516318-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/30/15 17:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	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: Eddy County Trunk A #2

Work Orders : 516318,

Project ID: 7250715074

Lab Batch #: 978032 **Sample:** 516318-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/01/15 16:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0255	0.0300	85	80-120	
4-Bromofluorobenzene	0.0265	0.0300	88	80-120	

Lab Batch #: 977796 **Sample:** 698688-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/28/15 11:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 977899 **Sample:** 698745-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/29/15 09:18

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.2	100	95	70-135	
o-Terphenyl	47.9	50.0	96	70-135	

Lab Batch #: 978032 **Sample:** 698835-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/30/15 10:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 977796 **Sample:** 698688-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/28/15 10:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0343	0.0300	114	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: Eddy County Trunk A #2

Work Orders : 516318,

Project ID: 7250715074

Lab Batch #: 977899 **Sample:** 698745-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/29/15 09:43

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	44.4	50.0	89	70-135	

Lab Batch #: 978032 **Sample:** 698835-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/30/15 09:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0326	0.0300	109	80-120	

Lab Batch #: 977796 **Sample:** 698688-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/28/15 11:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 977899 **Sample:** 698745-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/29/15 10:08

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	46.8	50.0	94	70-135	

Lab Batch #: 978032 **Sample:** 698835-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/30/15 10:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0332	0.0300	111	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	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: Eddy County Trunk A #2

Work Orders : 516318, **Project ID:** 7250715074

Lab Batch #: 977796 **Sample:** 516203-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/28/15 14:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	80-120	

Lab Batch #: 977899 **Sample:** 516318-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/29/15 13:24

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	99.6	115	70-135	
o-Terphenyl	51.9	49.8	104	70-135	

Lab Batch #: 978032 **Sample:** 516491-013 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/30/15 14:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0343	0.0300	114	80-120	

Lab Batch #: 977796 **Sample:** 516203-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/28/15 14:48

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0358	0.0300	119	80-120	

Lab Batch #: 977899 **Sample:** 516318-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/29/15 13:50

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	99.9	111	70-135	
o-Terphenyl	47.0	50.0	94	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: Eddy County Trunk A #2

Work Orders : 516318, **Project ID:** 7250715074

Lab Batch #: 978032 **Sample:** 516491-013 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/30/15 15:13

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	0.0347	0.0300	116	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: Eddy County Trunk A #2

Work Order #: 516318 **Project ID:** 7250715074

Analyst: SYG **Date Prepared:** 09/28/2015 **Date Analyzed:** 09/28/2015

Lab Batch ID: 977796 **Sample:** 698688-1-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	<0.000994	0.0994	0.0876	88	0.0996	0.0896	90	2	70-130	35	
Toluene	<0.00199	0.0994	0.0899	90	0.0996	0.0918	92	2	70-130	35	
Ethylbenzene	<0.000994	0.0994	0.0959	96	0.0996	0.0970	97	1	71-129	35	
m,p-Xylenes	<0.00199	0.199	0.195	98	0.199	0.196	98	1	70-135	35	
o-Xylene	<0.000994	0.0994	0.0941	95	0.0996	0.0944	95	0	71-133	35	

Analyst: SYG **Date Prepared:** 09/30/2015 **Date Analyzed:** 09/30/2015

Lab Batch ID: 978032 **Sample:** 698835-1-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	<0.000996	0.0996	0.0799	80	0.101	0.0811	80	1	70-130	35	
Toluene	<0.00199	0.0996	0.0840	84	0.101	0.0857	85	2	70-130	35	
Ethylbenzene	<0.000996	0.0996	0.0917	92	0.101	0.0939	93	2	71-129	35	
m,p-Xylenes	<0.00199	0.199	0.185	93	0.202	0.190	94	3	70-135	35	
o-Xylene	<0.000996	0.0996	0.0908	91	0.101	0.0933	92	3	71-133	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

BS / BSD Recoveries

Project Name: Eddy County Trunk A #2

Work Order #: 516318 **Project ID:** 7250715074

Analyst: JUM **Date Prepared:** 09/26/2015 **Date Analyzed:** 09/26/2015

Lab Batch ID: 977774 **Sample:** 698661-1-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	<2.00	50.0	49.6	99	50.0	48.4	97	2	90-110	20	

Analyst: MNR **Date Prepared:** 10/01/2015 **Date Analyzed:** 10/01/2015

Lab Batch ID: 978132 **Sample:** 698896-1-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	<2.00	50.0	50.0	100	50.0	49.4	99	1	90-110	20	

