2057 Commerce Drive
Midland, TX 79703

432.520.7720 PHONE
432.520.7701 FAX

www.trcsolutions.com

APPROVED
By Olivia Yu at 4:33 pm, Jun 09, 2017

NMOCD approves of the proposed remediation activities for 1RP-4634.

June 1, 2017

Olivia Yu
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1625 French Drive
Hobbs, NM 88240

Randall Pair
Carlsbad Field Office
United States Department of the Interior
Bureau of Land Management
620 E. Greene Street
Carlsbad, New Mexico 88220
rpair@blm.gov

Re: Soil Investigation Summary and Proposed Remediation Workplan
A-14 Compressor Station Field Scrubber Release (1RP-4634)
GPS: N32° 14' 46.26" W103° 24' 7.2"
Unit Letter "I", Section 6, Township 24 South, Range 35 East, NMPM
Lea County, New Mexico

Dear Ms. Yu and Mr. Pair,

TRC Environmental Corporation (TRC), on behalf of ETC Field Services, LLC (ETC) has prepared this Soil Investigation Summary and Proposed Remediation Workplan (Workplan) for the A-14 Compressor Station Field Scrubber Release Site (Release Site). The purpose of this Workplan is to propose remediation activities designed to advance the A-14 Compressor Station Field Scrubber Release Site toward an NMOCD approved Site Closure Status. The legal description of the Release Site is Unit Letter "I", Section 6, Township 24 South, Range 35 East, NMPM, in Lea County, New Mexico. The GPS coordinates for the site are N 32° 14' 46.26" W 103° 24' 7.2". The subject property is administered by the United States Bureau of Land Management (BLM). A Site Location Map, Site Detail and Soil Sample Location Map, and Site Detail and Soil Sample Locations Maps are provided as Figure 1, Figure 2, and Figure 3, respectively. Release Site photographs are attached to this Workplan.

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) did not identify any registered water wells in Section 6, Township 24 South, Range 35 East. A reference map utilized by the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office indicates groundwater should be encountered at approximately two hundred twenty-five (225) feet below ground

surface (bgs). Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

No water wells were observed within one-thousand (1,000) feet of the Release Site. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

No surface water was observed within one-thousand (1,000) feet of the release. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

Based on the NMOCD Site Classification criteria, the Release Site soil remediation levels are 10 mg/Kg for benzene, 50 mg/Kg for benzene, toluene, ethylbenzene and xylenes (BTEX), and 5,000 mg/Kg for total petroleum hydrocarbons (TPH). Per NMOCD request, chloride remediation levels for the Release Site will be 600 mg/Kg.

On March 21 and 22, 2017, due to safety concerns and the potential of striking underground piping and equipment within the vicinity of the A-14 Compressor Station, ETC utilized a hydro-vac prior to conducting any field sampling activities to identify the location of underground pipelines and other associated subsurface equipment.

On March 23, 2017, TRC, on behalf of ETC, utilized a hand auger to collect ten (10) delineation soil samples (FS-1 6" through FS-5 6" and FS-1 1' through FS-5 1') from the stained surface soil. The soil samples were submitted to Xenco Laboratories in Midland, Texas for determination of concentrations of BTEX using Method SW 846-8021B, TPH using Method SW 846-8015M, and chloride using Method E-300.1. The analytical results indicated benzene and BTEX concentrations were less than the applicable laboratory Method Detection Limit (MDL), with the exception of soil samples FS-1 6", FS-3 6", and FS-3 1', which exhibited BTEX concentrations of 0.00480 mg/Kg, 0.2959 mg/Kg, and 0.2374 mg/Kg, respectively. The collected soil samples exhibited BTEX concentrations below NMOCD regulatory guidelines. The laboratory results indicated TPH concentrations ranged from 574.0 mg/Kg for soil sample FS-1 1' to 27,290 mg/Kg for soil sample FS-3 1'. A review of laboratory analytical results indicated soil samples FS-2 6", FS-3 6", FS-3 1', and FS-5 1' exhibited TPH concentrations above NMOCD regulatory guidelines. Chloride concentrations ranged from less than the applicable laboratory MDL for soil samples FS-4 6" and FS-4 1' to 7,910 mg/Kg for soil sample FS-1 6". A review of laboratory analytical results indicated soil samples FS-1 6" through FS-3 6" and FS-1 1' through FS-3 1' exhibited chloride concentrations above NMOCD regulatory guidelines.

In addition to the soil samples described above, seven (7) soil samples (WFS-1 1', EFS-1 1', SFS-1 1', NFS-2 1', SFS-2 1', SFS-3 1', and NFS-3 1') were collected utilizing a hand auger approximately five (5) feet from the outer perimeter of the stained surface soil and submitted for BTEX, TPH, and chloride analysis. The analytical results indicated benzene and BTEX concentrations were less than the applicable laboratory MDL and NMOCD regulatory guidelines. TPH concentrations ranged from 16.7 mg/Kg for soil sample EFS-1 1' to 1,283 mg/Kg for soil sample NFS-3 1'. A review of laboratory results indicated TPH concentrations were below NMOCD regulatory guidelines for the submitted soil samples. Chloride concentrations ranged from less than the applicable laboratory MDL for soil samples SFS-1 1' and NFS-3 1' to 108 mg/Kg for soil sample SFS-3 1'. A review of laboratory analytical results indicated chloride concentrations were below NMOCD regulatory guidelines for the submitted samples.

In addition, one background sample (BG-1 1') was collected approximately fifty (50) feet north of the A-14 Compressor Station, utilizing a hand auger, and submitted to the laboratory for TPH, BTEX, and chloride analysis. A review of laboratory analytical results indicated benzene, BTEX, TPH, and chloride concentrations were less than laboratory applicable MDL.

On April 17, 2017, TRC conducted additional vertical delineation activities utilizing a hand auger. During the sampling event, hand auger refusal was encountered at a depth ranging from approximately one (1) foot to sixteen (16) inches bgs. Three (3) soil samples (FS-3 16", FS-5a 1', and FS-5a 16") were collected from the stained surface soil and submitted for BTEX and TPH analysis. The analytical results indicated benzene concentrations were below laboratory applicable MDL and NMOCD regulatory guidelines. BTEX concentrations ranged from 0.00389 mg/Kg for soil samples FS-5a 1' to 0.02233 mg/Kg for soil sample FS-3 16". A review of laboratory analytical results indicated BTEX concentrations were below NMOCD regulatory guidelines. TPH concentrations ranged from 1,690.8 mg/Kg for soil sample FS-3 16" to 3,550 mg/Kg for soil sample FS-5a 1'. A review of laboratory analytical results TPH concentrations were below NMOCD regulatory guidelines for the collected samples. In addition, soil samples FS-5a 1' and FS-5a 16" were submitted for chloride analysis. A review of laboratory analytical results indicated chloride concentrations were less than the applicable laboratory MDL for the submitted soil samples and below NMOCD regulatory guidelines.

On May 10, 2017, TRC conducted additional vertical delineation activities at the Release Site. Utilizing a backhoe, three (3) vertical trenches were advanced to approximately four (4) feet bgs. Three (3) soil samples (FS-1a 4', FS-2a 4', and FS-3a 4') were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. A review of laboratory analytical results indicated benzene and BTEX concentrations were less than the applicable laboratory MDL and below NMOCD regulatory guidelines. TPH concentrations ranged from 15.0 mg/Kg for soil sample FS-3a 4' to 23.6 mg/Kg for soil sample FS-1a 4'. A review of laboratory analytical results indicated TPH concentrations were below NMOCD regulatory guidelines. Chloride concentrations ranged from 22.8 mg/Kg for soil sample FS-3a 4' to 478 mg/Kg for soil sample FS-1a 4'. A review of laboratory analytical results indicate TPH concentrations were below NMOCD regulatory guidelines.

In addition, the three (3) vertical trenches were advanced to nine (9) feet bgs to confirm chloride concentrations remained below NMOCD regulatory guidelines. Three (3) soil samples (FS-1a 9', FS-2a 9', and FS-3a 9') were collected and submitted to the laboratory for chloride analysis. A review of laboratory analytical results indicated chloride concentrations ranged from 27.0 mg/Kg for soil sample FS-2a 9' to 162 mg/Kg for soil sample FS-1a 9' indicating chloride concentrations remained below NMOCD regulatory guidelines an additional five (5) feet below soil samples FS-1a 4', FS-2a 4', and FS-3a 4'.

A Kinder Morgan high pressure (1,000 psi) natural gas pipeline, heading in a northwest to southeast direction, bisects the area represented by soil samples FS-4 and FS-5. Due to safety concerns, heavy equipment (i.e. backhoe) is not permitted to break ground within a thirty-five (35) foot radius of the pipeline. For this reason, vertical trenches were not advanced in the areas represented by soil samples FS-4 and FS-5.

Based on the analytical results of soil samples collected on March 23, April 17, and May 10, 2017, ETC proposes the following field activities designed to remediate the A-14 Compressor Station Field Scrubber Release:

- Utilizing a backhoe, excavate the Release Site to a depth of approximately four (4) feet bgs in the areas represented by soil samples FS-1, FS-2 and FS-3. A hydro-vac will be used to excavate the areas represented by soil samples FS-4 and FS-5 to depths ranging from approximately one (1) foot bgs to approximately two (2) feet bgs. Excavated soil will be stockpiled on a plastic liner adjacent to the excavation pending transportation to a NMOCD approved disposal facility, as requested by the BLM.
- Collect an appropriate number of excavation floor and wall soil samples, spaced at approximately every forty (40) feet, and submit the soil samples to the laboratory for determination of concentrations of BTEX, TPH, and chloride.
- On receipt of favorable analytical results, request NMOCD and BLM permission to backfill the excavation with locally purchased non-impacted "like" soil or caliche. On NMOCD and BLM approval, the excavation will be backfilled with the non-impacted material.
- Transport excavated soil under manifest to an NMOCD approved disposal facility.
- Prepare and submit a "Remediation Summary and Site Closure Request" to the NMOCD and BLM.

ETC is prepared to begin the activities outlined in this Proposed Remediation Workplan on NMOCD and BLM approval.

If you have any questions, or if additional information is required, please feel free to call me at 432-520-7720 (office) or 432-664-6699 (cell).

