CORRECTIVE ACTION REPORT

Property:

Potash Line 1002
32.082736, -104.050094
NE ¼, SE ¼, S35 T25S R28E
Eddy County, New Mexico
2RP-3393

November 29, 2016
Apex Project No. 7250715102

Prepared for:

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

Prepared by:

Karolanne Toby
Project Manager

Liz Scaggs, P.G.
Division Manager

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1.0 INTRODUCTION

1.1 Site Description & Background

The Potash Line 1002 is located within the Enterprise Field Services LLC (Enterprise) pipeline right-of-way (ROW) in the northeast (NE) ¼ of the southeast (SE) ¼ of Section 35 in Township 25 South and Range 28 East in Eddy County, New Mexico, (32.082736, -104.050094) referred to hereinafter as the "Site". The Site consists of native vegetation range land periodically interrupted by oil and gas gathering facilities including one (1) Enterprise natural gas gathering pipeline which traverses the area northeast to southwest.

On November 7, 2015, Enterprise was informed of a pipeline leak by an aerial survey. Immediate response action commenced based on the Enterprise *General Release Notification, Response and Remediation Plan* (dated March 2015). Enterprise isolated the leaking portion, and the pipeline section was shut down to carry out repair activities. Approximately five (5) barrels (bbls) of natural gas pipeline liquids (NGPL) were released from the pipeline and impacted surface soils east and west of the release point. Under the supervision of Enterprise personnel, stained soil was excavated by NMR Pipeline, LLC (NMR Pipeline). Remediation activities began on November 24, 2015.

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

1.2 Project Objective

The primary objective of the corrective action activities completed at the Site was to reduce chemicals 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.

The objectives of Apex TITAN, Inc. (Apex's) scope of services were to:

1) Conduct field observations during response action activities utilizing visual and olfactory evidence of impairment to evaluate the potential presence and extent of petroleum hydrocarbons of impacted on-Site soils.

2) Collect soil samples from the release point and excavation areas based on visual and olfactory evidence of impairment for analysis of benzene, toluene, ethylbenzene and xylenes (BTEX), total petroleum hydrocarbons (TPH), and chloride.

2.0 SITE RANKING

In accordance with the New Mexico ENMRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*, 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 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	**10**
	200 to 1,000 feet	10	
	>1,000 feet	0	
Total Ranking Score			**20**

Based on Apex's evaluation of the scoring criteria, the Site would have a Total Ranking Score of 20. This ranking is based on the following:

- The approximate depth to the initial groundwater-bearing zone is greater between 50 to 99 feet at the Site.
- Distance from the impacted area to the closest private domestic water source is greater than 200 feet.
- Distance to the nearest surface water body is between 200 and 1,000 feet.

Based on a Total Ranking Score of 20, 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);
- 100 mg/Kg for total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO); and
- 250 mg/Kg for chloride

3.0 RESPONSE ACTIVITIES

3.1 Soil Remediation Activities

On November 7, 2015, Enterprise detected a pipeline leak by aerial survey. Enterprise isolated the leaking portion, and the pipeline section was shut down to carry out repair activities. Approximately five (5) bbls of NGPL were released from the pipeline and impacted surface soils directly above the release point.

The initial excavation was carried out on November 24, 2015. Excavation activities resumed November 1, 2016, to over excavate, remove impacted material and collect confirmation samples. Approximately 45 tons of impacted soil was excavated and removed from the pipeline release impacted area, and transported off-site for final disposal.

On November 9, 2016, the excavated stockpile was transported Lea Land Disposal facility located approximately 30 miles east of Carlsbad, New Mexico. Subsequent to receipt of laboratory analytical data, the excavation was backfilled with clean fill material and returned to approximate original grade on November 8, 2016.

3.2 Soil Sampling Program

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

On November 1, 2016, Apex's soil sampling program consisted of collection five confirmation soil samples (CS-1 through CS-5). The samples were collected along the sidewalls and floor of the excavation at approximate depths of three and a half (3.5) feet and five (5) feet below ground surface (bgs), respectively.

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

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

3.3 Laboratory Analytical Methods

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

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

4.0 DATA EVALUATION

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to condensate releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the OCD rules, specifically NMAC 19.15.30 *Remediation*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

Apex compared the BTEX and TPH concentrations or laboratory sample detection limits (SDLs) associated with the soil samples collected from the Site to the OCD Recommended Remediation Action Levels (RRALs) for sites having a total ranking score of 20.

4.1 Excavation Confirmation Samples

Laboratory analyses of the confirmation samples collected from the excavation (CS-1 through CS-5) did not exhibit BTEX concentrations above the laboratory SDLs, which are below the applicable OCD RRALs of 10 mg/Kg for benzene and 50 mg/Kg for BTEX.