Analyst: PJB **Date Prepared:** 09/28/2015 **Date Analyzed:** 09/29/2015

Lab Batch ID: 977899 **Sample:** 698745-1-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	944	94	1000	998	100	6	70-135	35	
C10-C28 Diesel Range Organics	<15.0	1000	765	77	1000	812	81	6	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: Eddy County Trunk A #2

Work Order #: 516318

Lab Batch #: 977774 **Project ID:** 7250715074

Date Analyzed: 09/26/2015 **Date Prepared:** 09/26/2015 **Analyst:** JUM

QC- Sample ID: 515940-001 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	3030	5000	8610	112	80-120	

Lab Batch #: 977774

Date Analyzed: 09/26/2015 **Date Prepared:** 09/26/2015 **Analyst:** JUM

QC- Sample ID: 516319-002 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	423	500	949	105	80-120	

Lab Batch #: 978132

Date Analyzed: 10/01/2015 **Date Prepared:** 10/01/2015 **Analyst:** MNR

QC- Sample ID: 516481-002 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	<10.0	500	491	98	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: Eddy County Trunk A #2

Work Order # : 516318 **Project ID:** 7250715074

Lab Batch ID: 977796 **QC- Sample ID:** 516203-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/28/2015 **Date Prepared:** 09/28/2015 **Analyst:** SYG

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	<0.000998	0.0998	0.0826	83	0.101	0.0965	96	16	70-130	35	
Toluene	<0.00200	0.0998	0.0833	83	0.101	0.0921	91	10	70-130	35	
Ethylbenzene	<0.000998	0.0998	0.0849	85	0.101	0.0955	95	12	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.171	86	0.201	0.197	98	14	70-135	35	
o-Xylene	<0.000998	0.0998	0.0838	84	0.101	0.0970	96	15	71-133	35	

Lab Batch ID: 978032 **QC- Sample ID:** 516491-013 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/30/2015 **Date Prepared:** 09/30/2015 **Analyst:** SYG

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	<0.00100	0.100	0.0802	80	0.0998	0.0802	80	0	70-130	35	
Toluene	<0.00200	0.100	0.0807	81	0.0998	0.0801	80	1	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0832	83	0.0998	0.0864	87	4	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.168	84	0.200	0.175	88	4	70-135	35	
o-Xylene	<0.00100	0.100	0.0816	82	0.0998	0.0858	86	5	71-133	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.

Form 3 - MS / MSD Recoveries

Project Name: Eddy County Trunk A #2

Work Order # : 516318 **Project ID:** 7250715074

Lab Batch ID: 977899 **QC- Sample ID:** 516318-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/29/2015 **Date Prepared:** 09/28/2015 **Analyst:** PJB

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	<14.9	996	1000	100	999	960	96	4	70-135	35	
C10-C28 Diesel Range Organics	<14.9	996	893	90	999	847	85	5	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

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

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

CHAIN OF CUSTODY RECORD

APEX

Office Location: Midland, TX

Project Manager: Karolanne Tcky

Laboratory: Xenco

Address: 1211 W. Florida, Midland, TX

Contact: Julian

Phone: 432-563-1800

PO/SO #:

Sampler's Name: Kallen Kauk

Sampler's Signature:

Proj. No.: 725071S074

Project Name: Eddy County Trunk A #2

No/Type of Containers: 6

Lab use only
Due Date:

Temp. of coolers when received (C°): 0.5

1 ✓ 2 3 4 5

Page 1 of 1

ANALYSIS REQUESTED

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 L.	250 ml	Glass Jar	P/O	BTEX (8021B)	TPH 8015M	Chloride	Lab Sample ID (Lab Use Only)
S	9-25	12:47		X	E-wall RE						X		X			516318
		13:56			N-wall-2											
		14:00			S-wall 2											
		14:10			BH-1											
		14:17	X		SFP-1 RE								X	X		
		14:20	X		SFP-2 RE								X	X		

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

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	9-25-15	16:51	Julian Martinez	9-25-15	16:51
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:

24 hr Rush

New Mexico Site

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: 09/25/2015 04:51:00 PM

Work Order #: 516318

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)?	.5
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 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)?	**Yes**
#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: Kelsey Brooks Date: 09/28/2015