Thank you,

Nikki Green
Project Manager
TRC Environmental Corporation

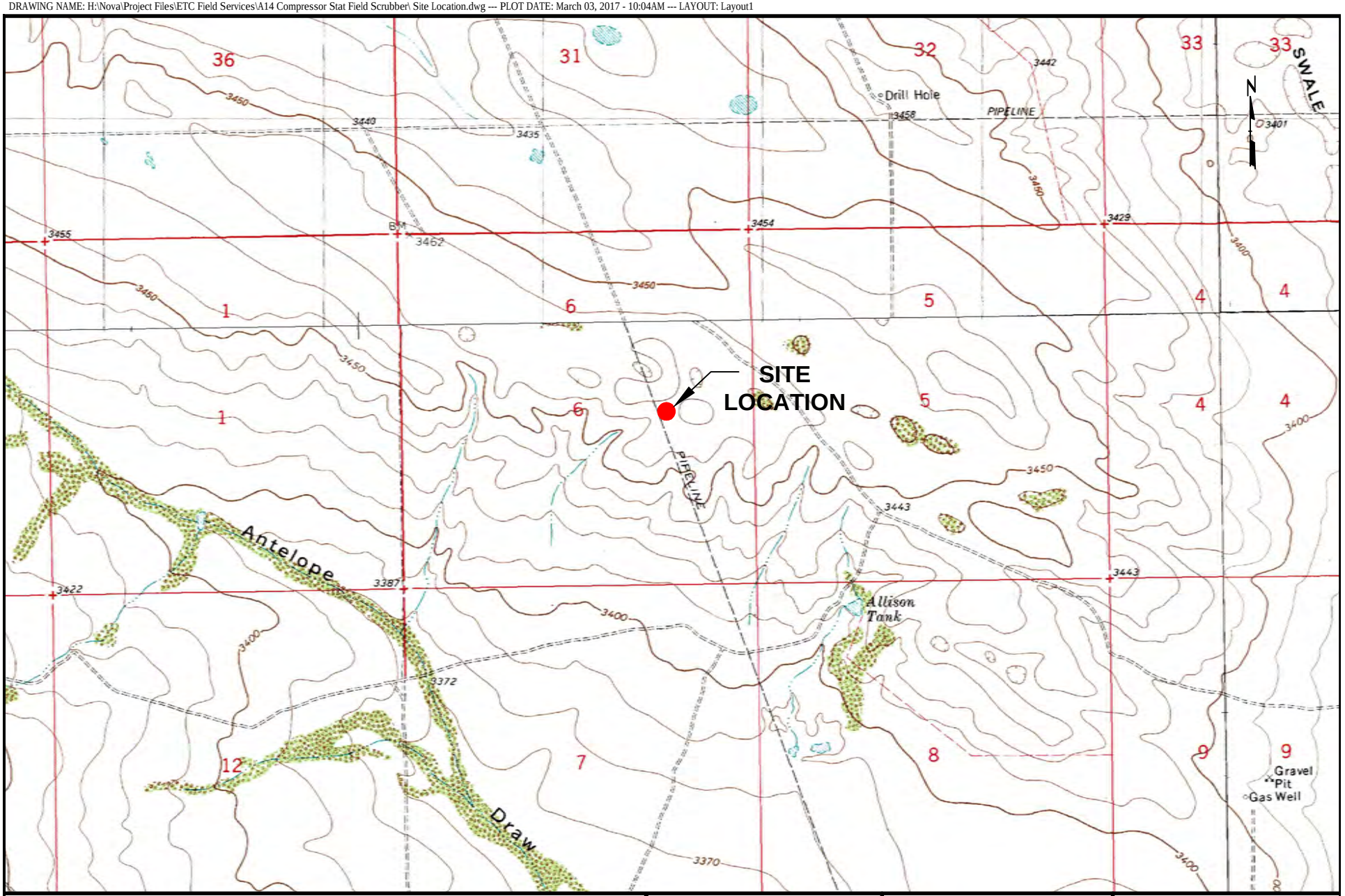
Jeffrey Kindley, PG
Senior Project Manager
TRC Environmental Corporation

Attachments:

Figure 1 - Site Location Map
Figure 2 - Site Detail and Soil Sample Location Map
Figure 3 - Site Detail and Soil Sample Locations Map
Table 1 - Concentrations of Benzene, BTEX, TPH and Chloride in Soil
Release Site Photographs
Laboratory Analytical Results
Release Notification and Corrective Action (Form C-141)

cc: File

DRAWING NAME: H:\Nova\Project Files\ETC Field Services\A14 Compressor Stat Field Scrubber\ Site Location.dwg --- PLOT DATE: March 03, 2017 - 10:04AM --- LAYOUT: Layout1



LEGEND:

2000 1000 0 1000 2000

Distance in Feet

Figure 1
Site Location Map
ETC Field Services, LLC
A-14 Compressor Station
Field Scrubber
Lea County, NM

Scale: 1" = 2000'	
CAD By: TA	Checked By: CS
Draft: March 3, 2017	
Lat. N 32° 14.771' , Long. W 103° 24.120'	
SE1/4 NE1/4 Sec 6 T24S R35E	
TRC Proj. No.: 273817	

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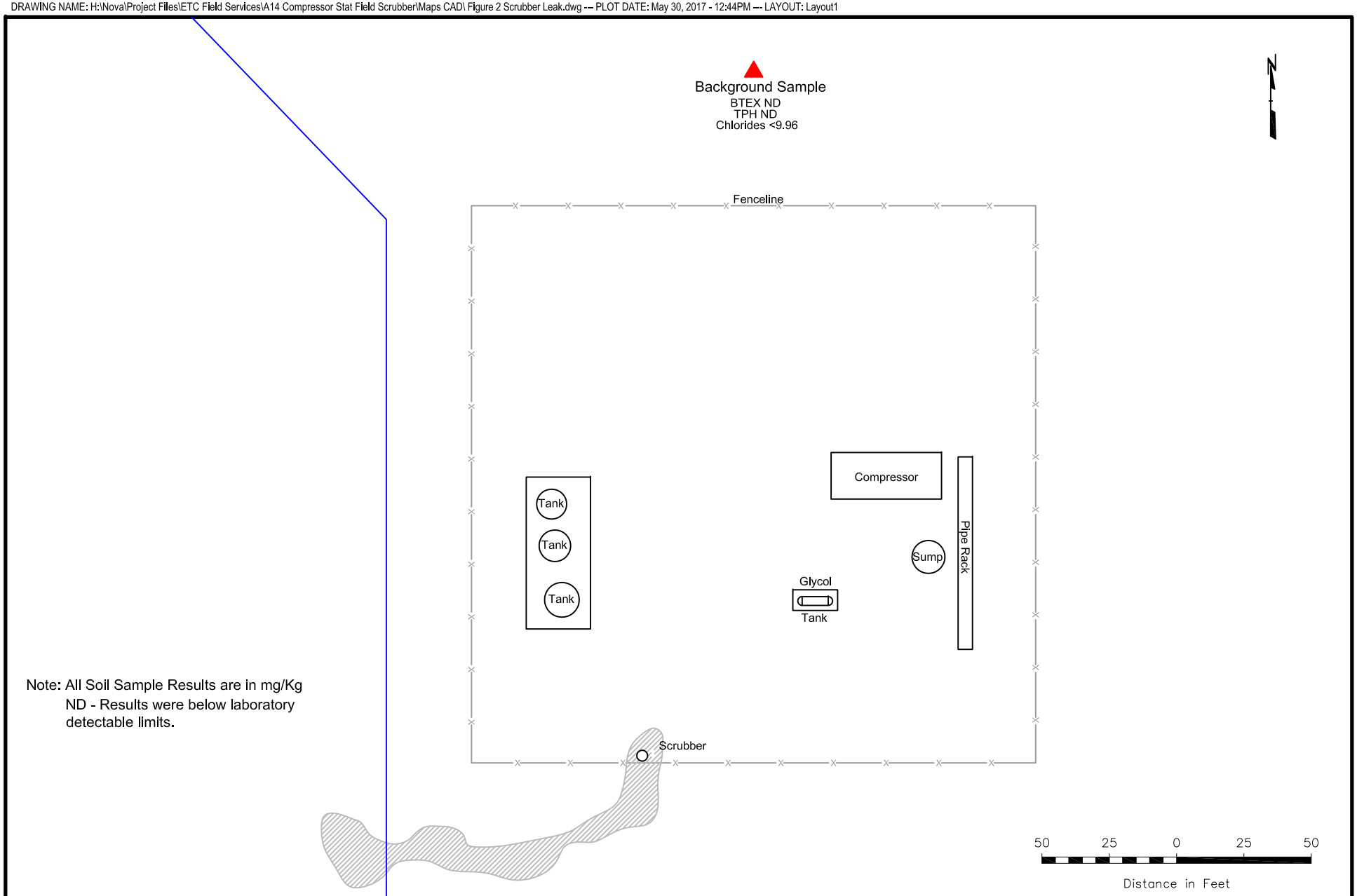
2057 Commerce Drive
Midland, Texas 79703
432.520.7720

DRAWING NAME: H:\Nova\Project Files\ETC Field Services\A14 Compressor Stat Field Scrubber\Maps CAD\ Figure 2 Scrubber Leak.dwg --- PLOT DATE: May 30, 2017 - 12:44PM --- LAYOUT: Layout1



Note: All Soil Sample Results are in mg/Kg
ND - Results were below laboratory detectable limits.

LEGEND:

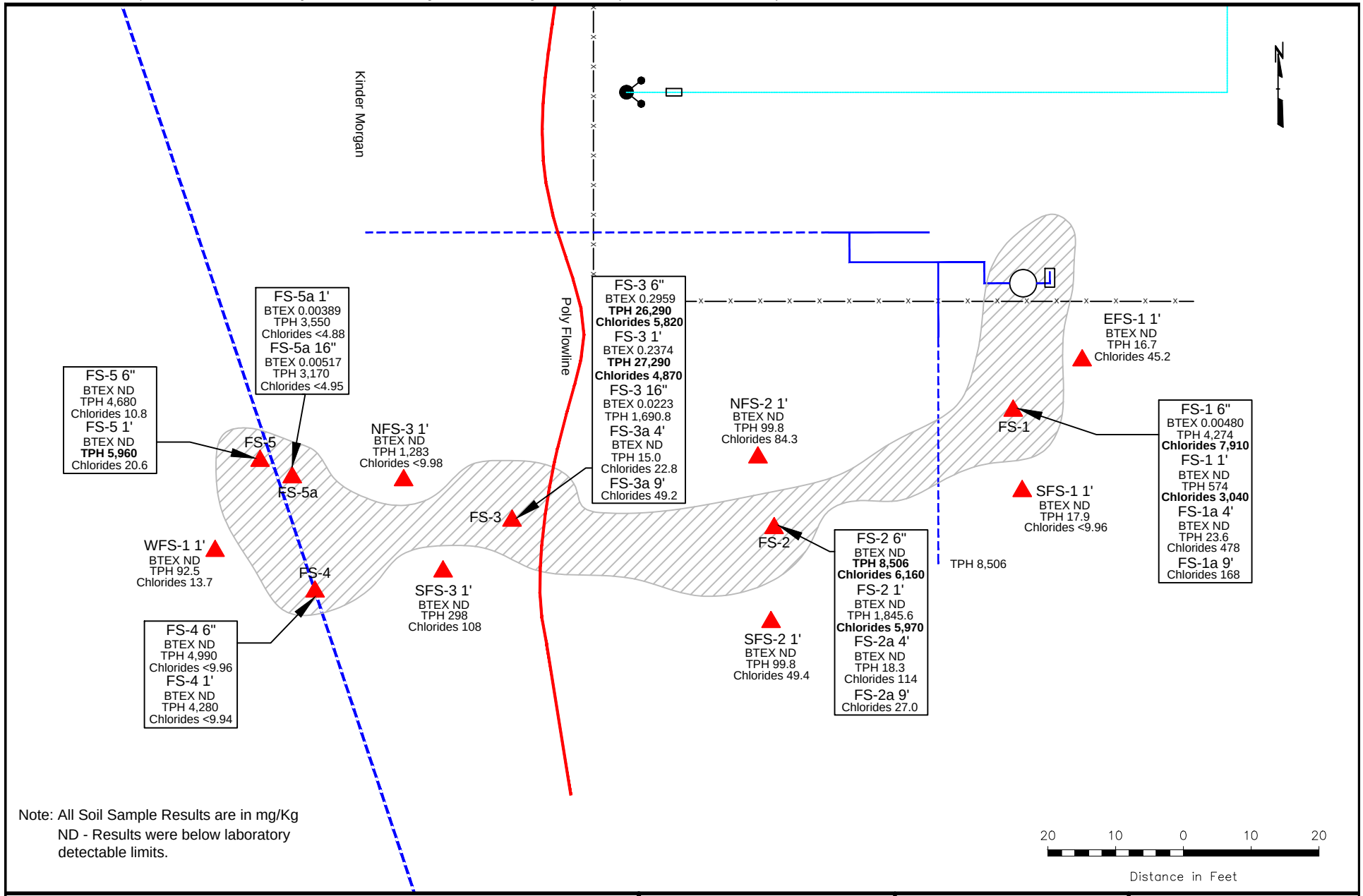
- Fence Line
- Soil Sample Location
- Pipleline

