

Remediation Summary and Soil Closure Report

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By JKeyes at 2:32 pm, Apr 25, 2016

APPROVED

Jal #3 Vent

NMOCD Ref. No. 1RP-3940

Lea County, New Mexico

Unit Letter "E", Section 33, Township 24 South, Range 37 East

Latitude 32.176433° / Longitude -103.172408°

April 8, 2016

Terracon Project No. AR157472



Prepared for:

ETC Field Services, LLC

San Antonio, Texas

Prepared by:

Terracon Consultants, Inc.

Lubbock, Texas

Distribution:

Copy 1: ETC Field Services – San Antonio, TX

Copy 2: New Mexico Oil Conservation Division – District I

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Materials

April 8, 2016



ETC Field Services, LLC
800 East Sonterra Road
San Antonio, Texas 78258

Attn: Ms. Rose Slade
P: (210) 425-6525
E: rose.slade@energytransfer.com

Re: Remediation Summary and Closure Report
Jal #3 Vent
NMOCD Ref. No. 1RP-3940
Lea County, New Mexico
Latitude 32.176433° / Longitude -103.172408°
Terracon Project No. AR157472

Dear Ms. Slade:

Terracon is pleased to submit two copies of the *Remediation Summary and Soil Closure Report* for the above-referenced site.

We appreciate the opportunity to provide site remediation services at the Jal #3 Vent site for ETC Field Services, LLC. Please contact the undersigned at (806) 300-0140 if you have questions regarding the information provided in the report.

Sincerely,
Terracon Consultants, Inc.

A handwritten signature in blue ink that reads "Joel Lowry". The signature is fluid and cursive.

Joel Lowry
Project Geologist
Lubbock

A handwritten signature in blue ink that reads "Erin Loyd". The signature is fluid and cursive.

Erin Loyd, PG
Senior Associate
Office Manager – Lubbock



Table of Contents

1.0	INTRODUCTION & BACKGROUND INFORMATION.....	1
2.0	LIMITATIONS	4
3.0	SUMMARY OF FIELD ACTIVITIES	5
4.0	RECOMMENDATIONS	8

LIST OF APPENDICES

Appendix A:	Figure 1 – Site Location Map
	Figure 2 – Site Diagram
Appendix B:	Table 1 – Analytical Summary Table
Appendix C:	Laboratory Analytical Reports
Appendix D:	Photographs
Appendix E:	Release Notification and Corrective Action (NMOCD Form C-141)

REMEDIATION SUMMARY AND SOIL CLOSURE REPORT

Jal #3 Vent

NMOCD Ref. No. 1RP-3940

Terracon Project No. AR157472

April 8, 2016

1.0 INTRODUCTION & BACKGROUND INFORMATION

Terracon Consultants Inc. (Terracon), on behalf of ETC Field Services, LLC (ETC), has prepared this *Remediation Summary and Soil Closure Report* for the release site known as Jal #3 Vent (hereafter referred to as the “site”). The site is located at 32.176433° North Latitude and 103.172408° West Longitude in Unit Letter “E”, Section 33, Township 24 South, Range 37 East, in Lea County, New Mexico. The affected property is owned by ETC Field Services, LLC. A “Site Location Map” is provided as Figure 1 in Appendix A.

On October 22, 2015, ETC discovered a release had occurred at the Jal #3 Plant facility. The release was attributed to a power outage in the city of Jal, New Mexico, causing the plant to shut-down and pressure up with liquids, resulting in the release of approximately 6 barrels (bbls) of crude oil and produced water through a vent pipe. The “Release Notification and Correction Action Form” (NMOCD Form C-141) indicated a majority of the release appeared to have been overspray, affecting an area measuring approximately 750 square feet (sq. ft.) in the northeast portion of the plant. Between November 18, 2015 and January 4, 2015, Terracon personnel oversaw the excavation of affected soil and conducted confirmation soil sampling activities at the site. Photographs of the site are provided in Appendix D.

Pursuant to the New Mexico Administrative Code (NMAC) 19.15.29, ETC personnel notified the New Mexico Oil Conservation Division (NMOCD) of the occurrence of the release due to the estimated volume of the release being greater than five barrels. A copy of the NMOCD Form C-141 is provided in Appendix E.

1.1 Site Description

Site Name	Jal #3 Vent
GPS	Lat.: 32.176433°, Long: -103.172408°
Legal Description	U/L “E”, Section 33, Township 24 South, Range 37 East
County	Lea County
General Description	The site consists of a vent pipe and an approximate 750 sq. ft. area of impacted soil located in the northeast portion of a natural gas processing plant.

A “Site Location Map” and “Site Diagram” are included as Figures 1 and 2, respectively, in Appendix A.

1.2 Regulatory Framework

Crude oil facilities in New Mexico are generally regulated by the New Mexico Oil Conservation Division (NMOCD). Contamination of soil due to a surface release of petroleum hydrocarbons is addressed in the NMOCD guidance document titled *Guidelines for Remediation of Leaks, Spills and Releases*, dated August 13, 1993.

The guidance document provides direction for initial response actions, site assessment, sampling procedures and provides a total ranking score based on the depth to groundwater, distance to private and domestic water sources, and the distance to the nearest surface water body as follows:

Ranking Score Criteria		
General Site Characteristics		Score
Depth to Ground Water	< 50 feet	20
	50 – 99 feet	10
	> 100 feet	0
Well Head Protection Area, <1,000 feet from water source, or <200 feet from private domestic water source	Yes	20
	No	0
Distance to Surface Water Body	< 200 feet	20
	200 – 1,000 feet	10
	> 1,000 feet	0

The total ranking score is the sum of the four individual ranking criteria and the basis for determining the recommended remediation action levels at the site.

