



CORRECTIVE ACTION REPORT

Property:

**Chinaberry Leak
32.330720, - 104.310416
NE ¼ SE ¼, S5 T23S R26E
Eddy County, New Mexico
2RP-3295**

August 2016

Apex Project No. 7250715089

Prepared for:

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

Prepared by:

A handwritten signature in blue ink, appearing to read 'K. Toby'.

Karolanne Toby
Project Manager

A handwritten signature in black ink, appearing to read 'Liz Scaggs'.

Liz Scaggs, P.G.
Division Manager

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Apex Project No. 7250715089

1.0 INTRODUCTION

1.1 Site Description & Background

The Chinaberry Leak Site 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 5 in Township 23 South and Range 26 East in rural Eddy County, New Mexico (32.330720N, 104.310416W), referred to hereinafter as the "Site" or "subject Site". The Site is located to the east of an unpaved road on Bureau of Land Management (BLM) managed lands. The Site is surrounded by native vegetation rangeland periodically interrupted with oil and gas production and gathering facilities, including the Enterprise 58475OPV natural gas gathering pipeline (Chinaberry line). The pipeline traverses the site from northeast to southwest.

On September 4, 2015, Enterprise was notified of a pipeline leak on the Chinaberry line. Enterprise isolated the leaking portion and the pipeline section was blown down to carry out repair activities. Approximately five (5) barrels (bbls) of natural gas pipeline liquids were released from the leaking portion of the pipeline onto the ground surface. The release was identified by Enterprise on the ground surface and occurred within the Enterprise pipeline ROW. The initial remediation activities were conducted on September 10, 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 actions was to reduce the concentration of constituents of concern (COCs) in the on-Site soils to below the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD) *Remediation Action Levels* using the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.



2.0 SITE RANKING

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

Ranking Criteria			Ranking Score
Depth to Groundwater	<50 feet	20	20
	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			20

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

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

Based on a Total Ranking Score of "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) and 250 mg/Kg for chloride.

3.0 RESPONSE ACTIONS

3.1 Soil Excavation Activities

On September 4, 2015, Enterprise was informed of a pipeline leak detected by an Enterprise technician on the Chinaberry line. Approximately five (5) bbls of natural gas pipeline liquids was released from the leaking portion of the pipeline and onto the ground surface within the pipeline ROW. Enterprise isolated the leaking portion and the pipeline section was blown down to carry out repair activities.

The excavation was carried out on September 10, 2015. Impacted soil was removed from below and surrounding the release point on the pipeline. The excavation dimensions measured approximately one-hundred and twenty feet (120) feet long by eight (8) feet wide, with total depth ranging to approximately six (6) feet below ground surface (bgs). Impacted soil was removed and collected into one (1) stockpile on Site.

As noted by Enterprise, the backfill of the excavation was completed between September 11, 2015 through October 16, 2015. The stockpiled material from the excavation was transported off-Site to Lea Land, LLC (Lea Land) disposal facility in Carlsbad, New Mexico during the completion of backfill activities. The excavation was backfilled with clean caliche fill material, compacted utilizing heavy equipment and the area was contoured to approximate original surface grade. Copies of the waste disposal manifests are included as an attachment in Appendix F.

3.2 Soil Sampling Program

On September 14, 2015, Apex collected six (6) confirmation soil samples (CS-1, CS-2, CS-3, CS-4, CS-5 and CS-6), from the resulting excavation. In addition, one (1) composite soil sample (STP-1) was collected from the stockpiled material for disposal purposes.

Soil samples were collected and delivered under chain of custody control to Xenco Laboratories in Odessa, Texas for 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.

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

4.0 DATA EVALUATION

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

4.1 Confirmation Soil Samples

Apex compared the benzene, BTEX, TPH and chloride concentrations, or reporting limits, associated with the confirmation soil samples (CS-1, CS-2, CS-3, CS-4, CS-5, and CS-6) collected from the excavated area and the composite soil sample (STP-1) collected from the stockpile to the OCD *Recommended Remediation Action Levels* (RRALs) for sites having a total ranking score of "20".

The laboratory analyses of confirmation soil samples (CS-1, CS-2, CS-3, CS-4, CS-5, and CS-6) collected from the Site indicate benzene concentrations ranging from below the laboratory reporting limits to 0.00235 mg/Kg, which are below the OCD RRAL limits of 10 mg/Kg for a Site ranking of "20".

The laboratory analyses of the confirmation soil samples (CS-1, CS-2, CS-3, CS-4, CS-5, and CS-6) collected from the Site indicate total BTEX concentrations ranging from below the laboratory reporting limits to 0.00540 mg/Kg, which are below the OCD RRAL limits of 50 mg/Kg for a Site ranking of "20".