Laboratory analyses of the confirmation samples collected from the excavation (CS-1 through CS-5) exhibited total TPH GRO/DRO concentrations ranging from below the laboratory SDLs to 18.2 mg/Kg. The identified concentrations and the laboratory SDLs are below the OCD RRAL of 100 mg/Kg for total TPH GRO/DRO.

Laboratory analyses of the confirmation samples collected from the excavation (CS-1 through CS-5) exhibited chloride concentrations ranging from 7.01 mg/Kg to 175 mg/Kg. The identified concentrations are below the OCD RRAL of 500 mg/Kg for chloride.

Confirmation sample results are provided in Table 1 in Appendix C.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The Potash Line 1002 is located within the Enterprise pipeline ROW in the NE ¼ of the SE ¼ of Section 35 in Township 25 South and Range 28 East in Eddy County, New Mexico, (32.082736, -104.050094). The Site consists of native vegetation range land periodically interrupted by oil and gas gathering facilities including one (1) Enterprise natural gas gathering pipeline which traverses the area northeast to southwest.

On November 7, 2015, Enterprise was informed of a pipeline leak by an aerial survey. Immediate response action commenced based on the Enterprise *General Release Notification, Response and Remediation Plan* (dated March 2015). Enterprise isolated the leaking portion, and the pipeline section was shut down to carry out repair activities. Approximately five (5) bbls of pipeline liquids were released from the pipeline and impacted surface soils east and west of the release point. Under the supervision of Enterprise personnel, stained soil was excavated by NMR Pipeline. Remediation activities began on November 24, 2015.

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

- The Site was excavated utilizing heavy equipment to remove soils affected by the pipeline liquids. The final excavation dimensions measured approximately 10 feet wide by 20 feet long by five (5) feet deep. Approximately 45 tons of impacted soil was excavated and removed from the area impacted by the pipeline release.

- The impacted excavated soils were transported to Lea Land Disposal facility located approximately 30 miles east of Carlsbad, New Mexico. Subsequent to receipt of laboratory analysis, the excavation was backfilled with clean fill material and returned to approximate original grade.

- Following completion of excavation activities, five (5) confirmation samples (CS-1 through CS-5) were collected from the excavation sidewalls and floor, below the release point. Based on the laboratory analytical results, the soils remaining in place do not indicate benzene, total BTEX, TPH GRO/DRO or chloride concentrations above the applicable OCD RRALs for a Site Total Ranking Score of 20.

Based on completed on-Site response actions and laboratory analytical results, no additional investigation and/or remediation appears warranted at this time.