Recommended Remediation Action Levels			
Contaminant of Concern	Total Ranking Score		
	>19	10-19	0-9
Benzene	10 mg/kg	10 mg/kg	10 mg/kg
BTEX	50 mg/kg	50 mg/kg	50 mg/kg
TPH	100 mg/kg	1,000 mg/kg	5,000 mg/kg

The NMAC does not specify a recommended remediation action level for chloride in soil. Recommended remediation action levels for chloride are determined by the NMOCD on a site-specific basis.

Remediation Summary and Soil Closure Report

Jal #3 Vent ■ Lea County, New Mexico

NMOCD Ref No. 1RP-3940 ■ Terracon Project No. AR157472



1.3 NMOCD Site Ranking

Based on Terracon's evaluation of the site ranking criteria, the site has an initial total ranking score of 0 points, based on the following:

- Review of the New Mexico Water Rights Reporting System (NMWRRS) database indicates groundwater information is not available for Section 33, Township 24 South, Range 37 East. A depth to groundwater gradient map utilized by the NMOCD suggests groundwater should be encountered at approximately 225 feet below ground surface (bgs).
- Review of the NMWRRS database indicates there are no registered water wells within 1,000 feet of the site.
- Review of available United States Geological Survey (USGS) topographical maps indicate that there are no surface water bodies within 1,000 feet of the site.

Total Ranking Score for Site			
Ranking Score Criteria			Score
Depth to Ground Water	< 50 feet	20	0
	50 – 99 feet	10	
	> 100 feet	0	
Well Head Protection Area, <1,000 feet from 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 – 1,000 feet	10	
	> 1,000 feet	0	
Total Ranking Score			0

Recommended remediation action levels for a site with a total ranking score of 0 points are as follows:

- Benzene – 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene and xylene (BTEX) – 50 mg/kg
- Total petroleum hydrocarbons (TPH) – 5,000 mg/kg

1.4 Scope of Services

The Scope of Services for Terracon as requested by ETC included:

Remediation Summary and Soil Closure Report

Jal #3 Vent ■ Lea County, New Mexico

NMOCD Ref No. 1RP-3940 ■ Terracon Project No. AR157472



- Oversight of the remediation of impacted soil;
- Collection of confirmation soil samples; and
- Submittal of a *Remediation Summary and Closure Report* detailing field activities, analytical results, site maps and photographs.

2.0 LIMITATIONS

2.1 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report.

2.2 Additional Scope Limitations

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; such 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, non-detectable or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this remediation activities. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

2.3 Reliance

This report has been prepared for the exclusive use of ETC Field Services, LLC, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of ETC Field Services, LLC and Terracon. 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 this report, and Terracon's Terms and Conditions. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to the client and all relying parties unless otherwise agreed in writing.

3.0 SUMMARY OF FIELD ACTIVITIES

3.1 Site Investigation

Following notification of a crude oil release that occurred on October 10, 2015, on the vent at the Jal #3 Plant, Terracon visited the site with an ETC representative. The release was attributed to a power outage, causing the plant to shut-down and pressure up with liquids, resulting in the release of approximately 6 bbls of crude oil and produced water through a vent pipe. The initial C-141 indicated that a majority of the release appeared to be overspray, affecting an area measuring approximately 750 sq. ft. During initial response activities, ETC personnel responded to the reported incident and secured the release site. A “Site Diagram” is provided as Figure 2 in Appendix A.

3.2 Remediation Summary and Soil Sampling Activities

November 16, 2015

Excavation activities commenced at the release site. Affected soil in the northern portion of the release site adjacent to the vent pipe was excavated to approximately 2 feet bgs. Affected soil in the southern portion of the release site was excavated to approximately 6 inches bgs. Excavated soil was stockpiled on-site, atop a polyurethane liner, pending final disposition.

November 18, 2015

Following the excavation of affected soil at the release site, Terracon collected 3 confirmation soil samples (Floor #2, Floor #3 and Floor #4) from the floor of the excavated area in the southern portion of the release site and relinquished them with the chain of custody forms to Cardinal Laboratories of Hobbs, New Mexico, for analysis of BTEX, TPH and chloride. The location of the confirmation soil sample locations are illustrated on Figure 2, Appendix A.

Laboratory analytical results indicated benzene concentrations were less than the laboratory reporting limit (RL) in each of the submitted soil samples. Total BTEX concentrations were less than the appropriate laboratory RL in each of the submitted soil samples with the exception of soil sample Floor #4, which exhibited a total BTEX concentration of 0.609 mg/kg. Analytical results indicated TPH concentrations ranged from 95.0 mg/kg in soil sample Floor #3 to 465 mg/kg in soil sample Floor #4. Chloride concentrations ranged from 48.0 mg/kg in soil sample Floor #2 to 208 mg/kg in soil sample Floor #4. TPH, BTEX and chloride concentrations were less than NMOCD Recommended Remediation Action Levels in each of the submitted soil samples.

Remediation Summary and Soil Closure Report

Jal #3 Vent ■ Lea County, New Mexico

NMOCD Ref No. 1RP-3940 ■ Terracon Project No. AR157472



In addition, one five point-composite sample (11/18 Stockpile) was collected from the excavation stockpile material and relinquished with chain of custody forms to the laboratory for analysis of BTEX, TPH and chloride.

Laboratory analytical results indicated soil sample 11/18 Stockpile exhibited a total BTEX concentration of less than the appropriate laboratory RL, a TPH concentration of 292 mg/kg and a chloride concentration of 64.0 mg/kg. Based on the results of laboratory analysis, stockpiled material represented by soil sample 11/18 Stockpile was deemed suitable for use as backfill.

January 4, 2016

Terracon collected 4 confirmation soil samples (NSW, WSW, SSW, ESW and Floor) from the floor and sidewalls of the excavated area in the northern portion of the release site and relinquished them with the chain of custody forms to the laboratory for analysis of BTEX, TPH and chloride.

