



2057 Commerce Drive
Midland, TX 79703

432.520.7720 PHONE
432.520.7701 FAX

www.trcsolutions.com

APPROVED

By Olivia Yu at 3:44 pm, Aug 11, 2017

July 27, 2017

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

NMOCD approves of the delineation and remediation completed for 1RP-4635 due to release location and practicability. NMOCD also grants backfill approval.

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: Remediation Summary and Permission to Backfill Request
A-14 Compressor Station (Below Ground Sump) Release (1RP-4635)
GPS: N 32.246183° W 103.402000°
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 Remediation Summary and Permission to Backfill Request (Request) for the A-14 Compressor Station (Below Ground Sump) Release Site (Release Site). The purpose of this Request is to provide documentation of remediation activities designed to advance the A-14 Compressor Station (Below Ground Sump) 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 32.246183° W 103.402000°. The subject property is administered by the United States Bureau of Land Management (BLM). A Site Location Map, Site Details and Soil Sample Location Map, Site Details and Soil Sample Locations Maps, and Site Details and Confirmation Soil Sample Locations Map are provided as Figure 1, Figure 2, Figure 3, and Figure 4, respectively. Release Site photographs are attached to this Request.

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 6, 2016, a representative of ETC submitted the "Proposed Delineation Workplan" for NMOCD and BLM consideration. The "Proposed Delineation Workplan" summarized the delineation activities strategy designed to progress the Release Site toward an NMOCD approved closure status. ETC received written (email) NMOCD and BLM approval to proceed with the activities outlined in the "Proposed Delineation Workplan".

On March 21 and 22, 2016, due to safety concerns and the potential of striking underground piping and equipment within 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. Hydro-vac activities were conducted within and adjacent to the release area. Soil excavated during hydro-vac activities was placed on a plastic liner adjacent to the Release Site.

In addition, due to the high risk of striking underground piping and associated subsurface equipment, heavy excavation machinery cannot be utilized within the A-14 Compressor Station without special permission from ETC operation representatives. Due to this safety concern, delineation trenches in the vicinity of the impacted area was not advanced an additional ten (10) feet bgs.

On March 22 and March 23, 2017, TRC, on behalf of ETC, utilized a hand auger to collect eighteen (18) delineation soil samples (S-1 6" through S-7 6", S-1 1' through S-7 1', S-3 16", S-3 22", S-4 21", and S-4 2') from the surface soil stained area. The soil samples were submitted to Xenco Laboratories in Midland, Texas for determination of concentrations of BTEX using Method SW 846-8021B, Total Petroleum Hydrocarbons (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 sample S-3 22", which exhibited a BTEX concentration of 0.00322 mg/Kg which is below NMOCD regulatory guidelines. TPH concentrations ranged from less than the laboratory MDL for soil samples S-1 1', S-5 6", and S-7 1' to 17,531 mg/Kg for soil sample S-4 6". A review of laboratory analytical results indicated soil samples S-3 1' and S-4 6" exhibited TPH concentrations above NMOCD regulatory guidelines. Chloride concentrations ranged from less than the applicable laboratory MDL for soil samples S-2 6", S-2 1', S-5 6", S-5 1', S-6 6", S-6 1', S-7 6", S-7 6", and S-7 1' to 3,120 mg/Kg for soil sample S-4 6". A review of

laboratory analytical results indicated soil samples S-4 6" and S-4 1' exhibited chloride concentrations above NMOCD regulatory guidelines.

In addition to the soil samples described above, nine (9) soil samples (NS-1 1', SS-1 1', NS-2 1', SS-2 1', WS-3 1', ES-3 1', NS-4 1', SS-4 1', NS-5 1') were collected utilizing a hand auger approximately five (5) feet from the outer perimeter of the surface soil stained area 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 were less than the applicable laboratory MDL for the submitted soil samples, with the exception of soil samples NS-1 1' (15 mg/Kg), NS-4 1' (303 mg/Kg), and NS-5 1' (381 mg/Kg). TPH concentrations were below NMOCD regulatory guidelines for the submitted soil samples. Chloride concentrations ranged from less than the applicable laboratory MDL for soil sample ES-3 1' to 261 mg/Kg for soil sample SS-4 1'. A review of laboratory analytical results indicated chloride concentrations were below NMOCD guidelines for the submitted samples.

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

On May 2, 2017, a representative of ETC submitted the "Soil Investigation Summary and Proposed Remediation Workplan" (Workplan) for NMOCD consideration. The Workplan summarized remedial activities to date and detailed a closure strategy designed to progress the Release Site toward an NMOCD approved closure status. ETC received written (email) NMOCD approval to proceed with the activities outlined in the Workplan.