The laboratory analyses of the confirmation soil samples (CS-1, CS-2, CS-3, CS-4, CS-5, and CS-6) collected from the Site indicate combined TPH GRO/DRO concentrations below the laboratory reporting limits, which are below the OCD RRAL limits of 100 mg/Kg for a Site ranking of "20".

The laboratory analyses of the confirmation soil samples (CS-1, CS-2, CS-3, CS-4, CS-5, and CS-6) collected from the Site indicate chloride concentrations ranging from 3.05 mg/Kg to 19.1 mg/Kg, which are below the OCD RRAL limits of 250 mg/Kg for a Site ranking of "20".

4.2 Stockpile Soil Samples

The laboratory analysis of the composite soil stockpile sample (STP-1) collected from the Site indicates a benzene concentration of 0.00252 mg/Kg, which is below the OCD RRAL limits of 10 mg/Kg for a Site ranking of "20".

The laboratory analysis of the composite soil stockpile sample (STP-1) collected from the Site indicates a total BTEX concentration of 0.00506 mg/Kg, which is below the OCD RRAL limits of 50 mg/Kg for a Site ranking of "20".

The laboratory analysis of the composite soil stockpile sample (STP-1) collected from the Site does not indicate combined a TPH GRO/DRO concentration above the laboratory reporting limits, which is below the OCD RRAL limits of 100 mg/Kg for a Site ranking of "20".

The laboratory analysis of the composite soil stockpile sample (STP-1) collected from the Site indicates a chloride concentration of 17.3 mg/Kg, which is below the OCD RRAL limits of 250 mg/Kg for a Site ranking of "20".

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

5.0 FINDINGS AND RECOMMENDATIONS

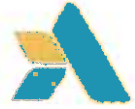
The Chinaberry Leak Site is located within the Enterprise ROW in the NE ¼ of SE ¼ of Section 5 in Township 23 South and Range 26 East in rural Eddy County, New Mexico (32.330720N, 104.310416W). The Site is located to the east of an unpaved road on BLM managed lands.

On September 4, 2015, Enterprise was notified of a pipeline leak on the Chinaberry line. Enterprise isolated the leaking portion and the pipeline section was blown down to carry out repair activities. Approximately five (5) bbls of natural gas pipeline liquids were released from the leaking portion of the pipeline onto the ground surface. The release was identified by Enterprise on the ground surface and occurred within the Enterprise pipeline ROW. The remediation activities were conducted on September 10, 2015

- The primary objective of the corrective actions was to reduce the concentration of COCs in the on-Site soils to below the New Mexico EMNRD OCD 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 surface soils affected by the release. The excavation dimensions measured approximately one-hundred and twenty (120) feet long by eight (8) feet wide, with total depth of approximately six (6) feet bgs.
- A total of six (6) final confirmation soil samples were collected from the resulting excavation. Based on analytical results, soils remaining in place do not exhibit COC concentrations above the OCD *Remediation Action Levels* for a Site ranking of "20".

- As noted by Enterprise, the backfill of the excavation was completed between September 11, 2015 through October 16, 2015. The stockpiled material from the excavation was transported off-Site to Lea Land, LLC (Lea Land) disposal facility in Carlsbad, New Mexico during the completion of backfill activities. The excavation was backfilled with clean caliche fill material, compacted utilizing heavy equipment and the area was contoured to approximate original surface grade.