Laboratory analytical results indicated benzene concentrations were less than the appropriate laboratory RL in each of the submitted soil samples with the exception of soil sample Floor #1, which exhibited a concentration of 0.00342 mg/kg. Total BTEX concentrations ranged from less than the appropriate laboratory RL in soil samples NSW, WSW and ESW to 1.68 mg/kg in soil sample SSW. Analytical results indicated TPH concentrations ranged from less than the laboratory RL in soil sample Floor #1 to 1,144 mg/kg in soil sample SSW. Chloride concentrations were less than the appropriate laboratory RL in each of the submitted soil samples. TPH, BTEX and chloride concentrations were less than NMOCD Recommended Remediation Action Levels in each of the submitted soil samples.

February 17, 2016

Upon receiving laboratory analytical results from confirmation soil samples and NMOCD approval, the excavated area was backfilled with stockpiled soil represented by soil sample 11/18 Stockpile. Prior to backfilling, the excavated area in the northern portion of the release site adjacent to the vent pipe measured approximately 15 feet in length, 10 feet in width and 2 feet in depth. The excavated area in the southern portion of the release site measured approximately 200 feet in length, 8 feet in width and 4 to 6 inches in depth. Excavation backfill was compacted and graded to meet the needs of the facility.

3.3 Laboratory Analytical Methods

Confirmation soil samples collected at the site were placed in laboratory-prepared containers, labeled and placed on ice in the field. The samples were relinquished with chain-of-custody forms to Cardinal Laboratories for analysis of BTEX, TPH and/or chloride using the following methods:

Remediation Summary and Soil Closure Report

Jal #3 Vent ■ Lea County, New Mexico

NMOCD Ref No. 1RP-3940 ■ Terracon Project No. AR157472



- BTEX concentrations in accordance with EPA Method SW-846 8021b
- TPH concentrations in accordance with EPA Method SW-846 8015M
- Chloride concentrations in accordance with Method 4500 Cl⁻ B.

4.0 RECOMMENDATIONS

Remediation activities conducted at the Jal #3 Vent release site met the objectives of the NMOCD. Laboratory analytical results from excavation confirmation and stockpile characterization soil samples indicate BTEX, TPH and chloride concentrations were less than NMOCD regulatory remediation action levels in each of the submitted soil samples. Based on field activities and review of laboratory analytical results from confirmation soil samples collected from the excavated area and soil stockpile, additional remediation and/or investigation activities are not warranted at the site at this time.

Terracon respectfully submits this Remediation *Summary and Soil Closure Report* to ETC Field Services, LLC, as documentation of the site remediation activities at the Jal #3 Vent site. Based on the completion of field activities and sample analysis to date, Terracon recommends no further action be taken in regards to the documented release to the site at this time.

Remediation Summary and Soil Closure Report

Jal #3 Vent ■ Lea County, New Mexico

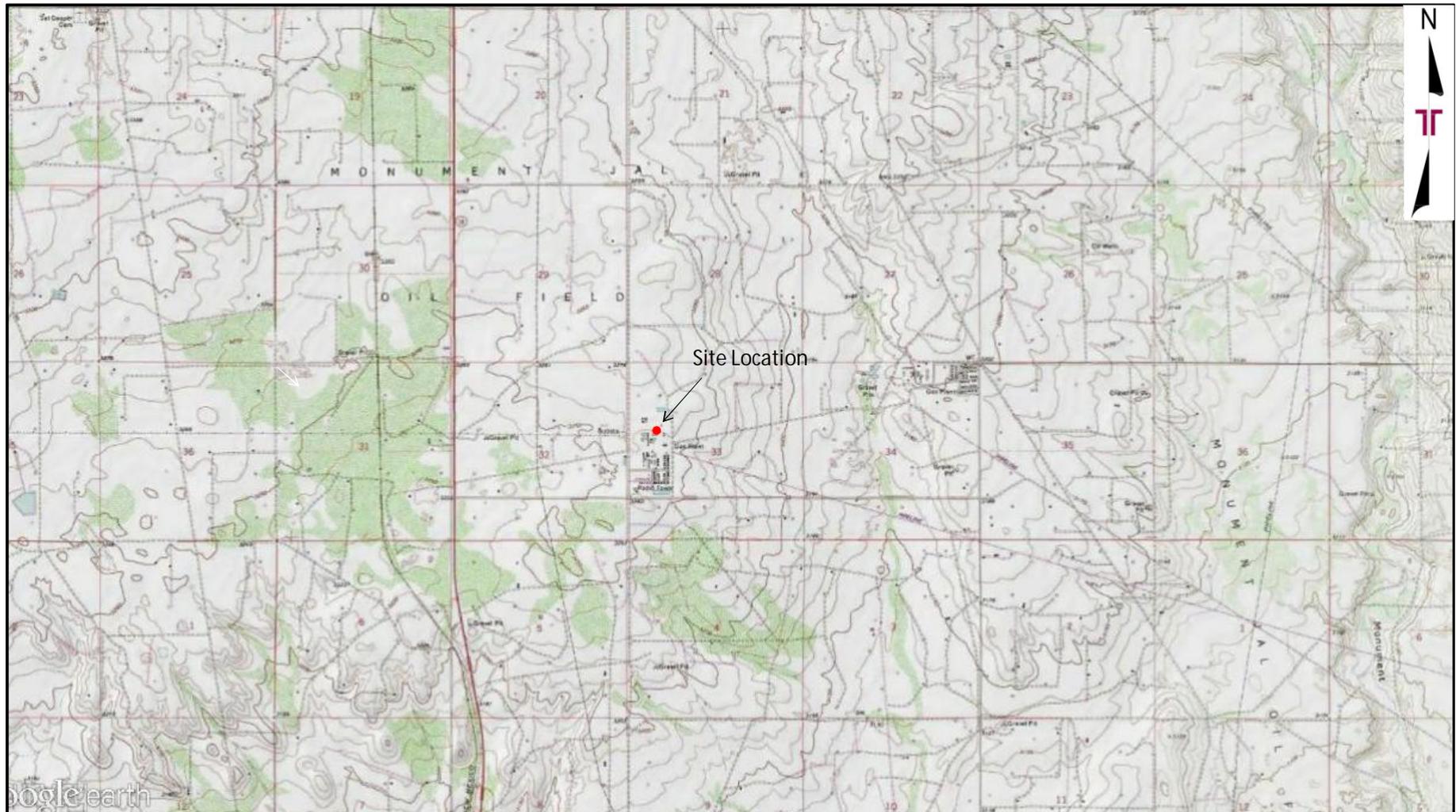
NMOCD Ref No. 1RP-3940 ■ Terracon Project No. AR157472