Figure 2
Site Detail and Soil Sample Location Map
ETC Field Services, LLC
A-14 Compressor Station
Field Scrubber Release
Lea County, NM

Scale: 1" = 50'	
CAD By: TA	Checked By: NG
Draft: March 4, 2017	
Lat. N 32° 14' 46.26" , Long. W 103° 24' 7.2"	
SE1/4 NE1/4 Sec 6 T24S R35E	
TRC Proj. No.: 273817	

TRC
2057 Commerce Drive
Midland, Texas 79703
432.520.7720

DRAWING NAME: H:\Nova\Project Files\ETC Field Services\A14 Compressor Stat Field Scrubber\ Figure 3 Plan Scrubber.dwg --- PLOT DATE: May 26, 2017 - 10:30AM --- LAYOUT: Layout1



Note: All Soil Sample Results are in mg/Kg
ND - Results were below laboratory detectable limits.

LEGEND:
- Pipleline
- Electric
- Light Pole
- Fence
- Flowline
- Soil Sample Location

Figure 3
Site Detail and
Soil Sample Locations
ETC Field Services, LLC
A-14 Compressor Station
Field Scrubber Release
Lea County, NM

Scale: 1" = 20'	
CAD By: TA	Checked By: NG
Draft: April 4, 2017	
Lat. N 32° 14' 46.26" , Long. W 103° 24' 7.2"	
SE1/4 NE1/4 Sec 6 T24S R35E	
TRC Proj. No.: 273817	

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TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

ETC FIELD SERVICES, LLC
A14 COMPRESSOR STATION FIELD SCRUBBER
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/Kg

SAMPLE LOCATION	SAMPLE DATE	SOIL STATUS	METHODS: SW 846-8021b						METHOD: SW 8015M				E 300.1
			BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE	TOTAL BTEX	TPH GRO C_6-C_{12}	TPH DRO C_{12}-C_{28}	TPH ORO C_{28}-C_{35}	TOTAL TPH C_6-C_{35}	CHLORIDE
NMOCD Site Classification Criteria			**10**					**50**				**5,000**	**600**
FS-1 6"	03/23/17	Trench	<0.00149	<0.00198	<0.00198	0.00480	<0.00297	0.00480	770	3,260	244	4,274	**7,910**
FS-1 1'	03/23/17	Trench	<0.00151	<0.00201	<0.00201	<0.00201	<0.00301	<0.00301	20.8	508	45.2	574.0	**3,040**
FS-2 6"	03/23/17	Trench	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	730	7,120	656	**8,506**	**6,160**
FS-2 1'	03/23/17	Trench	<0.00147	<0.00196	<0.00196	<0.00196	<0.00295	<0.00295	96.6	1,570	179	1,845.6	**5,970**
FS-3 6"	03/23/17	Trench	<0.00147	<0.00196	0.0209	0.146	0.129	0.2959	2,370	21,300	2,620	**26,290**	**5,820**
FS-3 1'	03/23/17	Trench	<0.00150	<0.00200	0.0144	0.119	0.104	0.2374	1,880	22,700	2,710	**27,290**	**4,870**
FS-4 6"	03/23/17	Trench	<0.00270	<0.00360	<0.00360	<0.00360	<0.00540	<0.00540	<15.0	1,730	3,260	4,990	<9.96
FS-4 1'	03/23/17	Trench	<0.00275	<0.00366	<0.00366	<0.00366	<0.00549	<0.00549	<15.0	1,640	3,180	4,820	<9.94
FS-5 6"	03/23/17	Trench	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	1,590	3,090	4,680	10.8
FS-5 1'	03/23/17	Trench	<0.00148	<0.00197	<0.00197	<0.00197	<0.00296	<0.00296	<15.0	2,060	3,900	**5,960**	20.6
WFS-1 1'	03/23/17	Trench	<0.00267	<0.00356	<0.00356	<0.00356	<0.00534	<0.00534	<14.9	51.4	41.1	92.5	13.7
EFS-1 1'	03/23/17	Trench	<0.00254	<0.00339	<0.00339	<0.00339	<0.00508	<0.00508	<15.0	16.7	<15.0	16.7	45.2
SFS-1 1'	03/23/17	Trench	<0.00262	<0.00350	<0.00350	<0.00350	<0.00524	<0.00524	<15.0	17.9	<15.0	17.9	<9.96
NFS-2 1'	03/23/17	Trench	<0.00148	<0.00198	<0.00198	<0.00198	<0.00296	<0.00296	<15.0	448	131	579	84.3
SFS-2 1'	03/23/17	Trench	<0.00149	<0.00199	<0.00199	<0.00199	<0.00299	<0.00299	<15.0	99.8	<15.0	99.8	49.4
SFS-3 1'	03/23/17	Trench	<0.00151	<0.00201	<0.00201	<0.00201	<0.00301	<0.00301	<15.0	180	118	298	108
NFS-3 1'	03/23/17	Trench	<0.00152	<0.00202	<0.00202	<0.00202	<0.00303	<0.00303	<15.0	513	770	1,283	<9.98
FS-3 16"	04/17/17	Trench	<0.00149	0.00479	0.00728	0.00625	0.00401	0.02233	117	1,480	93.8	1,690.8	-
FS-5a 1'	04/17/17	Trench	<0.00151	<0.00201	<0.00201	0.00389	<0.00301	0.00389	<15.0	1,240	2,310	3,550	<4.88
FS-5a 16"	04/17/17	Trench	<0.00152	<0.00152	<0.00202	<0.00202	0.00517	0.00517	<15.0	1,110	2,060	3,170	<4.95
FS-1a 4'	05/10/17	Trench	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<15.0	23.6	<15.0	23.6	478
FS-1a 9'	05/10/17	Trench	-	-	-	-	-	-	-	-	-	-	162
FS-2a 4'	05/10/17	Trench	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<15.0	18.3	<15.0	18.3	114
FS-2a 9'	05/10/17	Trench	-	-	-	-	-	-	-	-	-	-	27.0
FS-3a 4'	05/10/17	Trench	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	<0.00399	<14.9	15.0	<14.9	15.0	22.8
FS-3a 9'	05/10/17	Trench	-	-	-	-	-	-	-	-	-	-	49.2

Photographic Documentation

Client: ETC Field Services, LLC **Prepared by:** TRC Environmental Corp.
Project Name: A-14 Compressor Station Field Scrubber **Location:** Lea County, NM

Photograph No. 1 **Date:** **February 23, 2017** **Description:** **Looking west-north west at field scrubber.**	
Photograph No. 2 **Date:** **February 23, 2017** **Description:** **Looking northeast at Field Scrubber. Release in foreground.**	

Photographic Documentation

Client: ETC Field Services, LLC **Prepared by:** TRC Environmental Corp.
Project Name: A-14 Compressor Station Field Scrubber **Location:** Lea County, NM

Photograph No. 3 **Date:** **March 23, 2017** **Description:** **Looking east following hand auger delineation activities.**	
Photograph No. 4 **Date:** **May 9, 2017** **Description:** **Looking west during backhoe trench activities at sample point FS-1a.**	

Analytical Report 549417

for

TRC Solutions, Inc

Project Manager: Nikki Green

A14 Compressor Station Field Scrubber

TRC #273817

04-APR-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

04-APR-17

Project Manager: **Nikki Green**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **549417**
A14 Compressor Station Field Scrubber
Project Address: Lea County, NM

Nikki Green:

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) 549417. 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. 549417 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 549417

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Field Scrubber

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS-1 6"	S	03-23-17 13:25	- 6 In	549417-001
FS-1 1'	S	03-23-17 13:31	- 1 ft	549417-002
FS-2 6"	S	03-23-17 13:35	- 6 In	549417-003
FS-2 1'	S	03-23-17 13:42	- 1 ft	549417-004
FS-3 6"	S	03-23-17 13:47	- 6 In	549417-005
FS-3 1'	S	03-23-17 13:54	- 1 ft	549417-006
FS-4 6"	S	03-23-17 14:07	- 6 In	549417-007
FS-4 1'	S	03-23-17 14:20	- 1 ft	549417-008
FS-5 6"	S	03-23-17 14:28	- 6 In	549417-009
FS-5 1'	S	03-23-17 14:38	- 1 ft	549417-010
WFS-1 1'	S	03-23-17 14:48	- 1 ft	549417-011
EFS-1 1'	S	03-23-17 14:58	- 1 ft	549417-012
SFS-1 1'	S	03-23-17 15:09	- 1 ft	549417-013
NFS-2 1'	S	03-23-17 15:23	- 1 ft	549417-014
SFS-2 1'	S	03-23-17 15:37	- 1 ft	549417-015
SFS-3 1'	S	03-23-17 15:30	- 1 ft	549417-016
NFS-3 1'	S	03-23-17 16:10	- 1 ft	549417-017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3013589 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3013602 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 549417