On May 23, 2017, TRC commenced excavation activities utilizing a hydrovac in the vicinity of the A-14 Compressor Station below ground sump. One (1) soil sample (BH-1 @ 8") was collected from the floor of the excavated area. The soil sample was submitted to the laboratory and analyzed for concentrations of TPH using EPA Method SW 846-8015M and chloride using EPA Method E 300.0. A review of laboratory analytical results indicated benzene and BTEX concentrations were less than laboratory MDL and NMOCD regulatory guidelines. Laboratory analytical results indicated the TPH concentrations was 506 mg/Kg and below NMOCD regulatory guidelines. Laboratory analytical results indicated the chloride concentration for the submitted sample was 8.06 mg/Kg and below NMOCD regulatory guidelines.

In addition, one (1) composite soil sample (Hydrovac Solids) was collected from approximately twenty (20) cubic yards of hydro-excavated soil vacuumed from outside of the visibly impacted soil and submitted for BTEX, TPH, and chloride analysis. A review of the laboratory analytical results indicated benzene and BTEX concentrations were less than laboratory MDL and NMOCD regulatory guidelines. The TPH concentrations for the submitted soil sample was 452 mg/Kg and below NMOCD regulatory guidelines. The chloride concentration for the submitted soil sample was 52.5 mg/Kg and below NMOCD regulatory guidelines.

Based on the advancement of exploratory trenches utilizing a hydro-vac during delineation activities, it was determined the remainder of the impacted area could be excavated utilizing a backhoe to a maximum depth of approximately two (2) feet bgs.

On June 15, 2017, following additional excavation activities, three (3) soil samples (BH-6 6", BH-7 6", and BH-2 6") were collected from the floor of the excavated area and submitted to the laboratory for BTEX, TPH, and chloride analysis. A review of laboratory analytical results indicated benzene and BTEX concentrations for the submitted soil samples were less than laboratory MDL and NMOCD regulatory guidelines. TPH concentrations for the submitted soil samples ranged from less than the laboratory MDL for soil sample BH-2 6" to 231 mg/Kg for soil sample BH-7 6", which indicated the submitted soil samples were below NMOCD regulatory guidelines. A review of laboratory analytical results indicated chloride concentrations ranged from 5.85 mg/Kg for soil sample BH-7 6" to 32.4 mg/Kg for soil sample BH-2 6", which indicated chloride concentrations were below NMOCD regulatory guidelines.

On June 19 and 20, 2017, following additional excavation activities, ten (10) soil samples (BH-3 2', ESW-1 1', WSW-1 1', BH-5 6", BH-4 2', NSW-1 1', ESW-2 1', SSW-1 1', NSW-2 1', and WSW-2 1') were collected from the floor and side walls of the excavated area and submitted to the laboratory for BTEX, TPH, and chloride analysis. A review of laboratory analytical results indicated benzene and BTEX concentrations for the submitted soil samples were less than laboratory MDL and NMOCD regulatory guidelines. A review of laboratory analytical results indicated TPH concentrations were less than the applicable laboratory MDL for all submitted soil samples, with the exception of soil samples BH-3 2', ESW-1 1', and WSW-1 1', which exhibited TPH concentrations of 118 mg/Kg, 25.8 mg/Kg, and 321.2 mg/Kg, respectively, and remained below NMOCD regulatory guidelines. A review of laboratory analytical results indicate chloride concentrations for the submitted samples ranged from 9.95 mg/Kg for soil sample NSW-2 1' to 165 mg/Kg for soil sample WSW-1 1', which indicated TPH concentrations were below NMOCD regulatory guidelines. Table 1 summarizes the Concentrations of Benzene, BTEX, TPH, and Chlorides in Soil. Analytical reports are provided with this Request.

Pending NMOCD and BLM approval, ETC will transport the excavated soil under manifest to a NMOCD approved disposal facility and backfill the existing excavation with locally purchased non-impacted "like" soil and/or caliche. On completion of backfilling activities, the impacted area outside the A-14 Compressor Station will be contoured to fit the surrounding area and be reseeded with vegetation approved by the BLM.