APPENDIX A

Figure 1 – Site Location Map

Figure 2 – Site Diagram

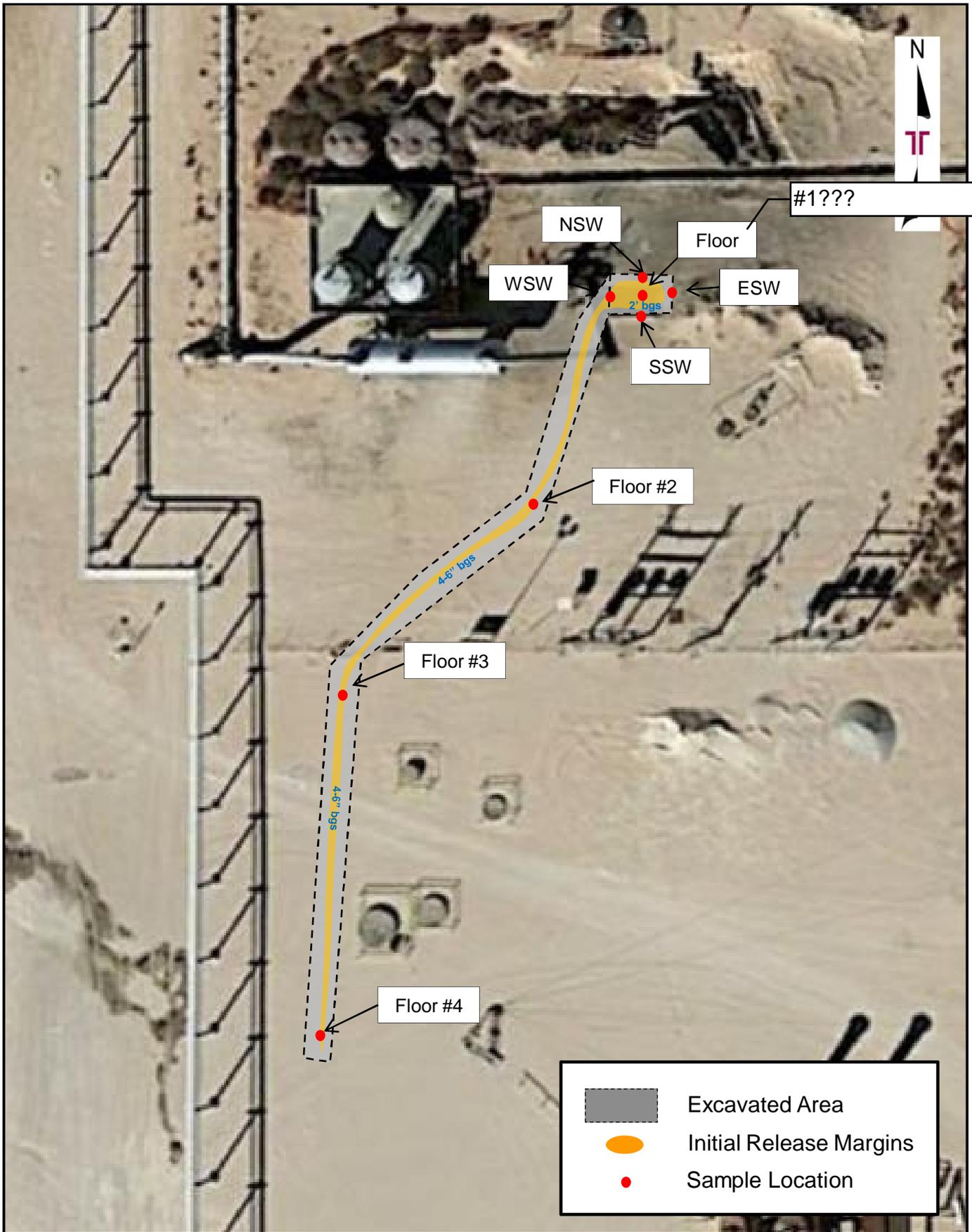


Project No.	AR157472
Scale:	1" = ~1 Mile
Source:	Google Earth
Date:	2014

Terracon
 Consulting Engineers & Scientists
 5827 50th St. Suite 1 Lubbock, Texas 79424
 PH. (806) 300-0104 FAX. (806) 797 0947

Figure 1– Topographic Map

Energy Transfer Company
 Jal #3 Vent
 32.176433° N, 103.172408° W
 Lea County, New Mexico



	Excavated Area
	Initial Release Margins
	Sample Location

Project No.	AR157472
Scale:	1"=40'
Source:	GoogleEarth
Date:	2014

Terracon
 Consulting Engineers & Scientists

5827 50th St. Suite 1 Lubbock, Texas 79424
 Phone (806) 300-0140 Fax (806) 797-0947