6.0 STANDARD OF CARE, LIMITATIONS, AND RELIANCE

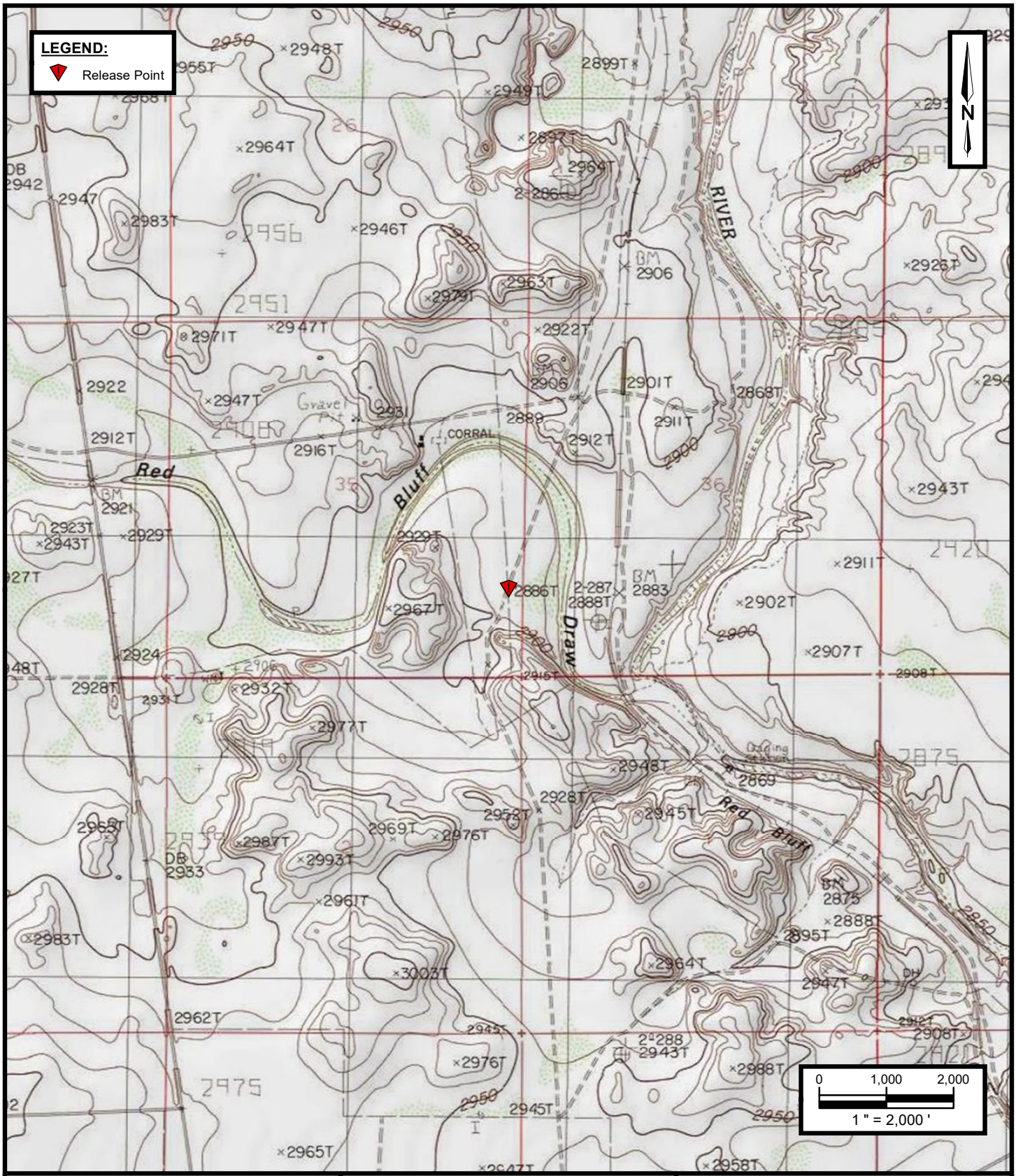
Apex's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work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

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

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

APPENDIX A

Figures



Enterprise Field Services, LLC
Potash Line 1002
Section 16, Township 25 South, Range 28 East
Eddy County, New Mexico
32.082464 N, 104.050120 W

Project No. 7250715102

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

FIGURE 1

Topographic Map

Z:\Dallas South\Drafting\Midland\2015\7250715102\Figure 1.mxd Modified 11/4/2016 by JSimpson NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US Coordinate System

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Section 16, Township 25 South, Range 28 East
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FIGURE 2

Site Vicinity Map

Service Layer Credits:
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, Aerial Photograph October 2014

Z:\Dallas South\Drafting\Midland\2015\7250715102\Figure 2.mxd Modified 11/4/2016 by JSimpson NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US Coordinate System