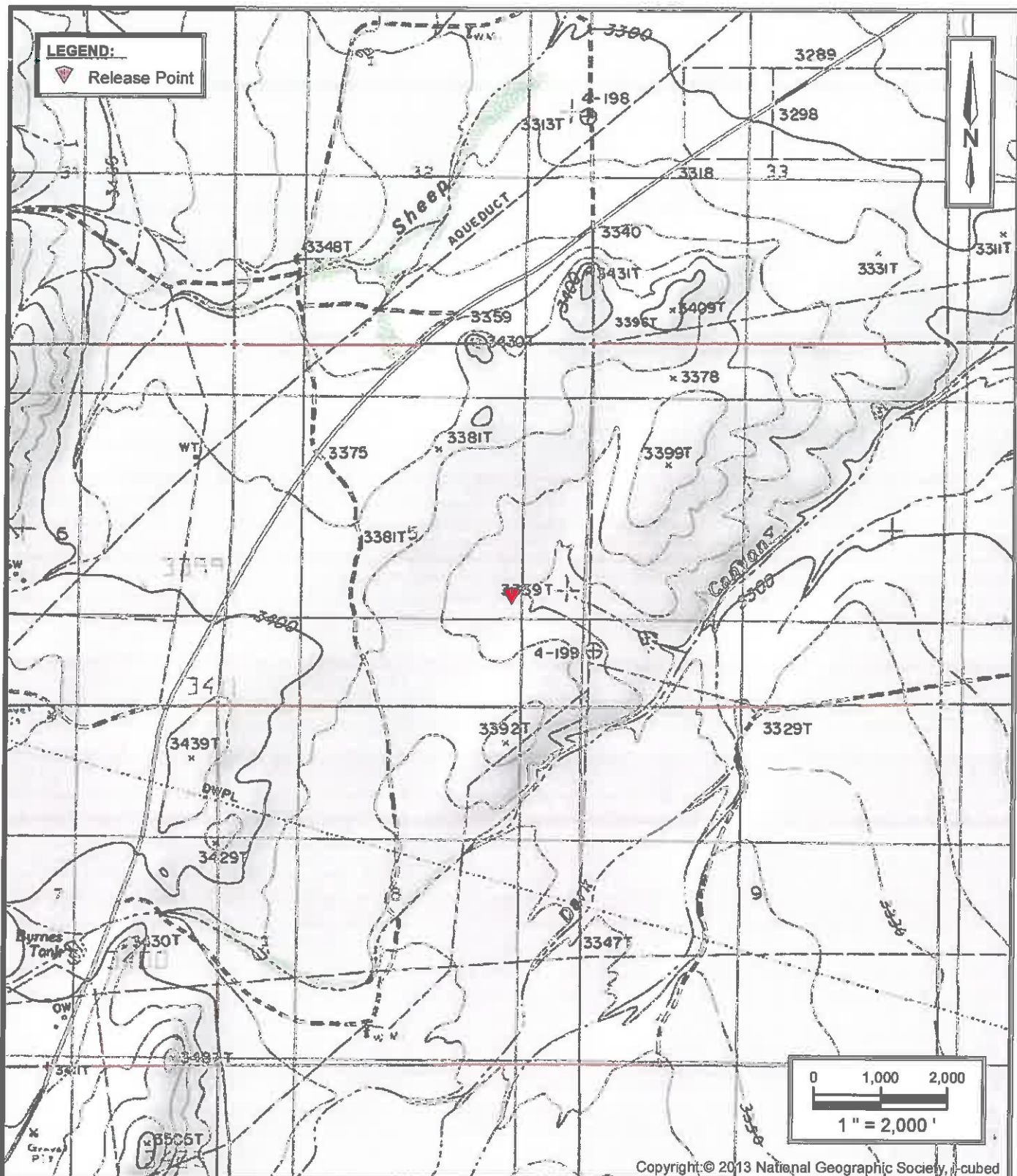
Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.



APEX

APPENDIX A

Figures



Enterprise Field Services, LLC
Chinaberry Leak
Eddy County, New Mexico
32.330720 N, 104.310416 W



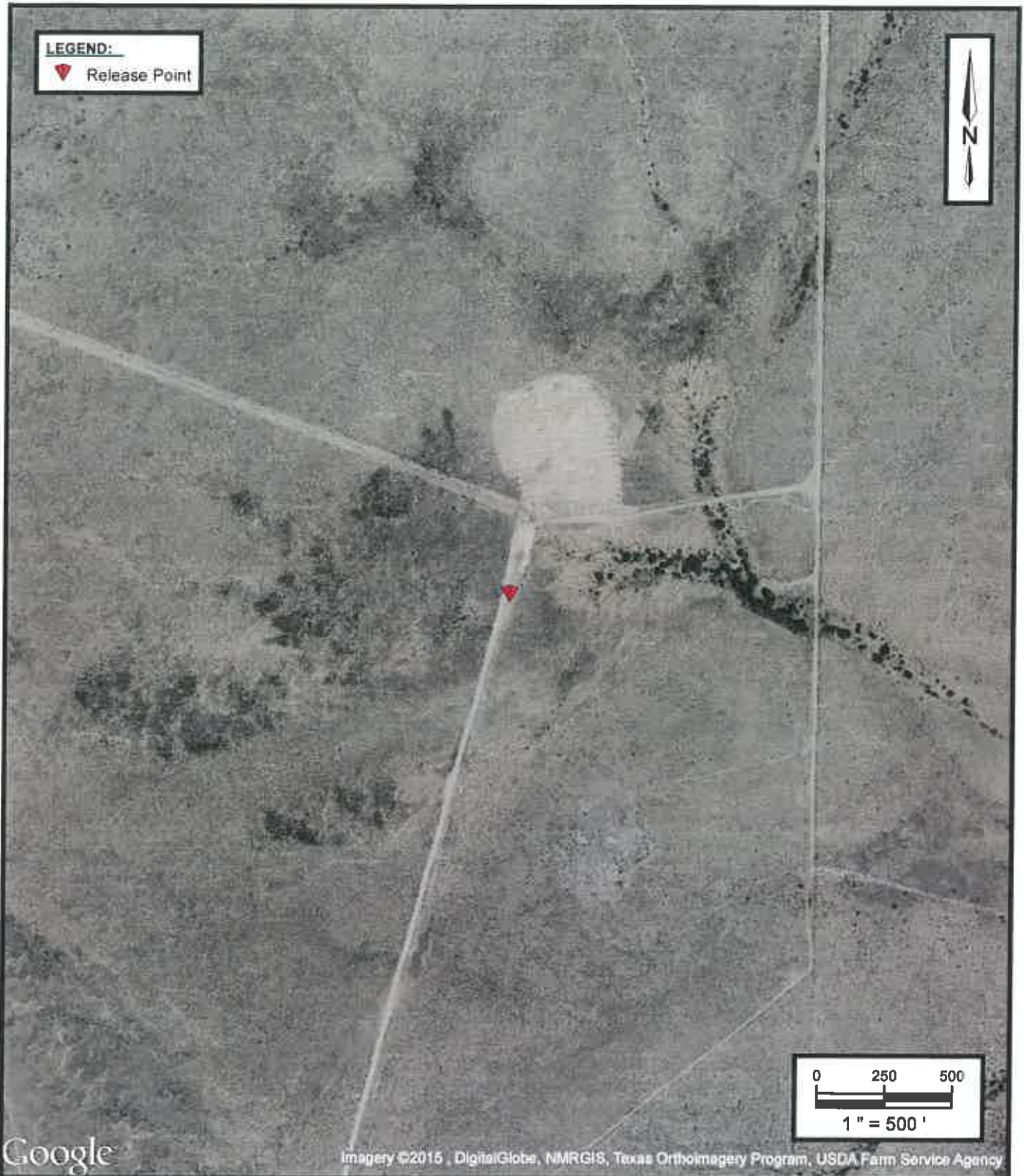
Apex TITAN, Inc.
505 N Big Spring St., Suite 301A
Midland, Texas 79701
Phone: (432) 695-6016
www.apexcos.com
A Subsidiary of Apex Companies, LLC