TRC Solutions, Inc, Midland, TX

Project Name: A14 Compressor Station Field Scrubber

Project Id: TRC #273817
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-24-17 02:55 pm
Report Date: 04-APR-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	549417-001		549417-002		549417-003		549417-004		549417-005		549417-006	
	Field Id:	FS-1 6"		FS-1 1'		FS-2 6"		FS-2 1'		FS-3 6"		FS-3 1'	
	Depth:	6 In		1 ft		6 In		1 ft		6 In		1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-23-17 13:25		Mar-23-17 13:31		Mar-23-17 13:35		Mar-23-17 13:42		Mar-23-17 13:47		Mar-23-17 13:54	
BTEX by EPA 8021B	***Extracted:***	Mar-28-17 15:30		Mar-28-17 15:30		Mar-28-17 15:30		Mar-28-17 15:30		Mar-28-17 15:30		Mar-28-17 15:30	
	Analyzed:	Mar-28-17 18:38		Mar-28-17 18:54		Mar-28-17 19:10		Mar-28-17 19:26		Mar-28-17 19:42		Mar-28-17 19:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00149	ND	0.00151	ND	0.00149	ND	0.00147	ND	0.00147	ND	0.00150
Toluene		ND	0.00198	ND	0.00201	ND	0.00199	ND	0.00196	ND	0.00196	ND	0.00200
Ethylbenzene		ND	0.00198	ND	0.00201	ND	0.00199	ND	0.00196	0.0209	0.00196	0.0144	0.00200
m_p-Xylenes		0.00480	0.00198	ND	0.00201	ND	0.00199	ND	0.00196	0.146	0.00196	0.119	0.00200
o-Xylene		ND	0.00297	ND	0.00301	ND	0.00298	ND	0.00295	0.129	0.00294	0.104	0.00299
Total Xylenes		0.00480	0.00198	ND	0.00201	ND	0.00199	ND	0.00196	0.275	0.00196	0.223	0.00200
Total BTEX		0.00480	0.00149	ND	0.00151	ND	0.00149	ND	0.00147	0.296	0.00147	0.237	0.00150
Chloride by EPA 300 **SUB: TX104704215**	***Extracted:***	Apr-01-17 13:54		Apr-01-17 13:54		Apr-01-17 13:54		Apr-01-17 13:54		Apr-01-17 13:54		Apr-01-17 13:54	
	Analyzed:	Apr-02-17 05:39		Apr-02-17 05:48		Apr-02-17 05:57		Apr-02-17 06:07		Apr-02-17 06:16		Apr-02-17 06:25	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		7910 D	99.8	3040 D	96.3	6160 D	98.8	5970 D	99.6	5820 D	99.6	4870 D	99.8
TPH By SW8015 Mod	***Extracted:***	Mar-24-17 17:00		Mar-24-17 17:00		Mar-24-17 17:00		Mar-24-17 17:00		Mar-24-17 17:00		Mar-24-17 17:00	
	Analyzed:	Mar-25-17 17:39		Mar-25-17 18:00		Mar-25-17 18:20		Mar-27-17 06:24		Mar-25-17 19:01		Mar-25-17 19:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		770	74.8	20.8	15.0	730	74.9	96.6	15.0	2370	74.9	1880	74.9
C10-C28 Diesel Range Organics		3260	74.8	508	15.0	7120	74.9	1570	15.0	21300	74.9	22700	74.9
C28-C35 Oil Range Hydrocarbons		244	74.8	45.2	15.0	656	74.9	179	15.0	2620	74.9	2710	74.9
Total TPH		4270	74.8	574	15.0	8510	74.9	1850	15.0	26300	74.9	27300	74.9

Certificate of Analysis Summary 549417

TRC Solutions, Inc, Midland, TX

Project Name: A14 Compressor Station Field Scrubber

Project Id: TRC #273817
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-24-17 02:55 pm
Report Date: 04-APR-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	549417-007		549417-008		549417-009		549417-010		549417-011		549417-012	
	Field Id:	FS-4 6"		FS-4 1'		FS-5 6"		FS-5 1'		WFS-1 1'		EFS-1 1'	
	Depth:	6 In		1 ft		6 In		1 ft		1 ft		1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-23-17 14:07		Mar-23-17 14:20		Mar-23-17 14:28		Mar-23-17 14:38		Mar-23-17 14:48		Mar-23-17 14:58	
BTEX by EPA 8021B	***Extracted:***	Mar-28-17 16:50		Mar-28-17 16:50		Mar-28-17 15:30		Mar-28-17 15:30		Mar-28-17 16:50		Mar-28-17 16:50	
	Analyzed:	Mar-29-17 12:30		Mar-29-17 11:08		Mar-28-17 21:20		Mar-28-17 21:37		Mar-29-17 11:24		Mar-29-17 11:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00270	ND	0.00275	ND	0.00149	ND	0.00148	ND	0.00267	ND	0.00254
Toluene		ND	0.00360	ND	0.00366	ND	0.00199	ND	0.00197	ND	0.00356	ND	0.00339
Ethylbenzene		ND	0.00360	ND	0.00366	ND	0.00199	ND	0.00197	ND	0.00356	ND	0.00339
m_p-Xylenes		ND	0.00360	ND	0.00366	ND	0.00199	ND	0.00197	ND	0.00356	ND	0.00339
o-Xylene		ND	0.00540	ND	0.00549	ND	0.00298	ND	0.00296	ND	0.00534	ND	0.00508
Total Xylenes		ND	0.00360	ND	0.00366	ND	0.00199	ND	0.00197	ND	0.00356	ND	0.00339
Total BTEX		ND	0.00270	ND	0.00275	ND	0.00149	ND	0.00148	ND	0.00267	ND	0.00254
Chloride by EPA 300 SUB: TX104704215	***Extracted:***	Apr-01-17 15:46		Apr-01-17 15:46		Apr-01-17 15:46		Apr-01-17 15:46		Apr-01-17 15:46		Apr-01-17 15:46	
	Analyzed:	Apr-02-17 16:20		Apr-02-17 16:48		Apr-02-17 16:57		Apr-02-17 17:07		Apr-02-17 17:16		Apr-02-17 17:44	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		ND	9.96	ND	9.94	10.8	9.92	20.6	9.88	13.7	9.98	45.2	9.77
TPH By SW8015 Mod	***Extracted:***	Mar-24-17 17:00		Mar-24-17 17:00		Mar-24-17 17:00		Mar-24-17 17:00		Mar-24-17 17:00		Mar-24-17 17:00	
	Analyzed:	Mar-25-17 19:44		Mar-25-17 20:03		Mar-25-17 20:25		Mar-25-17 20:46		Mar-25-17 21:48		Mar-25-17 22:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	14.9	ND	15.0
C10-C28 Diesel Range Organics		1730	15.0	1640	15.0	1590	15.0	2060	15.0	51.4	14.9	16.7	15.0
C28-C35 Oil Range Hydrocarbons		3260	15.0	3180	15.0	3090	15.0	3900	15.0	41.1	14.9	ND	15.0
Total TPH		4990	15.0	4820	15.0	4680	15.0	5960	15.0	92.5	14.9	16.7	15.0

Certificate of Analysis Summary 549417

TRC Solutions, Inc, Midland, TX

Project Name: A14 Compressor Station Field Scrubber

Project Id: TRC #273817
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-24-17 02:55 pm
Report Date: 04-APR-17
Project Manager: Kelsey Brooks

Analysis Requested											
	Lab Id:	549417-013		549417-014		549417-015		549417-016		549417-017	
	Field Id:	SFS-1 1'		NFS-2 1'		SFS-2 1'		SFS-3 1'		NFS-3 1'	
	Depth:	1 ft		1 ft		1 ft		1 ft		1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-23-17 15:09		Mar-23-17 15:23		Mar-23-17 15:37		Mar-23-17 15:30		Mar-23-17 16:10	
BTEX by EPA 8021B	*Extracted:*	Mar-28-17 16:50		Mar-28-17 15:30		Mar-28-17 15:30		Mar-28-17 15:30		Mar-28-17 15:30	
	Analyzed:	Mar-29-17 11:57		Mar-28-17 22:42		Mar-28-17 22:59		Mar-28-17 23:15		Mar-28-17 23:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00262	ND	0.00148	ND	0.00149	ND	0.00151	ND	0.00152
Toluene		ND	0.00350	ND	0.00198	ND	0.00199	ND	0.00201	ND	0.00202
Ethylbenzene		ND	0.00350	ND	0.00198	ND	0.00199	ND	0.00201	ND	0.00202
m_p-Xylenes		ND	0.00350	ND	0.00198	ND	0.00199	ND	0.00201	ND	0.00202
o-Xylene		ND	0.00524	ND	0.00296	ND	0.00299	ND	0.00301	ND	0.00303
Total Xylenes		ND	0.00350	ND	0.00198	ND	0.00199	ND	0.00201	ND	0.00202
Total BTEX		ND	0.00262	ND	0.00148	ND	0.00149	ND	0.00151	ND	0.00152
Chloride by EPA 300 SUB: TX104704215	*Extracted:*	Apr-01-17 15:46		Apr-01-17 15:46		Apr-01-17 15:46		Apr-01-17 15:46		Apr-01-17 15:46	
	Analyzed:	Apr-02-17 17:53		Apr-02-17 18:03		Apr-02-17 18:12		Apr-02-17 18:21		Apr-02-17 18:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		ND	9.96	84.3	9.88	49.4	9.92	108	10.0	ND	9.98
TPH By SW8015 Mod	*Extracted:*	Mar-24-17 17:00		Mar-24-17 17:00		Mar-24-17 17:00		Mar-24-17 17:00		Mar-24-17 17:00	
	Analyzed:	Mar-25-17 22:32		Mar-25-17 23:34		Mar-25-17 23:55		Mar-26-17 00:15		Mar-26-17 00:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0
C10-C28 Diesel Range Organics		17.9	15.0	448	15.0	99.8	15.0	180	15.0	513	15.0
C28-C35 Oil Range Hydrocarbons		ND	15.0	131	15.0	ND	15.0	118	15.0	770	15.0
Total TPH		17.9	15.0	579	15.0	99.8	15.0	298	15.0	1280	15.0

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Orders : 549417,

Project ID: TRC #273817

Lab Batch #: 3013500 **Sample:** 549417-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 17:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.2	99.7	93	70-135	
o-Terphenyl	43.8	49.9	88	70-135	

Lab Batch #: 3013500 **Sample:** 549417-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 18:00

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.7	99.7	89	70-135	
o-Terphenyl	44.7	49.9	90	70-135	

Lab Batch #: 3013500 **Sample:** 549417-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 18:20

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.1	99.9	88	70-135	
o-Terphenyl	38.6	50.0	77	70-135	

Lab Batch #: 3013500 **Sample:** 549417-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 19:01

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.9	106	70-135	
o-Terphenyl	48.9	50.0	98	70-135	

Lab Batch #: 3013500 **Sample:** 549417-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 19:23

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.9	99.9	95	70-135	
o-Terphenyl	64.7	50.0	129	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: A14 Compressor Station Field Scrubber

Work Orders : 549417,

Project ID: TRC #273817

Lab Batch #: 3013500 **Sample:** 549417-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 19:44

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.3	100	97	70-135	
o-Terphenyl	48.6	50.0	97	70-135	