Figure 2 – Site and Sample Location Map

Jal #3 Vent
 32.176433° N, 103.172408° W
 Lea County, New Mexico

Remediation Summary and Soil Closure Report

Jal #3 Vent ■ Lea County, New Mexico

NMOCD Ref No. 1RP-3940 ■ Terracon Project No. AR157472



APPENDIX B

Table 1 – Confirmation Soil Sample Analytical Results

Table 1
Confirmation Soil Sample Analytical Results - TPH¹, BTEX² and Chloride³
 ETC Field Services - Jal #3 Vent
 Latitude: 32.176433°, Longitude: -103.172408°
 Terracon Project No. AR157472

Sample ID	Depth	Date	Sample Type	Soil Status	TPH				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
					C ₆ -C ₁₂ (mg/kg)	C ₁₂ -C ₂₈ (mg/kg)	C ₂₈ -C ₃₅ (mg/kg)	C ₆ -C ₃₅ (mg/kg)						
Floor #2	6-9"	11/18/2015	Grab	In-Situ	<10.0	29.8	86.9	96.7	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
Floor #3	6-9"	11/18/2015	Grab	In-Situ	<10.0	19.7	75.3	95.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
Floor #4	6-9"	11/18/2015	Grab	In-Situ	21.8	98.7	344	465	<0.050	<0.050	0.102	0.480	0.609	208
11/18 Stockpile	11/18 Stockpile	11/18/2015	Composite	Stockpiled	<10.0	87.2	205	292	<0.050	<0.050	0.053	<0.150	<0.300	64.0
NSW	1'	1/4/2016	Grab	In-Situ	12.1	20.1	35.1	67.3	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
WSW	1'	1/4/2016	Grab	In-Situ	<10.0	40.9	96.2	137	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
SSW	1'	1/4/2016	Grab	In-Situ	194	264	686	1,144	<0.100	0.349	0.511	0.823	1.68	<16.0
ESW	1'	1/4/2016	Grab	In-Situ	<10.0	30.0	80.2	110	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
Floor #1	2-2.5'	1/4/2016	Grab	In-Situ	579	34.9	46.4	660	<0.500	0.917	0.689	6.07	7.67	<16.0
New Mexico Oil Conservation Division Regulatory Remediation Action Levels								5,000	10	N/A	N/A	N/A	50	250*

1. TPH = Total petroleum hydrocarbons analyzed by EPA Method SW-846 8015M.

2. BTEX = BTEX analyzed by EPA Method SW-846 8021b.

3. Chlorides = Chlorides analyzed by EPA Method E 300.

- = Soil sample not analyzed for that constituent.

< = Constituent not detected above the indicated laboratory reporting limit (RL).

N/A = Not Applicable

* = Remediation Action Levels for chloride are not currently specified in the New Mexico Administrative Code and are set by the NMOCD

Bold denotes concentrations that exceeds NMOCD Regulatory Remediation Action Levels

Remediation Summary and Soil Closure Report

Jal #3 Vent ■ Lea County, New Mexico

NMOCD Ref No. 1RP-3940 ■ Terracon Project No. AR157472



APPENDIX C

Laboratory Analytical Reports



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

November 25, 2015

JOEL LOWRY

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: JAL #3-VENT

Enclosed are the results of analyses for samples received by the laboratory on 11/18/15 15:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Hope S. Moreno".

Hope S. Moreno For Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TERRACON CONSULTANTS
 JOEL LOWRY
 5827 50TH ST. SUITE 1
 LUBBOCK TX, 79424
 Fax To:

Received:	11/18/2015	Sampling Date:	11/18/2015
Reported:	11/25/2015	Sampling Type:	Soil
Project Name:	JAL #3-VENT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: FLOOR #2 (H503057-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2015		1.93	96.3	2.00		
Toluene*	<0.050	0.050	11/22/2015		2.19	110	2.00		
Ethylbenzene*	<0.050	0.050	11/22/2015		2.19	110	2.00		
Total Xylenes*	<0.150	0.150	11/22/2015		6.48	108	6.00		
Total BTEX	<0.300	0.300	11/22/2015						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/20/2015	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/21/2015	ND	193	96.5	200	1.00	
DRO >C10-C28	29.8	10.0	11/21/2015	ND	187	93.5	200	4.15	

Surrogate: 1-Chlorooctane 81.8 % 35-147
Surrogate: 1-Chlorooctadecane 91.5 % 28-171

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TERRACON CONSULTANTS
 JOEL LOWRY
 5827 50TH ST. SUITE 1
 LUBBOCK TX, 79424
 Fax To:

 Received: 11/18/2015
 Reported: 11/25/2015
 Project Name: JAL #3-VENT
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/18/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Judy Garcia

Sample ID: FLOOR #3 (H503057-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2015		1.93	96.3	2.00		
Toluene*	<0.050	0.050	11/22/2015		2.19	110	2.00		
Ethylbenzene*	<0.050	0.050	11/22/2015		2.19	110	2.00		
Total Xylenes*	<0.150	0.150	11/22/2015		6.48	108	6.00		
Total BTEX	<0.300	0.300	11/22/2015						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/20/2015	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/21/2015	ND	193	96.5	200	1.00	
DRO >C10-C28	19.7	10.0	11/21/2015	ND	187	93.5	200	4.15	

Surrogate: 1-Chlorooctane 89.1 % 35-147

Surrogate: 1-Chlorooctadecane 96.9 % 28-171

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TERRACON CONSULTANTS
 JOEL LOWRY
 5827 50TH ST. SUITE 1
 LUBBOCK TX, 79424
 Fax To:

 Received: 11/18/2015
 Reported: 11/25/2015
 Project Name: JAL #3-VENT
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/18/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Judy Garcia