FIGURE 1

Topographic Map

**Kitchen Cove New Mexico Quadrangle
1985**

Project No. 7250715089



Enterprise Field Services, LLC
Chinaberry Leak
Eddy County, New Mexico
32.330720 N, 104.310416 W

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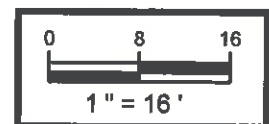
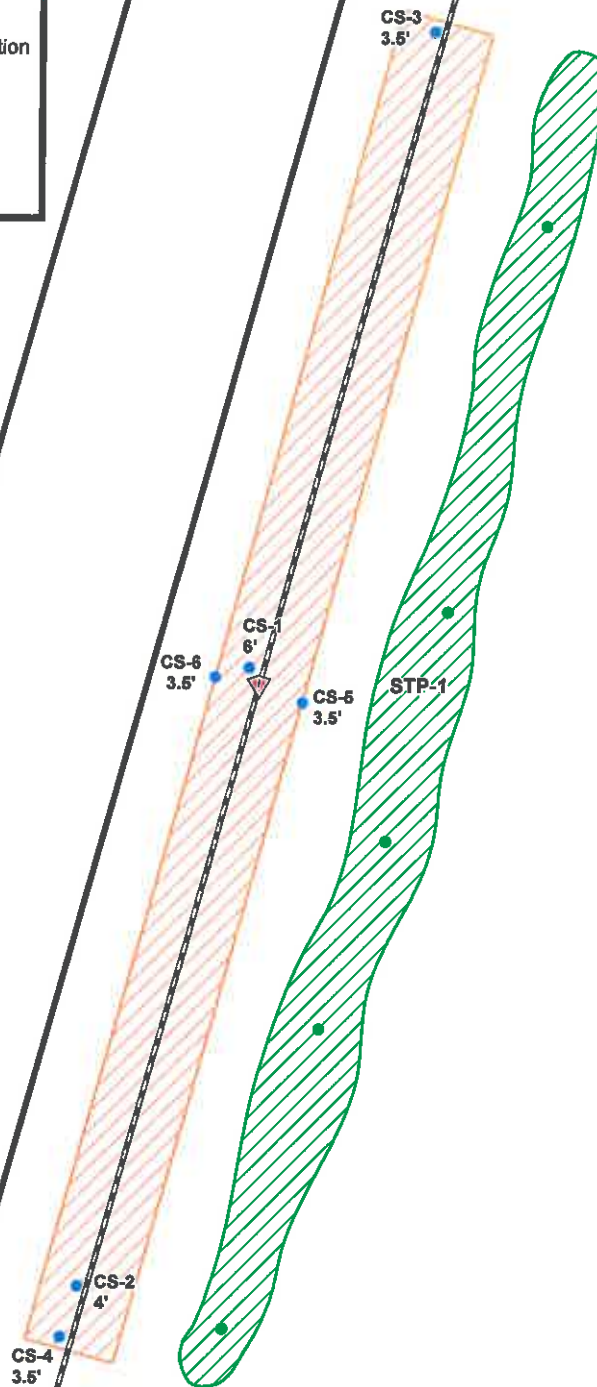
FIGURE 2