Checklist reviewed by: Kelsey Brooks Date: 09/28/2015

Analytical Report 522958

for

APEX/Titan

Project Manager: Karolanne Toby

Eddy County Trunk A #2

7250715074

26-JAN-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)

26-JAN-16

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

Reference: XENCO Report No(s): **522958**
Eddy County Trunk A #2
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) 522958. 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. 522958 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 522958

APEX/Titan, Midland, TX

Eddy County Trunk A #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH-1-RE	S	01-14-16 15:50	- 9 ft	522958-001

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 522958

APEX/Titan, Midland, TX

Project Name: Eddy County Trunk A #2

Project Id: 7250715074
Contact: Karolanne Toby
Project Location: NM

Date Received in Lab: Fri Jan-15-16 08:40 am
Report Date: 26-JAN-16
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	522958-001					
	Field Id:	BH-1-RE					
	Depth:	9 ft					
	Matrix:	SOIL					
	Sampled:	Jan-14-16 15:50					
BTEX by EPA 8021B	***Extracted:***	Jan-18-16 09:00					
	Analyzed:	Jan-19-16 10:06					
	Units/RL:	mg/kg	RL				
Benzene		0.0371	0.000998				
Toluene		0.00542	0.00200				
Ethylbenzene		0.0881	0.000998				
m,p-Xylenes		0.0802	0.00200				
o-Xylene		0.00637	0.000998				
Total Xylenes		0.0866	0.000998				
Total BTEX		0.217	0.000998				
TPH by SW 8015B	***Extracted:***	Jan-20-16 09:00					
	Analyzed:	Jan-22-16 12:39					
	Units/RL:	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		86.9	15.0				
C10-C28 Diesel Range Organics		369	15.0				
Total TPH		456	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

Form 2 - Surrogate Recoveries

Project Name: Eddy County Trunk A #2

Work Orders : 522958,

Project ID: 7250715074

Lab Batch #: 985838 **Sample:** 522958-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/19/16 10:06

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	0.0336	0.0300	112	80-120	

Lab Batch #: 986086 **Sample:** 522958-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/22/16 12:39

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	99.7	128	70-135	
o-Terphenyl	52.4	49.9	105	70-135	

Lab Batch #: 985838 **Sample:** 703579-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/18/16 09:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0337	0.0300	112	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 986086 **Sample:** 703716-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/20/16 09:11

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	45.9	50.0	92	70-135	

Lab Batch #: 985838 **Sample:** 703579-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/18/16 08:15

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	0.0334	0.0300	111	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: Eddy County Trunk A #2

Work Orders : 522958,

Project ID: 7250715074

Lab Batch #: 986086 **Sample:** 703716-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/20/16 09:38

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	49.6	50.0	99	70-135	

Lab Batch #: 985838 **Sample:** 703579-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/18/16 08:32

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0338	0.0300	113	80-120	
4-Bromofluorobenzene	0.0326	0.0300	109	80-120	

Lab Batch #: 986086 **Sample:** 703716-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/20/16 10:06

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	135	100	135	70-135	
o-Terphenyl	57.3	50.0	115	70-135	

Lab Batch #: 985838 **Sample:** 522956-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/18/16 13:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0338	0.0300	113	80-120	

Lab Batch #: 986086 **Sample:** 522956-010 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/21/16 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	103	99.6	103	70-135	
o-Terphenyl	49.9	49.8	100	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: Eddy County Trunk A #2

Work Orders : 522958,

Project ID: 7250715074

Lab Batch #: 985838 **Sample:** 522956-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/18/16 13:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0351	0.0300	117	80-120	
4-Bromofluorobenzene	0.0349	0.0300	116	80-120	

Lab Batch #: 986086 **Sample:** 522956-010 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/21/16 08:14

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.7	103	70-135	
o-Terphenyl	50.8	49.9	102	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: Eddy County Trunk A #2

Work Order #: 522958 **Project ID:** 7250715074

Analyst: SYG **Date Prepared:** 01/18/2016 **Date Analyzed:** 01/18/2016

Lab Batch ID: 985838 **Sample:** 703579-1-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	<0.00100	0.100	0.0805	81	0.100	0.0820	82	2	70-130	35	
Toluene	<0.00200	0.100	0.0810	81	0.100	0.0812	81	0	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0842	84	0.100	0.0839	84	0	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.172	86	0.200	0.171	86	1	70-135	35	
o-Xylene	<0.00100	0.100	0.0852	85	0.100	0.0849	85	0	71-133	35	