Sample ID: FLOOR #4 (H503057-03)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2015		1.93	96.3	2.00		
Toluene*	<0.050	0.050	11/22/2015		2.19	110	2.00		
Ethylbenzene*	0.102	0.050	11/22/2015		2.19	110	2.00		
Total Xylenes*	0.480	0.150	11/22/2015		6.48	108	6.00		
Total BTEX	0.609	0.300	11/22/2015						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	11/20/2015	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	21.8	10.0	11/21/2015	ND	193	96.5	200	1.00	
DRO >C10-C28	98.7	10.0	11/21/2015	ND	187	93.5	200	4.15	

Surrogate: 1-Chlorooctane 92.3 % 35-147

Surrogate: 1-Chlorooctadecane 97.3 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

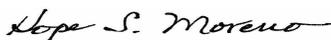
Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Terracon

CHAIN OF CUSTODY RECORD

Laboratory: Xenco Laboratories
 Address: 1211 W. Florida Ave.
 Midland, TX 79701
 432-563-1800

Phone: Carroll
 Contact: Joel Lowry

PO/SO #: ETI

Sampler's Signature: Joel Lowry

Office Location: Lubbock

Project Manager: Joel Lowry

Sampler's Name: Joel Lowry

Project Number: Sal #3 Vent

Project Name: Sal #3 Vent

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers	ANALYSIS REQUESTED
	5/11/81/15	3:00		X	Floor #2	6'	9'	1	BTEX 8021
	5/11/81/15	3:05		X	Floor #3	6'	9'	1	TPH 8015 MET
	5/11/81/15	3:10		X	Floor #4	6'	9'	1	CI- 4500

Relinquished by (Signature)	Date:	Time:	Received By (Signature)	Date:	Time:
<u>Joel Lowry</u>			<u>Joel Lowry</u>	11/18/15	15:25
Relinquished by (Signature)	Date:	Time:	Received By (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received By (Signature)	Date:	Time:

NOTES:

Please Email Results to
 erin.loyd@terracon.com
 joel.lowry@terracon.com

Matrix: WW-Wastewater W - Water S - Soil L - Liquid A - Air Bag C - Charcoal tube S - Sludge
 Container: VGA - 40 ml vial A/G - Amber Glass 1L P/O - Plastic or other

Lubbock Office ■ 5827 50th Street ■ Lubbock, Texas 79424 ■ 806-300-0140
 Responsive ■ Resourceful ■ Reliable

5800
#54



November 30, 2015

JOEL LOWRY

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: JAL #3-VENT

Enclosed are the results of analyses for samples received by the laboratory on 11/18/15 15:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TERRACON CONSULTANTS
 JOEL LOWRY
 5827 50TH ST. SUITE 1
 LUBBOCK TX, 79424
 Fax To:

Received:	11/18/2015	Sampling Date:	11/18/2015
Reported:	11/30/2015	Sampling Type:	Soil
Project Name:	JAL #3-VENT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: 11/18 STOCKPILE (H503056-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2015	ND	1.93	96.3	2.00	6.23	
Toluene*	<0.050	0.050	11/22/2015	ND	2.19	110	2.00	5.87	
Ethylbenzene*	0.053	0.050	11/22/2015	ND	2.19	110	2.00	5.88	
Total Xylenes*	<0.150	0.150	11/22/2015	ND	6.48	108	6.00	5.28	
Total BTEX	<0.300	0.300	11/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/20/2015	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/21/2015	ND	193	96.5	200	1.00	
DRO >C10-C28	87.2	10.0	11/21/2015	ND	187	93.5	200	4.15	
EXT DRO >C28-C35	205	10.0	11/21/2015	ND					

Surrogate: 1-Chlorooctane 82.5 % 35-147

Surrogate: 1-Chlorooctadecane 95.3 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report



Celey D. Keene, Lab Director/Quality Manager

TERRACON

Laboratory: Xenco Laboratories
 Address: 1211 W. Florida Ave.
 Midland, TX 79701
 432-563-1800

Office Location: Lubbock
 Project Manager: Joel Lowry
 Sampler's Name: Joel Lowry
 Phone: Received
 Contact: Joel Lowry
 PO/SO #: ETI

Project Number: SOEC Lowry
 Project Name: Set #3 - Vent
 Identifying Marks of Sample(s):
 Start Depth: 4 oz Glass
 End Depth: 1
 No. Type of Containers: 1
 Sampler's Signature: Joel Lowry

CHAIN OF CUSTODY RECORD

ANALYSIS REQUESTED

LAB USE ONLY
 DUE DATE:
 TEMP OF COOLER WHEN RECEIVED (°C)

Page 1 of 1

Lab Sample ID
H503056-01

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers	ANALYSIS REQUESTED	LAB USE ONLY
	11/18/18	3:20	X		11/18 Stockpile			1	B7CP TPH Phloride 450C	
Relinquished by (Signature)	Date:	Time:								
Relinquished by (Signature)	Date:	Time:								
Relinquished by (Signature)	Date:	Time:								

Received by (Signature): Erin Garcia
 Date: 11-18-18
 Time: 5:25

NOTES:
 Please Email Results to
 erin.loyd@terracon.com
 joel.lowry@terracon.com

Matrix: WW - Wastewater W - Water S - Soil L - Liquid A - Air Bag C - Charcoal tube SL - Sludge
 Container: VOA - 40 ml Vial A/G - Amber Glass 1L 250 ml - Glass wide mouth P/C - Plastic or other

Lubbock Office ■ 5827 50th Street ■ Lubbock, Texas 79424 ■ 806-300-0140
 Responsive ■ Resourceful ■ Reliable

\$180 #54



January 13, 2016

JOEL LOWRY

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: JAL #3-VENT

Enclosed are the results of analyses for samples received by the laboratory on 01/08/16 13:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, flowing "C" at the beginning.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TERRACON CONSULTANTS
 JOEL LOWRY
 5827 50TH ST. SUITE 1
 LUBBOCK TX, 79424
 Fax To:

Received:	01/08/2016	Sampling Date:	01/04/2016
Reported:	01/13/2016	Sampling Type:	Soil
Project Name:	JAL #3-VENT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	JAL, NM		