Site Vicinity Map

Aerial Photograph April 2013

LEGEND:

- Confirmation Sample Location
- Stockpile Composite Sample Location
- ◊ Release Point/Pipeline Clamp
- Underground Pipeline
- ▬ Unpaved Road
- ▨ Soil Stockpile Location
- ▨ Extent of Excavation



Enterprise Field Services, LLC
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Eddy County, New Mexico
32.330720 N, 104.310416 W



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FIGURE 3
Site Map

Project No. 7250715089



APEX

APPENDIX B

Photo Documentation



View of pipeline leak excavation facing south.



Close up view of release point facing south.



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APPENDIX C

Analytical Tables

TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Chinaberry Leak											
Sample I.D.	Sample Date	Sample Depth (feet BGS)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	BTEX (mg/Kg)	TPH GRO (mg/Kg)	TPH DRO (mg/Kg)	TPH GRO/DRO (mg/Kg)	Chloride (mg/Kg)
New Mexico Oil Conservation Division (NMOCD) Recommended Remediation Action Levels (RRALs) (Total Ranking Score: 20)											
New Mexico Oil Conservation Division (NMOCD) Recommended Remediation Action Level			10	NE	NE	NE	50	NE	NE	100	250
EXCAVATION CONFIRMATION SAMPLE ANALYTICAL RESULTS											
CS-1	9/14/2015	6	<0.000998	<0.00200	<0.000998	<0.000998	<0.000998	<15.0	<15.0	<15.0	18.1
CS-2	9/14/2015	4	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	<15.0	<15.0	<15.0	11.5
CS-3	9/14/2015	3.5	0.00235	0.00305	<0.000998	<0.000998	0.00540	<15.0	<15.0	<15.0	8.89
CS-4	9/14/2015	3.5	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	<15.0	<15.0	<15.0	3.05
CS-5	9/14/2015	3.5	<0.000994	<0.00199	<0.000994	<0.000994	<0.000994	<15.0	<15.0	<15.0	4.01
CS-6	9/14/2015	2.5	<0.00100	<0.00201	<0.00100	<0.00100	<0.00100	<14.9	<14.9	<14.9	12.2
STOCKPILE SAMPLE ANALYTICAL RESULTS											
SIP-1	9/14/2015	NA	0.00252	0.00254	<0.000998	<0.000998	0.00506	<15.0	<15.0	<15.0	17.3

mg/Kg- milligrams per Kilogram

NE - Not Established

NA - Not Applicable

BGS - below ground surface



APEX

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

Analytical Report 515457

**for
APEX/Titan**

Project Manager: Karolanne Toby

CHINABERRY

7250715089

16-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)



16-SEP-15

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

Reference: XENCO Report No(s): **515457**
CHINABERRY
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) 515457. 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. 515457 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,

Julian Martinez
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 515457



APEX/Titan, Midland, TX

CHINABERRY

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-1	S	09-14-15 12:23	- 6 ft	515457-001
CS-2	S	09-14-15 12:26	- 4 ft	515457-002
CS-3	S	09-14-15 12:29	- 3.5 ft	515457-003
CS-4	S	09-14-15 12:31	- 3.5 ft	515457-004
CS-5	S	09-14-15 12:34	- 3.5 ft	515457-005
CS-6	S	09-14-15 12:37	- 3.5 ft	515457-006
STP-1	S	09-14-15 12:47		515457-007