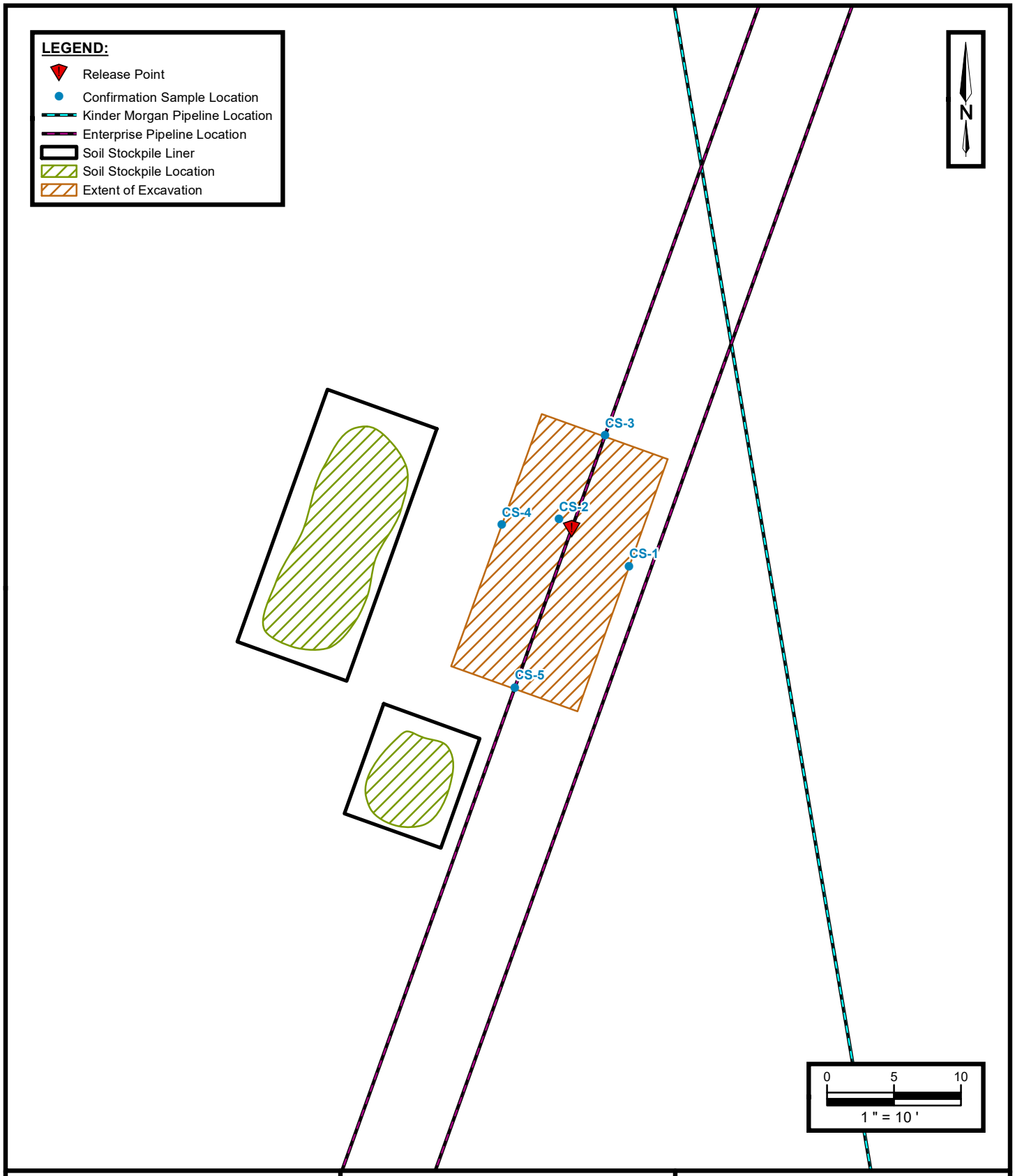

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FIGURE 3

Site Map

Z:\Dallas South\Drafting\Midland\2015\7250715102\Figure 3.mxd Modified 11/4/2016 by JSimpson NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US Coordinate System

APPENDIX B

Photographic Documentation

Close up view of exposed Enterprise Potash 1002 pipeline during initial hydroexcavation activities.

View of release point during initial hydroexcavation activities.

View of the length of the excavation during remediation activities, facing south.

View of clamped pipeline and stockpiled soil during remediation activities, facing west.

View of excavation during remediation activities, facing north.

View of excavation and stockpile area during remediation activities, facing northwest.

APEX

APPENDIX C

Tables

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS

Potash Line 1002 Release

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)	Total TPH GRO/DRO (mg/Kg)	Chloride (mg/Kg)
New Mexico Oil Conservation Division (NMOCD) Recomended Remediation Action Levels (RRALs) (Total Ranking Score: 20)											
New Mexico Oil Conservation Division (NMOCD) Recomended Remediation Action Level			**10**	**NE**	**NE**	**NE**	**50**	**NE**	**NE**	**100**	**250**
EXCAVATION CONFIRMATION SAMPLE ANALYTICAL RESULTS											
CS-1	11/1/2016	3.5	<0.00150	<0.00200	<0.00200	<0.00200	<0.00150	<15.0	<15.0	<15.0	**9.68**
CS-2	11/1/2016	5	<0.00150	<0.00200	<0.00200	<0.00200	<0.00150	<15.0	**18.2**	**18.2**	**9.41**
CS-3	11/1/2016	3.5	<0.00149	<0.00199	<0.00199	<0.00199	<0.00149	<15.0	<15.0	<15.0	**7.01**
CS-4	11/1/2016	3.5	<0.00149	<0.00199	<0.00199	<0.00199	<0.00149	<15.0	<15.0	<15.0	**8.89**
CS-5	11/1/2016	3.5	<0.00150	<0.00200	<0.00200	<0.00200	<0.00150	<15.0	<15.0	<15.0	**175**

bgs- below ground surface

mg/Kg- milligrams per Kilograms

NE - Not Established

APPENDIX D

Laboratory Data Reports
& Chain-of-Custody Documentation

Analytical Report 539589

for

APEX/Titan

Project Manager: Karolanne Toby

Potash Line 1002

7250715102

03-NOV-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

03-NOV-16

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

Reference: XENCO Report No(s): **539589**
Potash Line 1002
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) 539589. 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. 539589 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 539589