Lab Batch #: 3013500 **Sample:** 549417-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 20:03

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.8	104	70-135	
o-Terphenyl	52.8	49.9	106	70-135	

Lab Batch #: 3013500 **Sample:** 549417-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 20:25

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.7	100	100	70-135	
o-Terphenyl	50.1	50.0	100	70-135	

Lab Batch #: 3013500 **Sample:** 549417-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 20:46

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.6	99.7	99	70-135	
o-Terphenyl	51.1	49.9	102	70-135	

Lab Batch #: 3013500 **Sample:** 549417-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 21:48

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.2	99.6	88	70-135	
o-Terphenyl	44.5	49.8	89	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: A14 Compressor Station Field Scrubber

Work Orders : 549417,

Project ID: TRC #273817

Lab Batch #: 3013500 **Sample:** 549417-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 22:11

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.9	99.7	83	70-135	
o-Terphenyl	41.8	49.9	84	70-135	

Lab Batch #: 3013500 **Sample:** 549417-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 22:32

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.3	99.9	87	70-135	
o-Terphenyl	44.4	50.0	89	70-135	

Lab Batch #: 3013500 **Sample:** 549417-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 23:34

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.6	99.8	96	70-135	
o-Terphenyl	48.2	49.9	97	70-135	

Lab Batch #: 3013500 **Sample:** 549417-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 23:55

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.8	102	70-135	
o-Terphenyl	51.8	49.9	104	70-135	

Lab Batch #: 3013500 **Sample:** 549417-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/26/17 00:15

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.5	99.8	91	70-135	
o-Terphenyl	45.9	49.9	92	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: A14 Compressor Station Field Scrubber

Work Orders : 549417,

Project ID: TRC #273817

Lab Batch #: 3013500 **Sample:** 549417-017 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/26/17 00:36

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.3	99.9	97	70-135	
o-Terphenyl	50.2	50.0	100	70-135	

Lab Batch #: 3013500 **Sample:** 549417-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/27/17 06:24

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.1	99.8	94	70-135	
o-Terphenyl	39.0	49.9	78	70-135	

Lab Batch #: 3013589 **Sample:** 549417-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 18:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0245	0.0300	82	80-120	

Lab Batch #: 3013589 **Sample:** 549417-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 18:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 3013589 **Sample:** 549417-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 19:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0244	0.0300	81	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: A14 Compressor Station Field Scrubber

Work Orders : 549417,

Project ID: TRC #273817

Lab Batch #: 3013589 **Sample:** 549417-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 19:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 3013589 **Sample:** 549417-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 19:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0257	0.0300	86	80-120	

Lab Batch #: 3013589 **Sample:** 549417-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 19:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0240	0.0300	80	80-120	

Lab Batch #: 3013589 **Sample:** 549417-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 21:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0336	0.0300	112	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

Lab Batch #: 3013589 **Sample:** 549417-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 21:37

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0337	0.0300	112	80-120	
4-Bromofluorobenzene	0.0316	0.0300	105	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Orders : 549417,

Project ID: TRC #273817

Lab Batch #: 3013589 **Sample:** 549417-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 22:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0334	0.0300	111	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 3013589 **Sample:** 549417-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 22:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 3013589 **Sample:** 549417-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 23:15

SURROGATE RECOVERY STUDY

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

Lab Batch #: 3013589 **Sample:** 549417-017 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 23:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0360	0.0300	120	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 3013602 **Sample:** 549417-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/17 11:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Orders : 549417,

Project ID: TRC #273817

Lab Batch #: 3013602 **Sample:** 549417-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/17 11:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0340	0.0300	113	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 3013602 **Sample:** 549417-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/17 11:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 3013602 **Sample:** 549417-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/17 11:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0351	0.0300	117	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 3013602 **Sample:** 549417-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/17 12:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 3013500 **Sample:** 722213-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/25/17 16:38

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	51.7	50.0	103	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: A14 Compressor Station Field Scrubber

Work Orders : 549417,

Project ID: TRC #273817

Lab Batch #: 3013589 **Sample:** 722268-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/28/17 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	0.0341	0.0300	114	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 3013602 **Sample:** 722269-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/29/17 01:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 3013500 **Sample:** 722213-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/25/17 16:58

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.5	100	98	70-135	
o-Terphenyl	46.4	50.0	93	70-135	

Lab Batch #: 3013589 **Sample:** 722268-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/28/17 16:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0336	0.0300	112	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 3013602 **Sample:** 722269-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/29/17 00:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0341	0.0300	114	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	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: A14 Compressor Station Field Scrubber

Work Orders : 549417,

Project ID: TRC #273817

Lab Batch #: 3013500 **Sample:** 722213-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/25/17 17:19

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.8	100	98	70-135	
o-Terphenyl	47.0	50.0	94	70-135	

Lab Batch #: 3013589 **Sample:** 722268-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/28/17 16:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 3013602 **Sample:** 722269-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/29/17 00:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0347	0.0300	116	80-120	
4-Bromofluorobenzene	0.0265	0.0300	88	80-120	

Lab Batch #: 3013500 **Sample:** 549417-013 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 22:53

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.0	99.7	96	70-135	
o-Terphenyl	46.8	49.9	94	70-135	

Lab Batch #: 3013589 **Sample:** 549416-026 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 17:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	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: A14 Compressor Station Field Scrubber

Work Orders : 549417,

Project ID: TRC #273817

Lab Batch #: 3013602 **Sample:** 549418-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/17 00:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0356	0.0300	119	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

Lab Batch #: 3013500 **Sample:** 549417-013 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/25/17 23:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.3	99.7	88	70-135	
o-Terphenyl	41.6	49.9	83	70-135	

Lab Batch #: 3013589 **Sample:** 549416-026 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/28/17 17:16

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 3013602 **Sample:** 549418-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/17 01:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

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

BS / BSD Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Order #: 549417 **Project ID:** TRC #273817

Analyst: ALJ **Date Prepared:** 03/28/2017 **Date Analyzed:** 03/28/2017

Lab Batch ID: 3013589 **Sample:** 722268-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00150	0.100	0.107	107	0.0998	0.0921	92	15	70-130	35	
Toluene	<0.00200	0.100	0.112	112	0.0998	0.0993	99	12	70-130	35	
Ethylbenzene	<0.00200	0.100	0.118	118	0.0998	0.104	104	13	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.228	114	0.200	0.200	100	13	70-135	35	
o-Xylene	<0.00301	0.100	0.119	119	0.0998	0.103	103	14	71-133	35	

Analyst: ALJ **Date Prepared:** 03/28/2017 **Date Analyzed:** 03/29/2017

Lab Batch ID: 3013602 **Sample:** 722269-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00149	0.0990	0.0886	89	0.100	0.0825	83	7	70-130	35	
Toluene	<0.00198	0.0990	0.0935	94	0.100	0.0856	86	9	70-130	35	
Ethylbenzene	<0.00198	0.0990	0.0942	95	0.100	0.0873	87	8	71-129	35	
m_p-Xylenes	<0.00198	0.198	0.183	92	0.201	0.171	85	7	70-135	35	
o-Xylene	<0.00297	0.0990	0.0965	97	0.100	0.0905	91	6	71-133	35	

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

Version: 1.%

BS / BSD Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Order #: 549417 **Project ID:** TRC #273817

Analyst: ALA **Date Prepared:** 04/01/2017 **Date Analyzed:** 04/02/2017

Lab Batch ID: 3013926 **Sample:** 722476-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<1.00	10.0	10.1	101	10.0	10.1	101	0	80-120	20	

Analyst: ALA **Date Prepared:** 04/01/2017 **Date Analyzed:** 04/02/2017

Lab Batch ID: 3013961 **Sample:** 722491-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<1.00	10.0	9.75	98	10.0	9.99	100	2	80-120	20	

Analyst: ARM **Date Prepared:** 03/24/2017 **Date Analyzed:** 03/25/2017

Lab Batch ID: 3013500 **Sample:** 722213-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	918	92	1000	928	93	1	70-135	35	
C10-C28 Diesel Range Organics	<15.0	1000	931	93	1000	939	94	1	70-135	35	

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

Version: 1.%

Form 3 - MS / MSD Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Order # : 549417 **Project ID:** TRC #273817

Lab Batch ID: 3013589 **QC- Sample ID:** 549416-026 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/28/2017 **Date Prepared:** 03/28/2017 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00150	0.0998	0.0874	88	0.0994	0.0811	82	7	70-130	35	
Toluene	<0.00200	0.0998	0.0879	88	0.0994	0.0795	80	10	70-130	35	
Ethylbenzene	<0.00200	0.0998	0.0853	85	0.0994	0.0723	73	16	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.164	82	0.199	0.137	69	18	70-135	35	X
o-Xylene	<0.00299	0.0998	0.0903	90	0.0994	0.0744	75	19	71-133	35	

Lab Batch ID: 3013602 **QC- Sample ID:** 549418-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/29/2017 **Date Prepared:** 03/28/2017 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00151	0.100	0.0716	72	0.101	0.0798	79	11	70-130	35	
Toluene	<0.00201	0.100	0.0726	73	0.101	0.0815	81	12	70-130	35	
Ethylbenzene	<0.00201	0.100	0.0728	73	0.101	0.0819	81	12	71-129	35	
m_p-Xylenes	<0.00201	0.201	0.143	71	0.202	0.155	77	8	70-135	35	
o-Xylene	<0.00301	0.100	0.0713	71	0.101	0.0841	83	16	71-133	35	

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

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

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

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

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

Form 3 - MS / MSD Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Order # : 549417 **Project ID:** TRC #273817

Lab Batch ID: 3013926 **QC- Sample ID:** 549416-014 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/02/2017 **Date Prepared:** 04/01/2017 **Analyst:** ALA

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	62.5	99.8	164	102	99.8	164	102	0	80-120	20	

Lab Batch ID: 3013926 **QC- Sample ID:** 549416-024 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/02/2017 **Date Prepared:** 04/01/2017 **Analyst:** ALA

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	34.8	98.8	136	102	98.8	136	102	0	80-120	20	

Lab Batch ID: 3013961 **QC- Sample ID:** 549417-007 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/02/2017 **Date Prepared:** 04/01/2017 **Analyst:** ALA

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<9.96	99.6	103	103	99.6	103	103	0	80-120	20	

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

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

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

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

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

Form 3 - MS / MSD Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Order # : 549417 **Project ID:** TRC #273817

Lab Batch ID: 3013961 **QC- Sample ID:** 549417-017 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/02/2017 **Date Prepared:** 04/01/2017 **Analyst:** ALA

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<9.98	99.8	106	106	99.8	106	106	0	80-120	20	

Lab Batch ID: 3013500 **QC- Sample ID:** 549417-013 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/25/2017 **Date Prepared:** 03/24/2017 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	997	961	96	997	864	87	11	70-135	35	
C10-C28 Diesel Range Organics	17.9	997	958	94	997	862	85	11	70-135	35	

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

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

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

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

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST 1 of 2

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Nikki Green

Project Name: A14 Compressor Station Field Scrubber

Company Name: TRC Environmental Corporation

Project #: TRC #: 273817

Company Address: 2057 Commerce Drive

Project Loc: Lea County, NM

City/State/Zip: Midland, Texas 79703

PO #:

Telephone No: 432.520.7720

Fax No:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: Nikki Green

e-mail: rose.slade@energytransfer.com
ngreen@trcsolutions.com

(lab use only)
ORDER #: 549417

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M	TOTAL: TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021b/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	FS-1 6"			3/23	1325		1	x								Soil	x								x			x				x
	FS-1 1'				1331		1	x								Soil	x								x			x				x
	FS-2 6"				1335		1	x								Soil	x								x			x				x
	FS-2 1'				1342		1	x								Soil	x								x			x				x
	FS-3 6"				1347		1	x								Soil	x								x			x				x
	FS-3 1'				1354		1	x								Soil	x								x			x				x
	FS-4 6"				~~1350~~ 1407		1	x								Soil	x								x			x				x
	FS-4 1'				1420		1	x								Soil	x								x			x				x
	FS-5 6"				1428		1	x								Soil	x								x			x				x
	FS-5 1'				1438		1	x								Soil	x								x			x				x
	WFS-1 1'				1448		1	x								Soil	x								x			x				x

Special Instructions:

Bill to Rose Slade at Energy Transfer.