CASE NARRATIVE



Client Name: *APEX/Titan*
Project Name: *CHINABERRY*

Project ID: 7250715089
Work Order Number(s): 515457

Report Date: 16-SEP-15
Date Received: 09/15/2015

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 515457

APEX/Titan, Midland, TX



Project Id: 7250715089
Contact: Karolanne Toby
Project Location: NM

Project Name: CHINABERRY

Date Received in Lab: Tue Sep-15-15 08:20 am
Report Date: 16-SEP-15

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	515457-001	515457-002	515457-003	515457-004	515457-005	515457-006
	Extracted:	Analyzed:	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
BTEX by EPA 8021B											
Benzene				ND	0.000998	ND	0.00100	0.00235	0.000996	ND	0.00100
Toluene				ND	0.00200	ND	0.00200	0.00305	0.00199	ND	0.00199
Ethylbenzene				ND	0.000998	ND	0.00100	ND	0.000996	ND	0.000994
m,p-Xylenes				ND	0.00200	ND	0.00200	ND	0.00199	ND	0.00199
o-Xylene				ND	0.000998	ND	0.00100	ND	0.000996	ND	0.000994
Total Xylenes				ND	0.000998	ND	0.00100	ND	0.000996	ND	0.000994
Total BTEX				ND	0.000998	ND	0.00100	0.00540	0.000996	ND	0.000994
Inorganic Anions by EPA 300											
Chloride				Sep-15-15 16:00	19.1	2.00	Sep-15-15 16:00	Sep-15-15 16:00	Sep-15-15 16:00	Sep-15-15 16:00	Sep-15-15 16:00
				Sep-15-15 18:50	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg
				19.1	2.00	11.6	10.0	6.89	2.00	4.01	2.00
TPH by SW 8015B											
Extracted:				Sep-15-15 18:00	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg
Analyzed:				Sep-16-15 10:49	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg
Units/RL:				ND	15.0	ND	15.0	ND	15.0	ND	15.0
C6-C10 Gasoline Range Hydrocarbons				ND	15.0	ND	15.0	ND	15.0	ND	15.0
C10-C28 Diesel Range Organics				ND	15.0	ND	15.0	ND	15.0	ND	15.0
Total TPH				ND	15.0	ND	15.0	ND	15.0	ND	15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1%

Julian Martinez
Project Manager



Certificate of Analysis Summary 515457

APEX/Titan, Midland, TX
Project Name: CHINABERRY



Project Id: 7250715089
Contact: Karolanne Toby
Project Location: NM

Date Received in Lab: Tue Sep-15-15 08:20 am
Report Date: 16-SEP-15
Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:		515457-007 STP-1 SOIL Sep-14-15 12:47				
	Field Id:	Depth:					
BTEX by EPA 8021B	Matrix:						
	Sampled:						
	Extracted:	Sep-15-15 11:00					
	Analyzed:	Sep-16-15 12:02					
	Units/RL:	mg/kg RL					
Benzene		0.00252	0.000998				
Toluene		0.00254	0.00200				
Ethylbenzene		ND	0.000998				
m,p-Xylenes		ND	0.00200				
o-Xylene		ND	0.000998				
Total Xylenes		ND	0.000998				
Total BTEX		0.00506	0.000998				
Inorganic Anions by EPA 300	Extracted:	Sep-15-15 16:00					
	Analyzed:	Sep-15-15 22:13					
	Units/RL:	mg/kg RL					
		17.3	10.0				
TPH by SW 8015B	Extracted:	Sep-15-15 18:00					
	Analyzed:	Sep-16-15 15:29					
	Units/RL:	mg/kg RL					
		ND	15.0				
		ND	15.0				
C6-C10 Gasoline Range Hydrocarbons		ND	15.0				
C10-C28 Diesel Range Organics		ND	15.0				
Total TPH		ND	15.0				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Version: 1.5

Julian Martinez
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

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(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: CHINABERRY

Work Orders : 515457,

Lab Batch #: 977013

Sample: 515457-001 / SMP

Project ID: 7250715089

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/15/15 22:39

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	0.0302	0.0300	101	80-120	

Lab Batch #: 977013

Sample: 515457-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/15/15 22:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 977013

Sample: 515457-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/15/15 23:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 977013

Sample: 515457-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/15/15 23:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 977013

Sample: 515457-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/16/15 00:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	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: CHINABERRY

Work Orders : 515457,

Lab Batch #: 977003

Sample: 515457-001 / SMP

Project ID: 7250715089

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/16/15 10:49

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.4	99.7	86	70-135	
o-Terphenyl	40.5	49.9	81	70-135	

Lab Batch #: 977003

Sample: 515457-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/16/15 11:11

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.6	99.8	86	70-135	
o-Terphenyl	41.2	49.9	83	70-135	

Lab Batch #: 977003

Sample: 515457-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/16/15 11:34

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.1	100	89	70-135	
o-Terphenyl	37.3	50.0	75	70-135	

Lab Batch #: 977013

Sample: 515457-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/16/15 11:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 977013

Sample: 515457-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/16/15 12:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	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: CHINABERRY

Work Orders : 515457,

Project ID: 7250715089

Lab Batch #: 977003

Sample: 515457-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/16/15 12:44

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.7	99.6	91	70-135	
o-Terphenyl	37.0	49.8	74	70-135	

Lab Batch #: 977003

Sample: 515457-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/16/15 15:06

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.7	106	70-135	
o-Terphenyl	51.4	49.9	103	70-135	

Lab Batch #: 977003

Sample: 515457-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/16/15 15:29

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.1	100	94	70-135	
o-Terphenyl	45.0	50.0	90	70-135	

Lab Batch #: 977003

Sample: 515457-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/16/15 15:54

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.1	99.9	89	70-135	
o-Terphenyl	41.9	50.0	84	70-135	

Lab Batch #: 977013

Sample: 698194-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 09/15/15 18:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	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: CHINABERRY