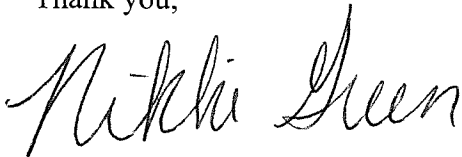
Based on the analytical results of soil samples collected between May 23 through June 20, 2017, ETC proposes the following field activities designed to advance the A-14 Compressor Station (Below Ground Sump) Release towards NMOCD closure status:

- Pending NMOCD and BLM approval, ETC will transport the excavated soil under manifest to an NMOCD approved disposal facility.
- On completion of transport and disposal of the excavated soil, the excavated area will be backfilled with locally purchased non-impacted "like" soil. In addition, the backfilled area will be contoured to fit the surrounding area and be reseeded with vegetation approved by the BLM.
- Utilize the excavated soil represented by soil sample Hydrovac Solids as backfill material within the A-14 Compressor Station.
- 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 Remediation Summary and Permission to Backfill Request 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

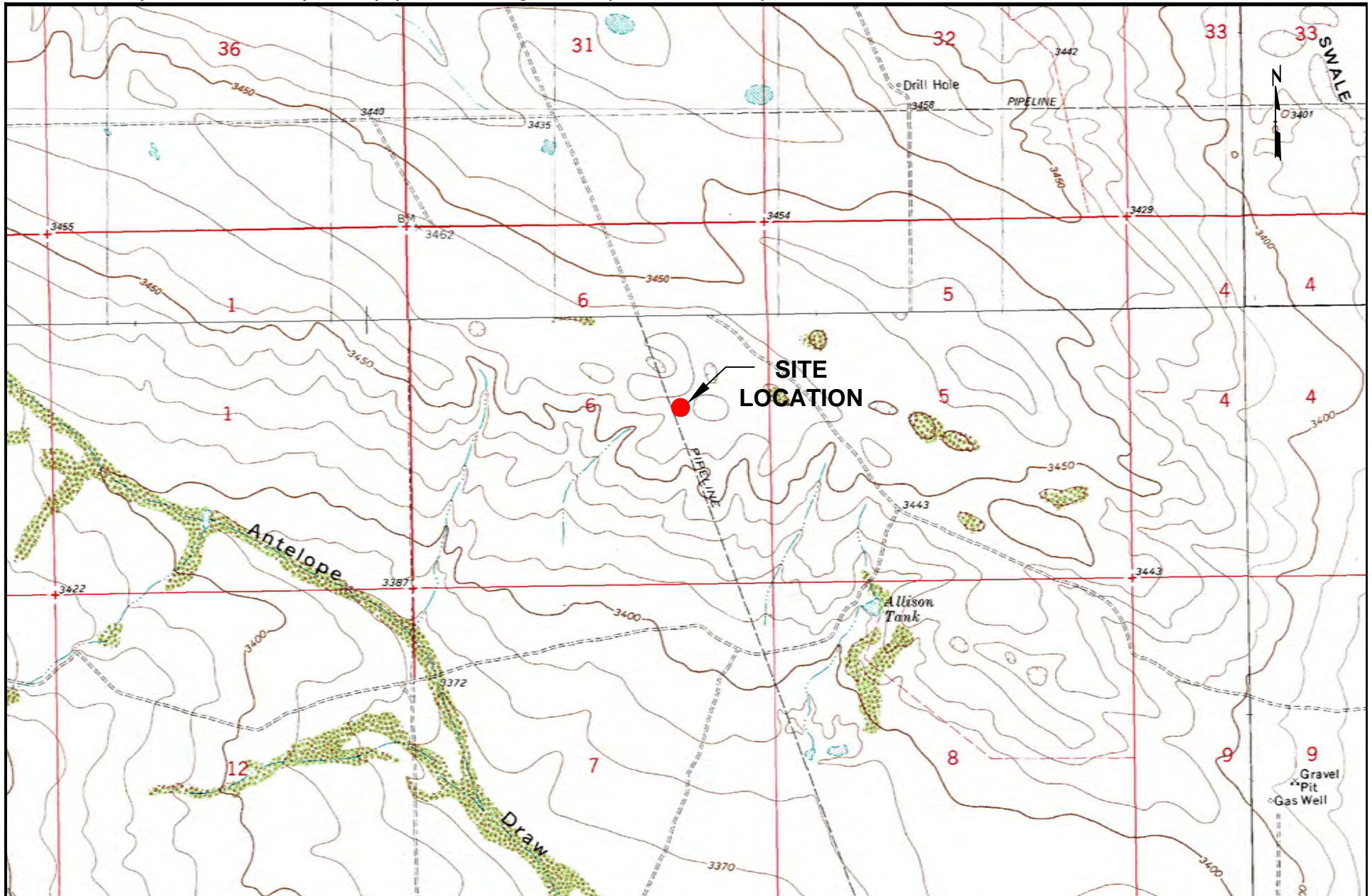
Attachments:

Figure 1 - Site Location Map
Figure 2 - Site Detail and Soil Sample Location Map
Figure 3 - Site Detail and Soil Sample Locations Map
Figure 4 – Site Details and Confirmation 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:

Rose Slade
ETC Field Services, LLC
800 East Sonterra Suite 2
San Antonio, TX 78258