APEX/Titan, Midland, TX

Potash Line 1002

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-1	S	11-01-16 12:00	3.5 ft	539589-001
CS-2	S	11-01-16 12:20	5 ft	539589-002
CS-3	S	11-01-16 12:25	3.5 ft	539589-003
CS-4	S	11-01-16 12:30	3.5 ft	539589-004
CS-5	S	11-01-16 13:00	3.5 ft	539589-005
CS-1 (RE)	S	11-01-16 13:10	3.5 ft	Not Analyzed
CS-2 (RE)	S	11-01-16 13:20	6 ft	Not Analyzed
CS-3 (RE)	S	11-01-16 13:30	3.5 ft	Not Analyzed
CS-4 (RE)	S	11-01-16 13:40	3.5 ft	Not Analyzed
CS-5 (RE)	S	11-01-16 13:50	3.5 ft	Not Analyzed
CS-2 (RE-2)	S	11-01-16 13:25	7 ft	Not Analyzed

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3003192 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 539589

APEX/Titan, Midland, TX

Project Name: Potash Line 1002

Project Id: 7250715102
Contact: Karolanne Toby
Project Location:

Date Received in Lab: Wed Nov-02-16 10:12 am
Report Date: 03-NOV-16
Project Manager: Kelsey Brooks

Analysis Requested											
	Lab Id:	539589-001		539589-002		539589-003		539589-004		539589-005	
	Field Id:	CS-1		CS-2		CS-3		CS-4		CS-5	
	Depth:	3.5- ft		5- ft		3.5- ft		3.5- ft		3.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-16 12:00		Nov-01-16 12:20		Nov-01-16 12:25		Nov-01-16 12:30		Nov-01-16 13:00	
BTEX by EPA 8021B	***Extracted:***	Nov-02-16 11:00		Nov-02-16 11:00		Nov-02-16 11:00		Nov-02-16 11:00		Nov-02-16 11:00	
	Analyzed:	Nov-02-16 12:56		Nov-02-16 13:13		Nov-02-16 13:29		Nov-02-16 13:46		Nov-02-16 14:02	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00150	0.00150	<0.00150	0.00150	<0.00149	0.00149	<0.00149	0.00149	<0.00150	0.00150
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200
o-Xylene		<0.00299	0.00299	<0.00300	0.00300	<0.00298	0.00298	<0.00299	0.00299	<0.00299	0.00299
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200
Total BTEX		<0.00150	0.00150	<0.00150	0.00150	<0.00149	0.00149	<0.00149	0.00149	<0.00150	0.00150
Inorganic Anions by EPA 300	***Extracted:***	Nov-02-16 13:06		Nov-02-16 13:06		Nov-02-16 13:06		Nov-02-16 13:06		Nov-02-16 13:06	
	Analyzed:	Nov-02-16 14:09		Nov-02-16 14:16		Nov-02-16 14:23		Nov-02-16 14:30		Nov-02-16 14:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9.68	5.00	9.41	5.00	7.01	5.00	8.89	5.00	175	5.00
TPH by SW 8015B	***Extracted:***	Nov-02-16 11:00		Nov-02-16 11:00		Nov-02-16 11:00		Nov-02-16 11:00		Nov-02-16 11:00	
	Analyzed:	Nov-02-16 18:05		Nov-02-16 18:29		Nov-02-16 19:17		Nov-02-16 19:41		Nov-02-16 20:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
C10-C28 Diesel Range Hydrocarbons		<15.0	15.0	18.2	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	18.2	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

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

Form 2 - Surrogate Recoveries

Project Name: Potash Line 1002

Work Orders : 539589, 539589 **Project ID:** 7250715102

Lab Batch #: 3003192 **Sample:** 539589-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 12:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 3003192 **Sample:** 539589-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 13:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 3003192 **Sample:** 539589-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 13:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0322	0.0300	107	80-120	

Lab Batch #: 3003192 **Sample:** 539589-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 13:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 3003192 **Sample:** 539589-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 14:02

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	0.0321	0.0300	107	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: Potash Line 1002

Work Orders : 539589, 539589 **Project ID:** 7250715102

Lab Batch #: 3003196 **Sample:** 539589-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 18:05

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.9	109	70-135	
o-Terphenyl	56.5	50.0	113	70-135	

Lab Batch #: 3003196 **Sample:** 539589-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 18:29

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	57.1	50.0	114	70-135	

Lab Batch #: 3003196 **Sample:** 539589-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 19:17

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.7	110	70-135	
o-Terphenyl	57.1	49.9	114	70-135	

Lab Batch #: 3003196 **Sample:** 539589-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 19:41

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.8	107	70-135	
o-Terphenyl	55.5	49.9	111	70-135	

Lab Batch #: 3003196 **Sample:** 539589-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 20:07