Sample ID: NSW (H600043-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/13/2016	ND	1.77	88.3	2.00	10.9	
Toluene*	<0.050	0.050	01/13/2016	ND	1.75	87.6	2.00	10.0	
Ethylbenzene*	<0.050	0.050	01/13/2016	ND	1.60	79.8	2.00	11.1	
Total Xylenes*	<0.150	0.150	01/13/2016	ND	4.93	82.1	6.00	10.1	
Total BTEX	<0.300	0.300	01/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/08/2016	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	12.1	10.0	01/11/2016	ND	211	106	200	13.3	
DRO >C10-C28	20.1	10.0	01/11/2016	ND	196	98.2	200	11.2	
EXT DRO >C28-C35	35.1	10.0	01/11/2016	ND					

Surrogate: 1-Chlorooctane 92.1 % 35-147

Surrogate: 1-Chlorooctadecane 97.5 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TERRACON CONSULTANTS
 JOEL LOWRY
 5827 50TH ST. SUITE 1
 LUBBOCK TX, 79424
 Fax To:

 Received: 01/08/2016
 Reported: 01/13/2016
 Project Name: JAL #3-VENT
 Project Number: NONE GIVEN
 Project Location: JAL, NM

 Sampling Date: 01/04/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: WSW (H600043-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/13/2016	ND	1.77	88.3	2.00	10.9	
Toluene*	<0.050	0.050	01/13/2016	ND	1.75	87.6	2.00	10.0	
Ethylbenzene*	<0.050	0.050	01/13/2016	ND	1.60	79.8	2.00	11.1	
Total Xylenes*	<0.150	0.150	01/13/2016	ND	4.93	82.1	6.00	10.1	
Total BTEX	<0.300	0.300	01/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/08/2016	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/11/2016	ND	211	106	200	13.3	
DRO >C10-C28	40.9	10.0	01/11/2016	ND	196	98.2	200	11.2	
EXT DRO >C28-C35	96.2	10.0	01/11/2016	ND					

Surrogate: 1-Chlorooctane 113 % 35-147

Surrogate: 1-Chlorooctadecane 113 % 28-171

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TERRACON CONSULTANTS
 JOEL LOWRY
 5827 50TH ST. SUITE 1
 LUBBOCK TX, 79424
 Fax To:

 Received: 01/08/2016
 Reported: 01/13/2016
 Project Name: JAL #3-VENT
 Project Number: NONE GIVEN
 Project Location: JAL, NM

 Sampling Date: 01/04/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SSW (H600043-03)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	01/13/2016	ND	1.77	88.3	2.00	10.9	
Toluene*	0.349	0.100	01/13/2016	ND	1.75	87.6	2.00	10.0	
Ethylbenzene*	0.511	0.100	01/13/2016	ND	1.60	79.8	2.00	11.1	
Total Xylenes*	0.823	0.300	01/13/2016	ND	4.93	82.1	6.00	10.1	
Total BTEX	1.68	0.600	01/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 117 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/08/2016	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	194	10.0	01/11/2016	ND	211	106	200	13.3	
DRO >C10-C28	264	10.0	01/11/2016	ND	196	98.2	200	11.2	
EXT DRO >C28-C35	686	10.0	01/11/2016	ND					

Surrogate: 1-Chlorooctane 45.4 % 35-147

Surrogate: 1-Chlorooctadecane 43.1 % 28-171

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TERRACON CONSULTANTS
 JOEL LOWRY
 5827 50TH ST. SUITE 1
 LUBBOCK TX, 79424
 Fax To:

 Received: 01/08/2016
 Reported: 01/13/2016
 Project Name: JAL #3-VENT
 Project Number: NONE GIVEN
 Project Location: JAL, NM

 Sampling Date: 01/04/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: ESW (H600043-04)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/13/2016	ND	1.77	88.3	2.00	10.9	
Toluene*	<0.050	0.050	01/13/2016	ND	1.75	87.6	2.00	10.0	
Ethylbenzene*	<0.050	0.050	01/13/2016	ND	1.60	79.8	2.00	11.1	
Total Xylenes*	<0.150	0.150	01/13/2016	ND	4.93	82.1	6.00	10.1	
Total BTEX	<0.300	0.300	01/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/08/2016	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/12/2016	ND	211	106	200	13.3	
DRO >C10-C28	30.0	10.0	01/12/2016	ND	196	98.2	200	11.2	
EXT DRO >C28-C35	80.2	10.0	01/12/2016	ND					

Surrogate: 1-Chlorooctane 77.4 % 35-147

Surrogate: 1-Chlorooctadecane 82.5 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TERRACON CONSULTANTS
 JOEL LOWRY
 5827 50TH ST. SUITE 1
 LUBBOCK TX, 79424
 Fax To:

 Received: 01/08/2016
 Reported: 01/13/2016
 Project Name: JAL #3-VENT
 Project Number: NONE GIVEN
 Project Location: JAL, NM

 Sampling Date: 01/04/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: FLOOR (H600043-05)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	01/13/2016	ND	1.77	88.3	2.00	10.9	
Toluene*	0.917	0.500	01/13/2016	ND	1.75	87.6	2.00	10.0	
Ethylbenzene*	0.689	0.500	01/13/2016	ND	1.60	79.8	2.00	11.1	
Total Xylenes*	6.07	1.50	01/13/2016	ND	4.93	82.1	6.00	10.1	
Total BTEX	7.67	3.00	01/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/08/2016	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	579	10.0	01/11/2016	ND	211	106	200	13.3	
DRO >C10-C28	34.9	10.0	01/11/2016	ND	196	98.2	200	11.2	
EXT DRO >C28-C35	46.4	10.0	01/11/2016	ND					