Work Orders : 515457,

Project ID: 7250715089

Lab Batch #: 977003

Sample: 698182-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 09/16/15 16:45

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.1	100	87	70-135	
o-Terphenyl	35.3	50.0	71	70-135	

Lab Batch #: 977013

Sample: 698194-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 09/15/15 17:32

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0355	0.0300	118	80-120	

Lab Batch #: 977003

Sample: 698182-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 09/15/15 20:35

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.7	100	93	70-135	
o-Terphenyl	39.9	50.0	80	70-135	

Lab Batch #: 977013

Sample: 698194-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 09/15/15 17:49

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 977003

Sample: 698182-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 09/15/15 20:59

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.3	100	83	70-135	
o-Terphenyl	36.0	50.0	72	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: CHINABERRY

Work Orders : 515457,

Project ID: 7250715089

Lab Batch #: 977013

Sample: 515462-004 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/15/15 21:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 977003

Sample: 515457-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/16/15 15:57

SURROGATE RECOVERY STUDY

TPH by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	122	99.9	122	70-135	
o-Terphenyl	55.0	50.0	110	70-135	

Lab Batch #: 977013

Sample: 515462-004 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/15/15 21:48

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0339	0.0300	113	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	80-120	

Lab Batch #: 977003

Sample: 515457-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/16/15 16:21

SURROGATE RECOVERY STUDY

TPH by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	119	99.5	120	70-135	
o-Terphenyl	51.8	49.8	104	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.

Project Name: CHINABERRY

Work Order #: 515457

Analyst: SYG

Lab Batch ID: 977013

Units: mg/kg

Sample: 698194-1-BKS

Batch #: 1

Date Prepared: 09/15/2015

Project ID: 7250715089

Date Analyzed: 09/15/2015

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
BTEX by EPA 8021B		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
Analytes												
Benzene		<0.00100	0.100	0.0817	82	0.0998	0.0801	80	2	70-130	35	
Toluene		<0.00200	0.100	0.0859	86	0.0998	0.0829	83	4	70-130	35	
Ethylbenzene		<0.00100	0.100	0.0977	98	0.0998	0.0917	92	6	71-129	35	
m,p-Xylenes		<0.00200	0.200	0.198	99	0.200	0.186	93	6	70-135	35	
o-Xylene		<0.00100	0.100	0.0964	96	0.0998	0.0896	90	7	71-133	35	

Date Prepared: 09/15/2015

Date Analyzed: 09/15/2015

Batch #: 1

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Inorganic Anions by EPA 300		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
Analytes												
Chloride		<2.00	50.0	50.8	102	50.0	50.6	101	0	90-110	20	

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

Work Order #: 515457

Analyst: PJB

Lab Batch ID: 977003

Units: mg/kg

Sample: 698182-1-BKS

Date Prepared: 09/15/2015
Batch #: 1

Project ID: 7250715089

Date Analyzed: 09/15/2015

Matrix: Solid

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	894	89	1000	856	86	4	70-135	35	
	C10-C28 Diesel Range Organics	<15.0	1000	720	72	1000	735	74	2	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: CHINABERRY



Work Order #: 515457

Lab Batch #: 976992

Date Analyzed: 09/16/2015

QC- Sample ID: 515359-004 S

Reporting Units: mg/kg

Date Prepared: 09/15/2015

Batch #: 1

Project ID: 7250715089

Analyst: JUM

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	1470	1000	1090	0	80-120	X

Lab Batch #: 976992

Date Analyzed: 09/15/2015

QC- Sample ID: 515457-001 S

Reporting Units: mg/kg

Date Prepared: 09/15/2015

Batch #: 1

Analyst: JUM

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	19.1	50.0	67.9	98	80-120	

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

BRL - Below Reporting Limit

Version: 1.0%



Project Name: CHINABERRY

Work Order #: 515457
 Lab Batch ID: 977013
 Date Analyzed: 09/15/2015
 Reporting Units: mg/kg

QC- Sample ID: 515462-004 S
 Date Prepared: 09/15/2015
 Batch #: 1
 Matrix: Soil
 Analyst: SYG

Project ID: 7250715089

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Duplicate Spike Added [E]	Duplicate Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		<0.000996	0.0996	0.0696	70	0.0994	0.0797	80	14	70-130	35	
Toluene		<0.00199	0.0996	0.0725	73	0.0994	0.0814	82	12	70-130	35	
Ethylbenzene		<0.000996	0.0996	0.0789	79	0.0994	0.0877	88	11	71-129	35	
m,p-Xylenes		<0.00199	0.199	0.160	80	0.199	0.178	89	11	70-135	35	
o-Xylene		<0.000996	0.0996	0.0783	79	0.0994	0.0881	89	12	71-133	35	

Lab Batch ID: 977003
 Date Analyzed: 09/16/2015
 Reporting Units: mg/kg
 QC- Sample ID: 515457-001 S
 Date Prepared: 09/15/2015
 Batch #: 1
 Matrix: Soil
 Analyst: PJB

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spike Added [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
C6-C10 Gasoline Range Hydrocarbons		<15.0	999	702	70	995	713	72	2	70-135	35	
C10-C28 Diesel Range Organics		<15.0	999	758	76	995	743	75	2	70-135	35	

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

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

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.