Relinquished by:	Date	Time	Received by:	Date	Time
Nikki Green	3/24	1455	J CRAMER	3/24	1455
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N
by Courier?		

Temp: IR ID:R-8
Temperature Up CF: +0.1 2.1
Corrected Temp: 2.2

Final 1.000

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST 2 of 2

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Nikki Green

Project Name: A14 Compressor Station Field Scrubber

Company Name: TRC Environmental Corporation

Project #: TRC #: 273817

Company Address: 2057 Commerce Drive

Project Loc: Lea County, NM

City/State/Zip: Midland, Texas 79703

PO #:

Telephone No: 432.520.7720

Fax No:

Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: Nikki Green

e-mail: rose.slade@energytransfer.com
ngreen@trcsolutions.com

Extended TAT

(lab use only)
ORDER #: 549417

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW=Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	EFS-1 1'			3/23	1458		1	x								Soil	x								x			x		x
	SFS-1 1'				1509		1	x								Soil	x								x			x		x
	NFS-2 1'				1523		1	x								Soil	x								x			x		x
	SFS-2 1'				1537		1	x								Soil	x								x			x		x
	SFS-3 1'				1530		1	x								Soil	x								x			x		x
	NFS-3 1'				1610		1	x								Soil	x								x			x		x
							1	x								Soil	x								x			x		x
							1	x								Soil	x								x			x		x
							1	x								Soil	x								x			x		x
							1	x								Soil	x								x			x		x
							1	x								Soil	x								x			x		x

Special Instructions:

Bill to Rose Slade at Energy Transfer.

Relinquished by:	Date	Time	Received by:	Date	Time
Nikki Green	3/24/17	1455	KRAMER	3/24	1455
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N
by Courier?	Y	N

Temperature U — Temp: 2.1 CF: +0.1 Corrected Temp: 2.2 IR ID:R-8

Final 1.000

Page 25 of 26

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 03/24/2017 02:55:00 PM

Work Order #: 549417

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seal present on shipping container/ cooler?	**N/A**
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**
#6 Custody Seals intact on sample bottles?	**N/A**
#7 *Custody Seals Signed and dated?	**N/A**
#8 *Chain of Custody present?	**Yes**
#9 Sample instructions complete on Chain of Custody?	**Yes**
#10 Any missing/extra samples?	**No**
#11 Chain of Custody signed when relinquished/ received?	**Yes**
#12 Chain of Custody agrees with sample label(s)?	**Yes**
#13 Container label(s) legible and intact?	**Yes**
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#15 Samples in proper container/ bottle?	**Yes**
#16 Samples properly preserved?	**Yes**
#17 Sample container(s) intact?	**Yes**
#18 Sufficient sample amount for indicated test(s)?	**Yes**
#19 All samples received within hold time?	**Yes**
#20 Subcontract of sample(s)?	**N/A**
#21 VOC samples have zero headspace?	**N/A**
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**N/A**
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

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

Analyst:

PH Device/Lot#:

Checklist completed by: Jessica Kramer
Jessica Kramer
Date: 03/24/2017

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 03/27/2017

Analytical Report 551537

for

TRC Solutions, Inc

Project Manager: Nikki Green

A14 Compressor Station Field Scrubber

TRC#273817

26-APR-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

26-APR-17

Project Manager: **Nikki Green**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **551537**
A14 Compressor Station Field Scrubber
Project Address: Lea County, NM

Nikki Green:

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) 551537. 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. 551537 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 551537

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Field Scrubber

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS-3 16"	S	04-17-17 13:40	- 16 In	551537-001
FS-5a 1'	S	04-17-17 14:30	- 1 ft	551537-002
FS-5a 16"	S	04-17-17 15:20	- 16 In	551537-003

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3015680 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 551537

TRC Solutions, Inc, Midland, TX

Project Name: A14 Compressor Station Field Scrubber

Project Id: TRC#273817
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Fri Apr-21-17 11:39 am
Report Date: 26-APR-17
Project Manager: Kelsey Brooks

Analysis Requested											
	Lab Id:	551537-001		551537-002		551537-003					
	Field Id:	FS-3 16"		FS-5a 1'		FS-5a 16"					
	Depth:	16 In		1 ft		16 In					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Apr-17-17 13:40		Apr-17-17 14:30		Apr-17-17 15:20					
BTEX by EPA 8021B	***Extracted:***	Apr-24-17 08:00		Apr-24-17 08:00		Apr-24-17 08:00					
	Analyzed:	Apr-24-17 10:30		Apr-24-17 10:46		Apr-24-17 11:01					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.00149	ND	0.00151	ND	0.00152				
Toluene		0.00479	0.00198	ND	0.00201	ND	0.00202				
Ethylbenzene		0.00728	0.00198	ND	0.00201	ND	0.00202				
m_p-Xylenes		0.00625	0.00198	0.00389	0.00201	0.00517	0.00202				
o-Xylene		0.00401	0.00298	ND	0.00301	ND	0.00303				
Total Xylenes		0.0103	0.00198	0.00389	0.00201	0.00517	0.00202				
Total BTEX		0.0223	0.00149	0.00389	0.00151	0.00517	0.00152				
Chloride by EPA 300	***Extracted:***			Apr-24-17 09:00		Apr-24-17 09:00					
	Analyzed:			Apr-24-17 11:39		Apr-24-17 11:47					
	Units/RL:			mg/kg	RL	mg/kg	RL				
Chloride				ND	4.88	ND	4.95				
TPH By SW8015 Mod	***Extracted:***	Apr-21-17 17:00		Apr-21-17 17:00		Apr-21-17 17:00					
	Analyzed:	Apr-22-17 16:34		Apr-22-17 16:53		Apr-22-17 17:12					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		117	15.0	ND	15.0	ND	15.0				
C10-C28 Diesel Range Organics		1480	15.0	1240	15.0	1110	15.0				
C28-C35 Oil Range Hydrocarbons		93.8	15.0	2310	15.0	2060	15.0				
Total TPH		1690	15.0	3550	15.0	3170	15.0				

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Orders : 551537,

Project ID: TRC#273817

Lab Batch #: 3015601 **Sample:** 551537-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/17 16:34

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.1	99.7	98	70-135	
o-Terphenyl	38.6	49.9	77	70-135	

Lab Batch #: 3015601 **Sample:** 551537-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/17 16:53

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	99.8	113	70-135	
o-Terphenyl	59.2	49.9	119	70-135	

Lab Batch #: 3015601 **Sample:** 551537-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/17 17:12

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.8	105	70-135	
o-Terphenyl	52.7	49.9	106	70-135	

Lab Batch #: 3015680 **Sample:** 551537-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/17 10:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0259	0.0300	86	80-120	

Lab Batch #: 3015680 **Sample:** 551537-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/17 10:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	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: A14 Compressor Station Field Scrubber

Work Orders : 551537,

Project ID: TRC#273817

Lab Batch #: 3015680 **Sample:** 551537-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/17 11:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	80-120	

Lab Batch #: 3015601 **Sample:** 723517-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/21/17 22:55

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	100	121	70-135	
o-Terphenyl	63.1	50.0	126	70-135	

Lab Batch #: 3015680 **Sample:** 723559-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/24/17 09:48

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0343	0.0300	114	80-120	

Lab Batch #: 3015601 **Sample:** 723517-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/21/17 23:15

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.0	100	98	70-135	
o-Terphenyl	50.2	50.0	100	70-135	

Lab Batch #: 3015680 **Sample:** 723559-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/24/17 08:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Orders : 551537,

Project ID: TRC#273817

Lab Batch #: 3015601 **Sample:** 723517-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/21/17 23:34

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-135	
o-Terphenyl	61.5	50.0	123	70-135	

Lab Batch #: 3015680 **Sample:** 723559-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/24/17 08:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 3015601 **Sample:** 551449-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/17 00:33

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.8	107	70-135	
o-Terphenyl	50.6	49.9	101	70-135	

Lab Batch #: 3015680 **Sample:** 551542-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/17 08:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 3015601 **Sample:** 551449-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/17 00:52

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	99.9	114	70-135	
o-Terphenyl	55.5	50.0	111	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Orders : 551537, **Project ID:** TRC#273817

Lab Batch #: 3015680 **Sample:** 551542-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/17 09:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0326	0.0300	109	80-120	

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

BS / BSD Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Order #: 551537 **Project ID:** TRC#273817

Analyst: ALJ **Date Prepared:** 04/24/2017 **Date Analyzed:** 04/24/2017

Lab Batch ID: 3015680 **Sample:** 723559-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00149	0.0994	0.107	108	0.0998	0.106	106	1	70-130	35	
Toluene	<0.00199	0.0994	0.0992	100	0.0998	0.108	108	8	70-130	35	
Ethylbenzene	<0.00199	0.0994	0.111	112	0.0998	0.109	109	2	71-129	35	
m_p-Xylenes	<0.00199	0.199	0.218	110	0.200	0.209	105	4	70-135	35	
o-Xylene	<0.00298	0.0994	0.105	106	0.0998	0.0967	97	8	71-133	35	

Analyst: MGO **Date Prepared:** 04/24/2017 **Date Analyzed:** 04/24/2017

Lab Batch ID: 3015643 **Sample:** 723511-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<4.98	249	270	108	249	269	108	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

BS / BSD Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Order #: 551537 **Project ID:** TRC#273817

Analyst: ARM **Date Prepared:** 04/21/2017 **Date Analyzed:** 04/21/2017

Lab Batch ID: 3015601 **Sample:** 723517-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	974	97	1000	1040	104	7	70-135	35	
C10-C28 Diesel Range Organics	<15.0	1000	910	91	1000	1010	101	10	70-135	35	