Surrogate: 1-Chlorooctane 107 % 35-147

Surrogate: 1-Chlorooctadecane 105 % 28-171

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report



Celey D. Keene, Lab Director/Quality Manager



CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

BILL TO

ANALYSIS REQUEST

Company Name: ETC Field Services P.O. #:
 Project Manager: JOEL LOWRY Company: TERRAVERA
 Address: _____ Attn: JOEL LOWRY
 City: _____ State: _____ Zip: _____ Address: 5827 SOTW
 Phone #: _____ Fax #: _____ City: Lebbok
 Project #: _____ Project Owner: ETC Field Services State: TX Zip: 79424
 Project Name: SAL #3 - Vent Phone #: _____
 Project Location: SAL, NM Fax #: _____
 Sampler Name: JOEL LOWRY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	REMARKS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:			
<u>H000043</u>	<u>1 NSW</u>		<u>6</u>								<u>1/4/10</u>	<u>13:20</u>	<u>BTEX 8021</u>
	<u>2 WSW</u>		<u>6</u>								<u>1/4/10</u>	<u>13:25</u>	<u>TPII 8015M Ext</u>
	<u>3 SSW</u>		<u>6</u>								<u>1/4/10</u>	<u>13:30</u>	<u>CI 4500</u>
	<u>4 ESW</u>		<u>6</u>								<u>1/4/10</u>	<u>13:35</u>	
	<u>5 Floor</u>		<u>6</u>								<u>1/4/10</u>	<u>19:40</u>	

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Relinquished By: _____ Date: 1/4/10 Time: 11:00
 Relinquished By: _____ Date: _____ Time: _____
 Received By: _____
 Received By: Joel Lowry

Delivered By: (Circle One) UPS 4.80 Sample Condition: Cool Intact Yes No
 Sampler - UPS - Bus - Other: _____

Phone Result: Yes No Add'l Phone #: _____
 Fax Result: Yes No Add'l Fax #: _____
 REMARKS: _____
 + Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

Remediation Summary and Soil Closure Report

Jal #3 Vent ■ Lea County, New Mexico

NMOCD Ref No. 1RP-3940 ■ Terracon Project No. AR157472



APPENDIX D

Photographs

Remediation Summary and Soil Closure Report

Jal #3 Vent ■ Lea County, New Mexico

NMOCD Ref No. 1RP-3940 ■ Terracon Project No. AR157472



Photo 1: View of surface staining from the initial release, facing south. (32.17593, -103.17287)



Photo 2: View of the excavated area adjacent to the release point, facing northwest. (32.17590, -103.172844)

Remediation Summary and Soil Closure Report

Jal #3 Vent ■ Lea County, New Mexico

NMOCD Ref No. 1RP-3940 ■ Terracon Project No. AR157472



Photo 3: View of the excavated flow path, facing south. (32.17563, -103.17308)



Photo 4: View the excavated area adjacent to the release point and sample locations, facing east. (32.17592, -103.17289)

Remediation Summary and Soil Closure Report

Jal #3 Vent ■ Lea County, New Mexico

NMOCD Ref No. 1RP-3940 ■ Terracon Project No. AR157472



Photo 5: View of the release site after remediation activities, facing northeast. (32.17564, -103.17315)



Photo 6: View of the release site after remediation activities, facing south. (32.17595, -103.17288)

Remediation Summary and Soil Closure Report

Jal #3 Vent ■ Lea County, New Mexico

NMOCD Ref No. 1RP-3940 ■ Terracon Project No. AR157472



APPENDIX E

**Release Notification and Corrective Action
(NMOCD Form C-141)**

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

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED

By JKeyes at 9:15 am, Oct 27, 2015

Form C-141

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: Regency Field Services LLC.	Contact: Rose Slade
Address: 800 East Sonterra Road San Antonio, TX 78258	Telephone No. 210-403-6525
Facility Name: Jal #3 Plant	Facility Type: Natural Gas Processing Plant

Surface Owner: Regency Field Services	Mineral Owner:	API No.
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	33	24 South	37 East					Lea County

Latitude 32 degrees 10'35.16" North - **Longitude** 103 degrees 10'20.67" West

NATURE OF RELEASE

Type of Release: Mixture of Produced water & Crude oil	Volume of Release: 6 barrels	Volume Recovered: 0
Source of Release: Vent Pipe	Date and Hour of Occurrence: 10/20/15 Time Unknown	Date and Hour of Discovery: 10/21/15 @ 8:00 AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Kellie Jones & Jamie Keyes	
By Whom? Rose Slade	Date and Hour: 8/22/15 2:30 PM	
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.*

Severe weather in the area resulted in a power outage in the city of Jal, NM. This caused the plant to shut-down and pressure up with gas and liquids. The plant was overwhelmed, resulting in the release of approximately 6 barrels of crude oil and produced water through a vent pipe. A majority of the release appeared to have been overspray, affecting an area measuring approximately 750 square feet in the northeast portion of the plant. Remedial action taken: Affected soil has been excavated and placed on a plastic liner, pending final disposition.

Describe Area Affected and Cleanup Action Taken.*

The release affected an area measuring approximately 750 square feet in the northeast portion of the plant. The release will be remediated according to NMOCD regulatory guidelines.

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: <i>Rose Slade</i>		OIL CONSERVATION DIVISION	
Printed Name: Rose Slade		Approved by Environmental Specialist: <i>Jamie Keyes</i>	
Title: Sr. Environmental Specialist		Approval Date: 10/27/2015	Expiration Date: 12/27/2015
E-mail Address: Rose.Slade@energytransfer.com		Conditions of Approval:	
Date: 10/26/15	Phone: 210-425-6525	Discrete site samples required. Delineate and remediate per NMOCD guidelines.	Attached <input type="checkbox"/> 1RP 3940

* Attach Additional Sheets If Necessary

Geotagged photos of remediation required.