APEX

Office Location Midland, TX

Laboratory: KENCO
Address: Midland, TX

Contact: _____

Phone: _____

PO/SO #: _____

Project Manager: Karlene Tody

Sampler's Signature

Proj. No.

7250715089

Project Name

Chimney

No/Type of Containers

7

Matrix Date Time

9/14/15 12:23

C o m p

1

G a b

1

Identifying Marks of Sample(s)

Start Depth

End Depth

VOA

A/G 1 L

250 ml

Glass Jar

P/O

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9/14/15 12:23

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9/14/15 12:23

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XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In



Client: APEX/Titan

Date/ Time Received: 09/15/2015 08:20:00 AM

Work Order #: 515457

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3
#2 *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 HNO ₃ , HCL, H ₂ SO ₄ ? 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 NaAsO ₂ +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:

Caroline Dugan

Date: 09/15/2015

Checklist reviewed by:

Julian Martinez

Date: 09/15/2015



APEX

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 <i>Enterprise Field Services LLC</i>	Contact <i>Dina Ferguson</i>
<i>PO Box 4324, Houston, TX 77210</i>	Telephone No. <i>210-528-3824</i>
Facility Name <i>Pipeline ROW, 58475OPV Gathering Lateral</i>	Facility Type: <i>Gas Gathering Pipeline</i>

Surface Owner <i>Bureau of Land Management</i>	Mineral Owner <i>NA - Pipeline</i>	Lease No. <i>NA</i>
------------------------------------------------	------------------------------------	---------------------

LOCATION OF RELEASE

Unit Letter <i>I</i>	Section <i>5</i>	Township <i>23S</i>	Range <i>26E</i>	Feet from the <i>266</i>	North/South Line <i>South</i>	Feet from the <i>260</i>	East/West Line <i>West</i>	County <i>Eddy</i>
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Latitude: *N 32.330724* Longitude: *W -104.310416*

NATURE OF RELEASE

Type of Release <i>Natural Gas, Pipeline Liquids</i>	Volume of Release: <i>570 MCF, 5 BBL Liquids</i>	Volume Recovered: <i>N/A</i>
Source of Release <i>Pipeline Leak.</i>	Date and Hour of Occurrence <i>09/04/2015 @ 15:30 MDT</i>	Date and Hour of Discovery <i>09/04/2015 @ 15:30 MDT</i>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? <i>Osman De Leon</i>	Date and Hour <i>9/4/2015 @ 19:30 MDT</i>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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. Cleanup activities will be carried out in accordance with Enterprise's General Release Notification, Response and Remediation Plan (dated March 9, 2015). A final C-141 form will be submitted once soil sampling demonstrates cleanup is complete.

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.

OIL CONSERVATION DIVISION

Signature:

Jon Fields

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: *9-16-2015* Phone: *713-381-6684*

* Attach Additional Sheets If Necessary



APEX

APPENDIX F

Disposal Documentation

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

Sote lo

NON-HAZARDOUS WASTE MANIFEST

NO 111701

1. PAGE ___ OF ___

2. TRAILER NO. #28

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3. COMPANY NAME
Enterprise Products
PHONE NO.
(432) 230-1414

4. ADDRESS
2182 Commerce
CITY Midland STATE TX ZIP 79703

5. PICK-UP DATE
10/16/2015
6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:
a. Non-Regulated, Non-Hazardous Waste

8. CONTAINERS
No. Type

9. TOTAL
QUANTITY

10. UNIT
Wt/Vol.

11. TEXAS
WASTE ID #

b.

c.

d. WT:

38,580 @ 37.720

12. COMMENTS OR SPECIAL INSTRUCTIONS:
CHINA BERRY LEAK

13. WASTE PROFILE NO.
708582

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME
Kin Slaughter

PHONE NO.
575-887-4048

24-HOUR EMERGENCY NO.

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

PRINTED/TYPED NAME

SIGNATURE

DATE

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16. TRANSPORTER (1)

NAME: SOTELO'S TRUCKING

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT: JOSE SOTELO

EMERGENCY PHONE: (575) 706-3842

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

PRINTED/TYPED NAME

SIGNATURE

DATE

10/16/2015

17. TRANSPORTER (2)

NAME:

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

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

PRINTED/TYPED NAME

SIGNATURE

DATE

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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 10/16/2015

TIME

9:35