Analyst: PJB **Date Prepared:** 01/20/2016 **Date Analyzed:** 01/20/2016

Lab Batch ID: 986086 **Sample:** 703716-1-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	801	80	1000	879	88	9	70-135	35	
C10-C28 Diesel Range Organics	<15.0	1000	1040	104	1000	1140	114	9	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 / MSD Recoveries

Project Name: Eddy County Trunk A #2

Work Order # : 522958 **Project ID:** 7250715074

Lab Batch ID: 985838 **QC- Sample ID:** 522956-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/18/2016 **Date Prepared:** 01/18/2016 **Analyst:** SYG

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	<0.000992	0.0992	0.0836	84	0.0992	0.0837	84	0	70-130	35	
Toluene	<0.00198	0.0992	0.0796	80	0.0992	0.0803	81	1	70-130	35	
Ethylbenzene	<0.000992	0.0992	0.0802	81	0.0992	0.0817	82	2	71-129	35	
m,p-Xylenes	<0.00198	0.198	0.163	82	0.198	0.166	84	2	70-135	35	
o-Xylene	<0.000992	0.0992	0.0795	80	0.0992	0.0800	81	1	71-133	35	

Lab Batch ID: 986086 **QC- Sample ID:** 522956-010 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/21/2016 **Date Prepared:** 01/20/2016 **Analyst:** PJB

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	<14.9	996	845	85	997	794	80	6	70-135	35	
C10-C28 Diesel Range Organics	<14.9	996	942	95	997	968	97	3	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.

CHAIN OF CUSTODY RECORD

APEX

Office Location Midland, TX

Project Manager Karolanne Toby

Laboratory: XENCO

Address:

Contact:

Phone:

PO/SO #: 725071507 4

Sampler's Name: Georgi'anna McSwane

Sampler's Signature:

Proj. No.: 725071507 4

Project Name: Eddy County Trunk A #2

No/Type of Containers: 1

ANALYSIS REQUESTED: BTEX 8021B; TPH DRO/GRO

Lab use only
Due Date:

Temp. of coolers when received (C°): 2.9

1 | 2 | 3 | 4 | 5

Page 1 of 1

522958
Lab Sample ID (Lab Use Only)

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	1/14/16	15:50		X	BH-1-RE		9'				X	

N.F.G. 1-14-16

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

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	1/14/16	19:30		1/14/16	19:30
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
				01/15/16	8:40a
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:

* NM sample

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: 01/15/2016 08:40:00 AM

Work Order #: 522958

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

Temperature Measuring device used : r8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.9
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 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: 01/15/2016

Carley Owens

Checklist reviewed by: Kelsey Brooks Date: 01/15/2016

Kelsey Brooks

APPENDIX E

NMOCD C-141

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 *Dina Ferguson*
PO Box 4324, Houston, TX 77210	Telephone No. *210-528-3824*
Facility Name *Pipeline ROW, Eddy County Trunk A Gathering Lateral*	Facility Type: *Gas Gathering Pipeline*

Surface Owner *Bureau of Land Management*	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
K	*8*	*23S*	*31E*	*47*	*South*	*343*	*West*	*Eddy*

Latitude: *N 32.315501* **Longitude:** *W -103.803016*

NATURE OF RELEASE

Type of Release *Natural Gas, Pipeline Liquids*	Volume of Release: *441 MCF, 5 BBL Liquids*	Volume Recovered: *N/A*
Source of Release *Pipeline Leak.*	Date and Hour of Occurrence *07/30/2015 @ 13:00 MDT*	Date and Hour of Discovery *07/30/2015 @ 13:00 MDT*
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 discovered by Enterprise operations. Pipeline segment was isolated, blown down and clamped; leaking portion was repaired following standard One-Call.

Describe Area Affected and Cleanup Action Taken.*

Liquid spill occurred within pipeline ROW with liquid overspray outside of ROW. Cleanup activities will be carried out in accordance with Enterprise's General Release Notification, Response and Remediation Plan (dated March 9, 2015) housekeeping standards. Enterprise will maintain sample results and closure report on file.

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:	
Title: *Director, Field Environmental*	Approval Date:	Expiration Date:
E-mail Address: *jefields@eprod.com*	Conditions of Approval:	Attached ☐
Date: 8/5/2015 Phone: *713-381-6684*		

* Attach Additional Sheets If Necessary