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.7	106	70-135	
o-Terphenyl	55.4	49.9	111	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: Potash Line 1002

Work Orders : 539589, 539589 **Project ID:** 7250715102

Lab Batch #: 3003192 **Sample:** 715677-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/02/16 12:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0326	0.0300	109	80-120	

Lab Batch #: 3003196 **Sample:** 715657-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/02/16 13:09

SURROGATE RECOVERY STUDY

TPH by SW 8015B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	57.7	50.0	115	70-135	

Lab Batch #: 3003192 **Sample:** 715677-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/02/16 11:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 3003196 **Sample:** 715657-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/02/16 13:39

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	59.8	50.0	120	70-135	

Lab Batch #: 3003192 **Sample:** 715677-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/02/16 11:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	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: Potash Line 1002

Work Orders : 539589, 539589 **Project ID:** 7250715102

Lab Batch #: 3003196 **Sample:** 715657-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/02/16 14:08

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	57.6	50.0	115	70-135	

Lab Batch #: 3003192 **Sample:** 539589-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 11:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0357	0.0300	119	80-120	

Lab Batch #: 3003196 **Sample:** 539560-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 22:11

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	99.9	124	70-135	
o-Terphenyl	63.2	50.0	126	70-135	

Lab Batch #: 3003192 **Sample:** 539589-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 12:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 3003196 **Sample:** 539560-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/16 22:38

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	99.8	122	70-135	
o-Terphenyl	57.9	49.9	116	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: Potash Line 1002

Work Order #: 539589, 539589 **Project ID:** 7250715102

Analyst: PJB **Date Prepared:** 11/02/2016 **Date Analyzed:** 11/02/2016

Lab Batch ID: 3003192 **Sample:** 715677-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00150	0.100	0.0920	92	0.100	0.104	104	12	70-130	35	
Toluene	<0.00200	0.100	0.0914	91	0.100	0.105	105	14	70-130	35	
Ethylbenzene	<0.00200	0.100	0.0973	97	0.100	0.109	109	11	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.200	100	0.200	0.222	111	10	70-135	35	
o-Xylene	<0.00300	0.100	0.0984	98	0.100	0.109	109	10	71-133	35	

Analyst: MNR **Date Prepared:** 11/02/2016 **Date Analyzed:** 11/02/2016

Lab Batch ID: 3003173 **Sample:** 715638-1-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	<5.00	250	246	98	250	249	100	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: Potash Line 1002

Work Order #: 539589, 539589 **Project ID:** 7250715102

Analyst: ARM **Date Prepared:** 11/02/2016 **Date Analyzed:** 11/02/2016

Lab Batch ID: 3003196 **Sample:** 715657-1-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	972	97	1000	942	94	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	939	94	1000	908	91	3	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: Potash Line 1002

Work Order # : 539589 **Project ID:** 7250715102

Lab Batch ID: 3003192 **QC- Sample ID:** 539589-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/02/2016 **Date Prepared:** 11/02/2016 **Analyst:** PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00149	0.0992	0.0754	76	0.100	0.0908	91	19	70-130	35	
Toluene	<0.00198	0.0992	0.0743	75	0.100	0.0918	92	21	70-130	35	
Ethylbenzene	<0.00198	0.0992	0.0790	80	0.100	0.0942	94	18	71-129	35	
m,p-Xylenes	<0.00198	0.198	0.166	84	0.200	0.194	97	16	70-135	35	
o-Xylene	<0.00298	0.0992	0.0841	85	0.100	0.0957	96	13	71-133	35	

Lab Batch ID: 3003173 **QC- Sample ID:** 539588-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/02/2016 **Date Prepared:** 11/02/2016 **Analyst:** MNR

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 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
Chloride	35.9	250	282	98	250	283	99	0	90-110	20	

Lab Batch ID: 3003173 **QC- Sample ID:** 539635-001 S **Batch #:** 1 **Matrix:** Solid

Date Analyzed: 11/03/2016 **Date Prepared:** 11/02/2016 **Analyst:** MNR

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 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
Chloride	8.51	250	233	90	250	241	93	3	90-110	20	

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: Potash Line 1002

Work Order # : 539589 **Project ID:** 7250715102

Lab Batch ID: 3003196 **QC- Sample ID:** 539560-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/02/2016 **Date Prepared:** 11/02/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	999	926	93	998	839	84	10	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	999	863	86	998	808	81	7	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 Toby

Laboratory: XENCO

Address: Midland, TX

Contact:

Phone:

PO/SO #: 7250715102

Lab use only
Due Date:

Temp. of coolers when received (C°): 4°

1	2	3	4	5

Page 1 of 2

Sampler's Name: Georgiana McSwane

Sampler's Signature:

Proj. No.: 7250715102

Project Name: Potash Line 1002

No/Type of Containers: 11

ANALYSIS REQUESTED: TPH GRO/DRO, BTEX 8021B, Chloride, Halide

Temp: 4.0 IR ID: R-8
CF: + 0.1
Corrected Temp: 4.1

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	11/1/16	1200		X	CS-1		3.5'				X		539589
		1220			CS-2		5'						
		1225			CS-3		3.5'						
		1230			CS-4								
		1300			CS-5								
		1310			CS-1 (RE)		3.5'						
		1320			CS-2 (RE)		6'						
		1330			CS-3 (RE)		3.5						
		1340			CS-4 (RE)		3.5						
S	11/1/16	1350		X	CS-5 (RE)		3.5				X		

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

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	11/2/16	0800		11-2-16	0800
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	11-2-16	0843		11/2/16	843
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:
24 hour rush
NM samples

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

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CHAIN OF CUSTODY RECORD

APEX

Office Location: Midland, TX

Project Manager: Karolanne Toby

Laboratory: XENCO

Address: Midland, TX

Contact:

Phone:

PO/SO #: 725071502

Sampler's Name: Georgiana McSwane

Sampler's Signature:

Proj. No.: 725071502

Project Name: Potash Line 1002

No/Type of Containers: 11

ANALYSIS REQUESTED

Lab use only
Due Date:

Temp. of coolers when received (C°): 4

1	2	3	4	5

Page 2 of 2

Temp: 4.0 IR ID:R-8
CF:+ 0.1
Corrected Temp: 4.1

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	Hold	Lab Sample ID (Lab Use Only)
S	11/1/16	1325		X	CS-2 (RE-2)		7'				X		X	539589

1456
11/2/16

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

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	11/2/16	0800		11-2-16	0800
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	11-2-16	0843		11/2/16	843
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:
#24 hour rush
#NM samples

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

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XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: APEX/Titan

Date/ Time Received: 11/02/2016 10:12:54 AM

Work Order #: 539589

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.1
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seal present on shipping container/ cooler?	**N/A**
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**
#6 Custody Seals intact on sample bottles?	**N/A**
#7 *Custody Seals Signed and dated?	**N/A**
#8 *Chain of Custody present?	**Yes**
#9 Sample instructions complete on Chain of Custody?	**Yes**
#10 Any missing/extra samples?	**No**
#11 Chain of Custody signed when relinquished/ received?	**Yes**
#12 Chain of Custody agrees with sample label(s)?	**Yes**
#13 Container label(s) legible and intact?	**Yes**
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#15 Samples in proper container/ bottle?	**Yes**
#16 Samples properly preserved?	**Yes**
#17 Sample container(s) intact?	**Yes**
#18 Sufficient sample amount for indicated test(s)?	**Yes**
#19 All samples received within hold time?	**Yes**
#20 Subcontract of sample(s)?	**No**
#21 VOC samples have zero headspace (less than 1/4 inch bubble)?	**N/A**
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**N/A**
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

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

Analyst:

PH Device/Lot#:

Checklist completed by: Julian Martinez Date: 11/02/2016

Checklist reviewed by: Kelsey Brooks Date: 11/02/2016

APPENDIX E

NMOCD C-141

NM OIL CONSERVATION
ARTESIA DISTRICT
NOV 12 2015
RECEIVED

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.

fAB1532029020
NAB1532029638

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company *Enterprise Field Services LLC*	Contact *Alena Polk*
PO Box 4324, Houston, TX 77210	Telephone No. *575-706-4926*
Facility Name *Pipeline ROW, Potash Line 1002*	Facility Type: *Gas Gathering Pipeline*

Surface Owner *State of New Mexico*	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
I	*35*	*25S*	*28E*	*35*	*South*	*257*	*East*	*Eddy*

Latitude: *32.082736* **Longitude:** *W -104.050094*

NATURE OF RELEASE

Type of Release *Natural Gas and pipeline liquids*	Volume of Release: *71 MCF gas and 5bbls liquids*	Volume Recovered: *N/A*
Source of Release *Pipeline Leak.*	Date and Hour of Occurrence *11/07/2015 @ 13:45 MST*	Date and Hour of Discovery *11/07/2015 @ 13:45 MST*
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Pipeline leak was detected by aerial survey. Pipeline segment was isolated, blown down, repaired following standard one-call. About 5 bbls of liquid noted on ROW.

Describe Area Affected and Cleanup Action Taken.*

A liquid spill of about 5bbls occurred as part of the leak. Remediation actions will follow the Enterprise Products, General Release Notification, Response and Remediation Plan (March 9, 2015).