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

Form 3 - MS / MSD Recoveries

Project Name: A14 Compressor Station Field Scrubber

Work Order # : 551537 **Project ID:** TRC#273817

Lab Batch ID: 3015680 **QC- Sample ID:** 551542-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/24/2017 **Date Prepared:** 04/24/2017 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00151	0.100	0.0743	74	0.0998	0.0666	67	11	70-130	35	X
Toluene	<0.00201	0.100	0.0515	52	0.0998	0.0436	44	17	70-130	35	X
Ethylbenzene	<0.00201	0.100	0.0454	45	0.0998	0.0396	40	14	71-129	35	X
m_p-Xylenes	<0.00201	0.201	0.0856	43	0.200	0.0765	38	11	70-135	35	X
o-Xylene	<0.00301	0.100	0.0449	45	0.0998	0.0378	38	17	71-133	35	X

Lab Batch ID: 3015643 **QC- Sample ID:** 551526-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/24/2017 **Date Prepared:** 04/24/2017 **Analyst:** MGO

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	695	250	936	96	250	944	100	1	90-110	20	

Lab Batch ID: 3015601 **QC- Sample ID:** 551449-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/22/2017 **Date Prepared:** 04/21/2017 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	998	953	95	999	1050	105	10	70-135	35	
C10-C28 Diesel Range Organics	61.3	998	1030	97	999	1080	102	5	70-135	35	

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

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

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Nikki Green

Company Name: TRC Environmental Corporation

Company Address: 2057 Commerce Drive

City/State/Zip: Midland, Texas 79703

Telephone No: 432.520.7720 Fax No:

Sampler Signature: Nikki Green e-mail: rose.slade@energytransfer.com; ngreen@trcsolutions.com

Project Name: A14 Compressor Station Field Scrubber

Project #: TRC #: 273817

Project Loc: Lea County, NM

PO #:

Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only) ORDER #: 551537

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	FS-3 16"			4/17/2017	1340		1	x								Soil	x								x					x
	FS-5a 1'			4/17/2017	1430		1	x								Soil	x								x			x		x
	FS-5a 16"			4/17/2017	1520		1	x								Soil	x								x			x		x

Temp: 3.1 IR ID:R-8
CF. +0.1
Corrected Temp: 3.2

Special Instructions:

Bill to Rose Slade at Energy Transfer.

Relinquished by:	Date	Time	Received by:	Date	Time
Nikki Green	4/21/17	1139	[illegible]	4.21	1139
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: °C

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 04/21/2017 11:39:00 AM

Work Order #: 551537

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seal present on shipping container/ cooler?	**N/A**
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**
#6 Custody Seals intact on sample bottles?	**N/A**
#7 *Custody Seals Signed and dated?	**N/A**
#8 *Chain of Custody present?	**Yes**
#9 Sample instructions complete on Chain of Custody?	**Yes**
#10 Any missing/extra samples?	**No**
#11 Chain of Custody signed when relinquished/ received?	**Yes**
#12 Chain of Custody agrees with sample label(s)?	**Yes**
#13 Container label(s) legible and intact?	**Yes**
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#15 Samples in proper container/ bottle?	**Yes**
#16 Samples properly preserved?	**Yes**
#17 Sample container(s) intact?	**Yes**
#18 Sufficient sample amount for indicated test(s)?	**Yes**
#19 All samples received within hold time?	**Yes**
#20 Subcontract of sample(s)?	**N/A**
#21 VOC samples have zero headspace?	**N/A**
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**N/A**
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

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

Analyst:

PH Device/Lot#:

Checklist completed by: Jessica Kramer
Jessica Kramer
Date: 04/21/2017

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 04/21/2017

Certificate of Analysis Summary 553088

TRC Solutions, Inc, Midland, TX

Project Name: A14 Compressor Station Field Scrubber

Project Id: TRC#273817
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Fri May-12-17 01:13 pm
Report Date: 26-MAY-17
Project Manager: Liz Givens

Analysis Requested													
	Lab Id:	553088-001		553088-002		553088-003		553088-004		553088-005		553088-006	
	Field Id:	FS -1a 4'		FS-1a 9'		FS-2a 4'		FS-2a 9'		FS-3a 4'		FS-3a 9'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-10-17 11:45		May-10-17 12:19		May-10-17 14:25		May-10-17 14:58		May-10-17 16:12		May-10-17 16:58	
BTEX by EPA 8021B	***Extracted:***	May-16-17 15:00				May-16-17 15:00				May-16-17 15:00			
	Analyzed:	May-17-17 07:39				May-17-17 07:55				May-17-17 08:12			
	Units/RL:	mg/kg	RL			mg/kg	RL			mg/kg	RL		
Benzene		<0.00201	0.00201			<0.00199	0.00199			<0.00200	0.00200		
Toluene		<0.00201	0.00201			<0.00199	0.00199			<0.00200	0.00200		
Ethylbenzene		<0.00201	0.00201			<0.00199	0.00199			<0.00200	0.00200		
m,p-Xylenes		<0.00402	0.00402			<0.00398	0.00398			<0.00399	0.00399		
o-Xylene		<0.00201	0.00201			<0.00199	0.00199			<0.00200	0.00200		
Total Xylenes		<0.00201	0.00201			<0.00199	0.00199			<0.00200	0.00200		
Total BTEX		<0.00201	0.00201			<0.00199	0.00199			<0.00200	0.00200		
Chloride by EPA 300	***Extracted:***	May-20-17 16:45		May-20-17 16:45		May-20-17 16:45		May-20-17 16:45		May-20-17 16:45		May-20-17 16:45	
	Analyzed:	May-20-17 19:52		May-20-17 19:59		May-20-17 20:07		May-20-17 20:15		May-20-17 20:22		May-20-17 20:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		478	4.92	162	49.3	114	24.7	27.0	5.01	22.8	5.00	49.2	5.00
TPH by SW8015 Mod	***Extracted:***	May-15-17 14:00				May-15-17 14:00				May-15-17 14:00			
	Analyzed:	May-15-17 20:48				May-15-17 21:07				May-15-17 22:04			
	Units/RL:	mg/kg	RL			mg/kg	RL			mg/kg	RL		
Gasoline Range Hydrocarbons		<15.0	15.0			<15.0	15.0			<14.9	14.9		
Diesel Range Organics		23.6	15.0			18.3	15.0			15.0	14.9		
Oil Range Hydrocarbons		<15.0	15.0			<15.0	15.0			<14.9	14.9		
Total TPH		23.6	15.0			18.3	15.0			15.0	14.9		

Kelsey Brooks
Project Manager

Analytical Report 553088

for

TRC Solutions, Inc

Project Manager: Nikki Green

A14 Compressor Station Field Scrubber

TRC#273817

26-MAY-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

26-MAY-17

Project Manager: **Nikki Green**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **553088**
A14 Compressor Station Field Scrubber
Project Address: Lea County, NM

Nikki Green:

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) 553088. 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. 553088 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 553088

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Field Scrubber

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS -1a 4'	S	05-10-17 11:45		553088-001
FS-1a 9'	S	05-10-17 12:19		553088-002
FS-2a 4'	S	05-10-17 14:25		553088-003
FS-2a 9'	S	05-10-17 14:58		553088-004
FS-3a 4'	S	05-10-17 16:12		553088-005
FS-3a 9'	S	05-10-17 16:58		553088-006

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3017621 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 553088

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Field Scrubber

Sample Id:	**FS -1a 4'**	Matrix:	Soil	Date Received:	05.12.17 13.13
Lab Sample Id:	553088-001	Date Collected:	05.10.17 11.45		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	05.20.17 16.45	Basis:	Wet Weight
Seq Number:	3017806				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**478**	4.92	mg/kg	05.20.17 19.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.15.17 14.00	Basis:	Wet Weight
Seq Number:	3017485				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	05.15.17 20.48	U	1
Diesel Range Organics	C10C28DRO	**23.6**	15.0	mg/kg	05.15.17 20.48		1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	05.15.17 20.48	U	1
Total TPH	PHC635	**23.6**	15.0	mg/kg	05.15.17 20.48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	05.15.17 20.48	
o-Terphenyl	84-15-1	101	%	70-135	05.15.17 20.48	

Certificate of Analytical Results 553088

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Field Scrubber

Sample Id:	**FS -1a 4'**	Matrix:	Soil	Date Received:	05.12.17 13.13
Lab Sample Id:	553088-001	Date Collected:	05.10.17 11.45		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.16.17 15.00	Basis:	Wet Weight
Seq Number:	3017621				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.17.17 07.39	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.17.17 07.39	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.17.17 07.39	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.17.17 07.39	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.17.17 07.39	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.17.17 07.39	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.17.17 07.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	80-120	05.17.17 07.39	
1,4-Difluorobenzene	540-36-3	116	%	80-120	05.17.17 07.39	

Certificate of Analytical Results 553088

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Field Scrubber

Sample Id:	**FS-1a 9'**	Matrix:	Soil	Date Received:	05.12.17 13.13
Lab Sample Id:	553088-002	Date Collected:	05.10.17 12.19		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	05.20.17 16.45	Basis:	Wet Weight
Seq Number:	3017806				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**162**	49.3	mg/kg	05.20.17 19.59		10

Certificate of Analytical Results 553088

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Field Scrubber

Sample Id:	**FS-2a 4'**	Matrix:	Soil	Date Received:	05.12.17 13.13
Lab Sample Id:	553088-003	Date Collected:	05.10.17 14.25		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	05.20.17 16.45	Basis:	Wet Weight
Seq Number:	3017806				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**114**	24.7	mg/kg	05.20.17 20.07		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.15.17 14.00	Basis:	Wet Weight
Seq Number:	3017485				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	05.15.17 21.07	U	1
Diesel Range Organics	C10C28DRO	**18.3**	15.0	mg/kg	05.15.17 21.07		1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	05.15.17 21.07	U	1
Total TPH	PHC635	**18.3**	15.0	mg/kg	05.15.17 21.07		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.15.17 21.07	
o-Terphenyl	84-15-1	98	%	70-135	05.15.17 21.07	

Certificate of Analytical Results 553088

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Field Scrubber

Sample Id:	**FS-2a 4'**	Matrix:	Soil	Date Received:	05.12.17 13.13
Lab Sample Id:	553088-003	Date Collected:	05.10.17 14.25		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.16.17 15.00	Basis:	Wet Weight
Seq Number:	3017621				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.17.17 07.55	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.17.17 07.55	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.17.17 07.55	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.17.17 07.55	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.17.17 07.55	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.17.17 07.55	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.17.17 07.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	87	%	80-120	05.17.17 07.55	
4-Bromofluorobenzene	460-00-4	85	%	80-120	05.17.17 07.55	