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

Signature: Jon Fields	OIL CONSERVATION DIVISION
Printed Name: *Jon E. Fields*	Signed By Mike Bratcher Approved by District Supervisor:
Title: *Director, Field Environmental*	Approval Date: 11/16/15 Expiration Date: N/A
E-mail Address: *jefields@eprod.com*	Conditions of Approval: Attached ☐ **Remediation per O.C.D. Rules & Guidelines** **SUBMIT REMEDIATION PROPOSAL NO**
Date: 11-12-2015 Phone: *713-381-6684*	**LATER THAN:** 12/17/15

* Attach Additional Sheets If Necessary

2RP-3393

APPENDIX F

Waste Disposal Tickets

1002

LEA LAND DISPOSAL SITE NEW MEXICO

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

LEA LAND, LLC

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

B+B

NON-HAZARDOUS WASTE MANIFEST NO 116139 | 1. PAGE ___ OF ___ | 2. TRAILER NO. 28

GENERATOR

3. COMPANY NAME — 4. ADDRESS — 5. PICK-UP DATE

PHONE NO. — CITY — STATE — ZIP — 6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a.					
b.					
c.					
d. 24120					

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. WASTE PROFILE NO.

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

NAME — PHONE NO — 24-HOUR EMERGENCY NO.

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

PRINTED/TYPED NAME — SIGNATURE — DATE

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME:	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME _____	PRINTED/TYPED NAME _____
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez			10:20

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

COPY 4

1002

LEA LAND DISPOSAL SITE NEW MEXICO

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

LEA LAND, LLC

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

B+R

NON-HAZARDOUS WASTE MANIFEST NO 116137 | 1. PAGE__OF__ | 2. TRAILER NO. 26

GENERATOR

3. COMPANY NAME — PHONE NO.

4. ADDRESS — CITY — STATE — ZIP

5. PICK-UP DATE

6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a.					
b.					
c.					
d. 24820					

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. WASTE PROFILE NO.

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

NAME — PHONE NO — 24-HOUR EMERGENCY NO.

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

PRINTED/TYPED NAME — SIGNATURE — DATE

TRANSPORTERS

16. **TRANSPORTER (1)**

NAME:

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

17. **TRANSPORTER (2)**

NAME:

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

18. **TRANSPORTER (1):** Acknowledgment of receipt of material

PRINTED/TYPED NAME Carlos Delgado Jr.

SIGNATURE — DATE

19. **TRANSPORTER (2):** Acknowledgment of receipt of material

PRINTED/TYPED NAME

SIGNATURE — DATE

DISPOSAL FACILITY

Lea Land, LLC

ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM

PHONE: 575-887-4048

PERMIT NO. WM-01-035 - New Mexico

20. COMMENTS

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE Santos Lonzoiz — CELL NO. — DATE — TIME 10:00

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

COPY 4

LEA LAND DISPOSAL SITE NEW MEXICO

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

LEA LAND, LLC

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

NON-HAZARDOUS WASTE MANIFEST NO 116138 | 1. PAGE ___ OF ___ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME / PHONE NO.	4. ADDRESS / CITY / STATE / ZIP	5. PICK-UP DATE / 6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a.					
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME | PHONE NO | 24-HOUR EMERGENCY NO.

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

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME:	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Carlos Delgado	PRINTED/TYPED NAME
SIGNATURE Carlos Delgado DATE	SIGNATURE DATE

DISPOSAL FACILITY

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

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

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Carlos Gonzalez			10:05

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

COPY 4

1002

LEA LAND DISPOSAL SITE NEW MEXICO

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

LEA LAND, LLC

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

B + R

NON-HAZARDOUS WASTE MANIFEST NO 116140 | 1. PAGE ___ OF ___ | 2. TRAILER NO. 38

GENERATOR

3. COMPANY NAME / PHONE NO.

4. ADDRESS / CITY / STATE / ZIP

5. PICK-UP DATE

6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a.					
b.					
c.					
d. 24940					

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. WASTE PROFILE NO.

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

NAME / PHONE NO / 24-HOUR EMERGENCY NO.

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

PRINTED/TYPED NAME | SIGNATURE | DATE

TRANSPORTERS

16. **TRANSPORTER (1)**

NAME:

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

17. **TRANSPORTER (2)**

NAME:

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

18. **TRANSPORTER (1):** Acknowledgment of receipt of material

PRINTED/TYPED NAME Adrian Mendez

SIGNATURE _____ DATE _____

19. **TRANSPORTER (2):** Acknowledgment of receipt of material

PRINTED/TYPED NAME _____

SIGNATURE _____ DATE _____

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		11/9/2016	10:15

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

COPY 4