Certificate of Analytical Results 553088

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Field Scrubber

Sample Id:	**FS-2a 9'**	Matrix:	Soil	Date Received:	05.12.17 13.13
Lab Sample Id:	553088-004	Date Collected:	05.10.17 14.58		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	05.20.17 16.45	Basis:	Wet Weight
Seq Number:	3017806				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**27.0**	5.01	mg/kg	05.20.17 20.15		1

Certificate of Analytical Results 553088

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Field Scrubber

Sample Id:	**FS-3a 4'**	Matrix:	Soil	Date Received:	05.12.17 13.13
Lab Sample Id:	553088-005	Date Collected:	05.10.17 16.12		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	05.20.17 16.45	Basis:	Wet Weight
Seq Number:	3017806				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**22.8**	5.00	mg/kg	05.20.17 20.22		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.15.17 14.00	Basis:	Wet Weight
Seq Number:	3017485				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	05.15.17 22.04	U	1
Diesel Range Organics	C10C28DRO	**15.0**	14.9	mg/kg	05.15.17 22.04		1
Oil Range Hydrocarbons	PHCG2835	<14.9	14.9	mg/kg	05.15.17 22.04	U	1
Total TPH	PHC635	**15.0**	14.9	mg/kg	05.15.17 22.04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.15.17 22.04	
o-Terphenyl	84-15-1	94	%	70-135	05.15.17 22.04	

Certificate of Analytical Results 553088

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Field Scrubber

Sample Id:	**FS-3a 4'**	Matrix:	Soil	Date Received:	05.12.17 13.13
Lab Sample Id:	553088-005	Date Collected:	05.10.17 16.12		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.16.17 15.00	Basis:	Wet Weight
Seq Number:	3017621				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.17 08.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.17 08.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.17 08.12	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.17.17 08.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.17 08.12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.17 08.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.17 08.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	80-120	05.17.17 08.12	
1,4-Difluorobenzene	540-36-3	100	%	80-120	05.17.17 08.12	

Certificate of Analytical Results 553088

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Field Scrubber

Sample Id:	**FS-3a 9'**	Matrix:	Soil	Date Received:	05.12.17 13.13
Lab Sample Id:	553088-006	Date Collected:	05.10.17 16.58		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	05.20.17 16.45	Basis:	Wet Weight
Seq Number:	3017806				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.2**	5.00	mg/kg	05.20.17 20.30		1

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

QC Summary 553088

TRC Solutions, Inc

A14 Compressor Station Field Scrubber

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3017806 Matrix: Solid Date Prep: 05.20.17
MB Sample Id: 724934-1-BLK LCS Sample Id: 724934-1-BKS LCSD Sample Id: 724934-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	253	101	255	102	90-110	1	20	mg/kg	05.20.17 16:49	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3017806 Matrix: Soil Date Prep: 05.20.17
Parent Sample Id: 553084-001 MS Sample Id: 553084-001 S MSD Sample Id: 553084-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	144	246	413	109	413	109	90-110	0	20	mg/kg	05.20.17 17:12	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3017806 Matrix: Soil Date Prep: 05.20.17
Parent Sample Id: 553084-005 MS Sample Id: 553084-005 S MSD Sample Id: 553084-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	526	250	774	99	775	100	90-110	0	20	mg/kg	05.20.17 18:59	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3017485 Matrix: Solid Date Prep: 05.15.17
MB Sample Id: 724731-1-BLK LCS Sample Id: 724731-1-BKS LCSD Sample Id: 724731-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	960	96	915	92	70-135	5	35	mg/kg	05.15.17 16:53	
Diesel Range Organics	<15.0	1000	935	94	909	91	70-135	3	35	mg/kg	05.15.17 16:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		113		110		70-135	%	05.15.17 16:53
o-Terphenyl	119		107		106		70-135	%	05.15.17 16:53

QC Summary 553088

TRC Solutions, Inc

A14 Compressor Station Field Scrubber

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3017485 Matrix: Soil Date Prep: 05.15.17
Parent Sample Id: 553084-001 MS Sample Id: 553084-001 S MSD Sample Id: 553084-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	999	945	95	932	93	70-135	1	35	mg/kg	05.15.17 17:58	
Diesel Range Organics	19.5	999	939	92	927	91	70-135	1	35	mg/kg	05.15.17 17:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		105		70-135	%	05.15.17 17:58
o-Terphenyl	100		93		70-135	%	05.15.17 17:58

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3017621 Matrix: Solid Date Prep: 05.16.17
MB Sample Id: 724725-1-BLK LCS Sample Id: 724725-1-BKS LCSD Sample Id: 724725-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0884	88	0.0888	89	70-130	0	35	mg/kg	05.16.17 15:59	
Toluene	<0.00202	0.101	0.0889	88	0.0944	94	70-130	6	35	mg/kg	05.16.17 15:59	
Ethylbenzene	<0.00202	0.101	0.100	99	0.0996	100	71-129	0	35	mg/kg	05.16.17 15:59	
m,p-Xylenes	<0.00403	0.202	0.202	100	0.201	100	70-135	0	35	mg/kg	05.16.17 15:59	
o-Xylene	<0.00202	0.101	0.0963	95	0.0964	96	71-133	0	35	mg/kg	05.16.17 15:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		106		118		80-120	%	05.16.17 15:59
4-Bromofluorobenzene	95		112		119		80-120	%	05.16.17 15:59

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3017621 Matrix: Soil Date Prep: 05.16.17
Parent Sample Id: 553084-008 MS Sample Id: 553084-008 S MSD Sample Id: 553084-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.00489	0.0996	0.0767	72	0.0763	71	70-130	1	35	mg/kg	05.16.17 17:03	
Toluene	<0.00199	0.0996	0.0826	83	0.0823	82	70-130	0	35	mg/kg	05.16.17 17:03	
Ethylbenzene	<0.00199	0.0996	0.0880	88	0.0770	77	71-129	13	35	mg/kg	05.16.17 17:03	
m,p-Xylenes	<0.00398	0.199	0.177	89	0.155	78	70-135	13	35	mg/kg	05.16.17 17:03	
o-Xylene	<0.00199	0.0996	0.0850	85	0.0820	82	71-133	4	35	mg/kg	05.16.17 17:03	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		103		80-120	%	05.16.17 17:03
4-Bromofluorobenzene	119		119		80-120	%	05.16.17 17:03

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Nikki Green

Project Name: A14 Compressor Station Field Scrubber

Company Name: TRC Environmental Corporation

Project #: TRC #: 273817

Company Address: 2057 Commerce Drive

Project Loc: Lea County, NM

City/State/Zip: Midland, Texas 79703

PO #:

Telephone No: 432.520.7720

Fax No:

Report Format: [x] Standard [ ] TRRP [ ] NPDES

Sampler Signature: Nikki Green

e-mail: rose.slade@energytransfer.com
ngreen@trcsolutions.com

(lab use only)
ORDER #: 553088

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M	TOTAL: TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	FS-1a 4'			5/10/2017	1145		1	x								Soil	x								x			x				x
	FS-1a 9'			5/10/2017	1219		1	x								Soil												x				x
	FS-2a 4'			5/10/2017	1425		1	x								Soil	x								x			x				x
	FS-2a 9'			5/10/2017	1458		1	x								Soil												x				x
	FS-3a 4'			5/10/2017	1612		1	x								Soil	x								x			x				x
	FS-3a 9'			5/10/2017	1658		1	x								Soil												x				x

Special Instructions:

Bill to Rose Slade at Energy Transfer.

Relinquished by: Nikki Green	Date 5/12/17	Time 13:13	Received by: Monaya	Date 5/12/17	Time 13:13
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Temp: 4.6 IR ID:R-9
CF:(0-6: 0.0°C) (6-23: +0.1°C)
Corrected Temp: 4.6

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: °C

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 05/12/2017 01:13:00 PM

Work Order #: 553088

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

Temperature Measuring device used : R9

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	4.6	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seal present on shipping container/ cooler?	**N/A**	
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#6 Custody Seals intact on sample bottles?	**N/A**	
#7 *Custody Seals Signed and dated?	**N/A**	
#8 *Chain of Custody present?	**Yes**	
#9 Sample instructions complete on Chain of Custody?	**Yes**	
#10 Any missing/extra samples?	**No**	
#11 Chain of Custody signed when relinquished/ received?	**Yes**	
#12 Chain of Custody agrees with sample label(s)?	**Yes**	
#13 Container label(s) legible and intact?	**Yes**	
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#15 Samples in proper container/ bottle?	**Yes**	
#16 Samples properly preserved?	**Yes**	
#17 Sample container(s) intact?	**Yes**	
#18 Sufficient sample amount for indicated test(s)?	**Yes**	
#19 All samples received within hold time?	**Yes**	
#20 Subcontract of sample(s)?	**N/A**	Houston
#21 VOC samples have zero headspace?	**N/A**	
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**N/A**	
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**	

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

Analyst:

PH Device/Lot#:

Checklist completed by: Marithza Anaya Date: 05/12/2017

Marithza Anaya

Checklist reviewed by: Holly Taylor Date: 05/15/2017

Holly Taylor

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

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: ETC Field Services, LLC	Contact: Rose Slade
Address: 800 East Sonterra Rd. Suite 2 San Antonio, TX 78249	Telephone No. 210-403-6525
Facility Name: A-14 (Field Scrubber)	Facility Type: Compressor Station

Surface Owner: BLM	Mineral Owner: N/A	API No. N/A

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County:
I	6	24S	35E					Lea

Latitude 32.246183 **Longitude:** -103.402000

NATURE OF RELEASE

Type of Release: Crude Oil/ Produced water	Volume of Release: < 5 barrels	Volume Recovered: O
Source of Release: Field Scrubber	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 2/23/17
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? Notification was given to Ms. Olivia Yu on 3/3/17 at approximately 8:19 AM	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

N/A

RECEIVED
By Olivia Yu at 12:52 pm, Mar 09, 2017

Describe Cause of Problem and Remedial Action Taken.*
On 2/23/17 ETC personnel discovered a crude oil & produced water release from the field scrubber due to a piece of tubing breaking off going into the field scrubber. During the initial response activities, ETC installed a new piece of tubing going into the field scrubber to prevent another incident.

Describe Area Affected and Cleanup Action Taken.* Fluid flowed from the release point to the southwest corner of the facility. The impacted area was approximately 3,000 square feet. A Site Assessment has been conducted by ETC personnel and an environmental company representing ETC. A work-plan is being written to submit to the NMOCD Hobbs District Office and the Bureau of Land Management (BLM)

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: Rose L. Slade	OIL CONSERVATION DIVISION	
Printed Name: Rose L. Slade	Approved by Environmental Specialist: OK	
Title: Sr. Environmental Specialist	Approval Date: 3/9/2017	Expiration Date:
E-mail Address: Rose.Slade@energytransfer.com	Conditions of Approval: see attached directive	Attached ☑
Date: 3/3/17 Phone: 210-403-6525		

* Attach Additional Sheets If Necessary

1RP-4634 fOY1706953656 nOY1706954187

pOY1706955443

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _3/3/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number __1R-_4634___ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _4/10/2017_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

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