File



LEGEND:

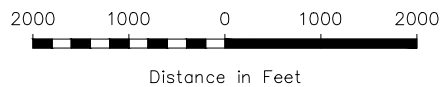


Figure 1
Site Location Map
ETC Field Services, LLC
A-14 Compressor Station
Below Ground Sump
Lea County, NM

Scale: 1" = 2000'

CAD By: TA

Checked By: CS

Draft: March 3, 2017

Lat. N 32.246183°, Long. W 103.402000°

SE1/4 NE1/4 Sec 6 T24S R35E

TRC Proj. No.: 273817



2057 Commerce Drive
Midland, Texas 79703
432.520.7720

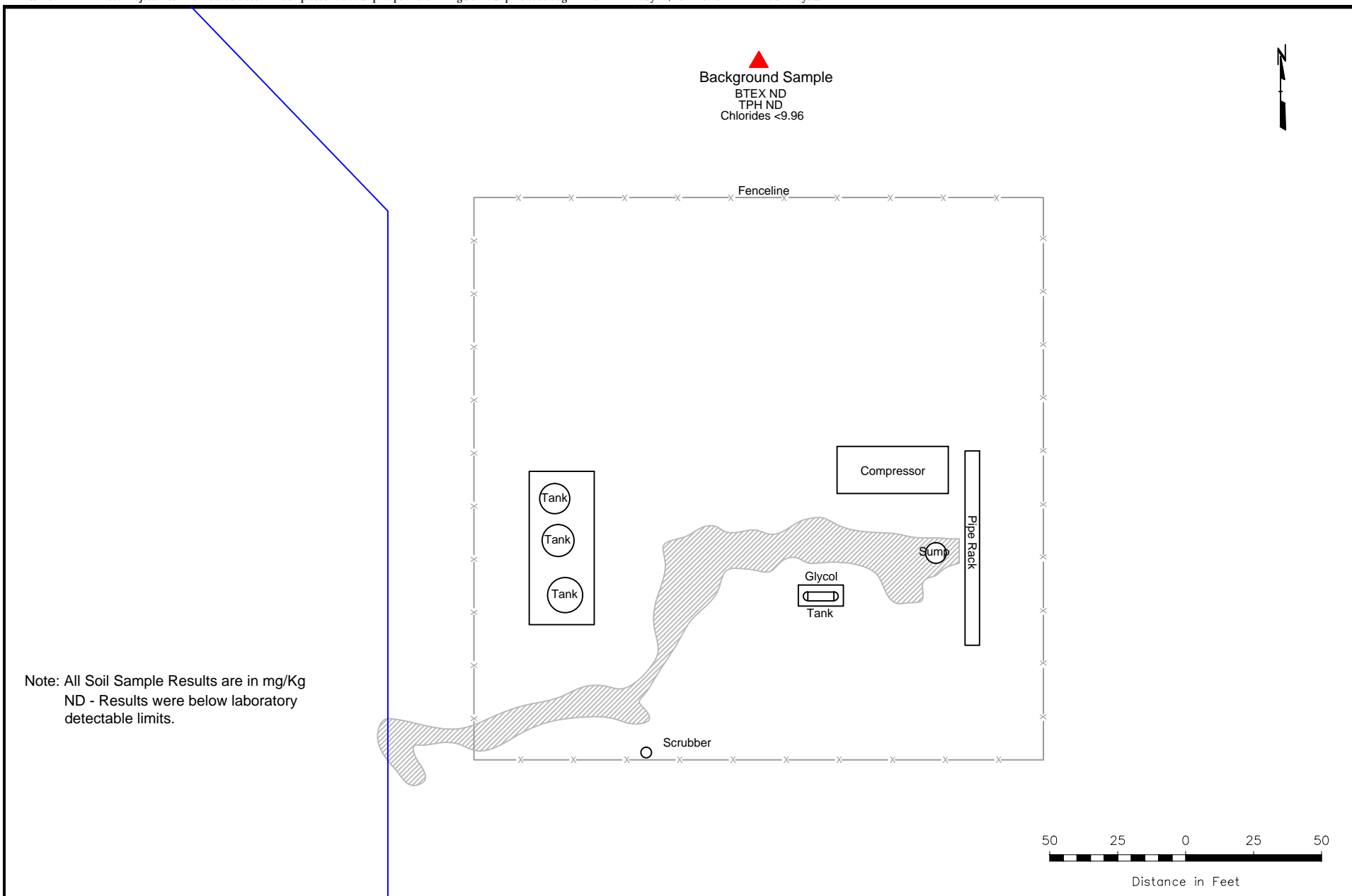
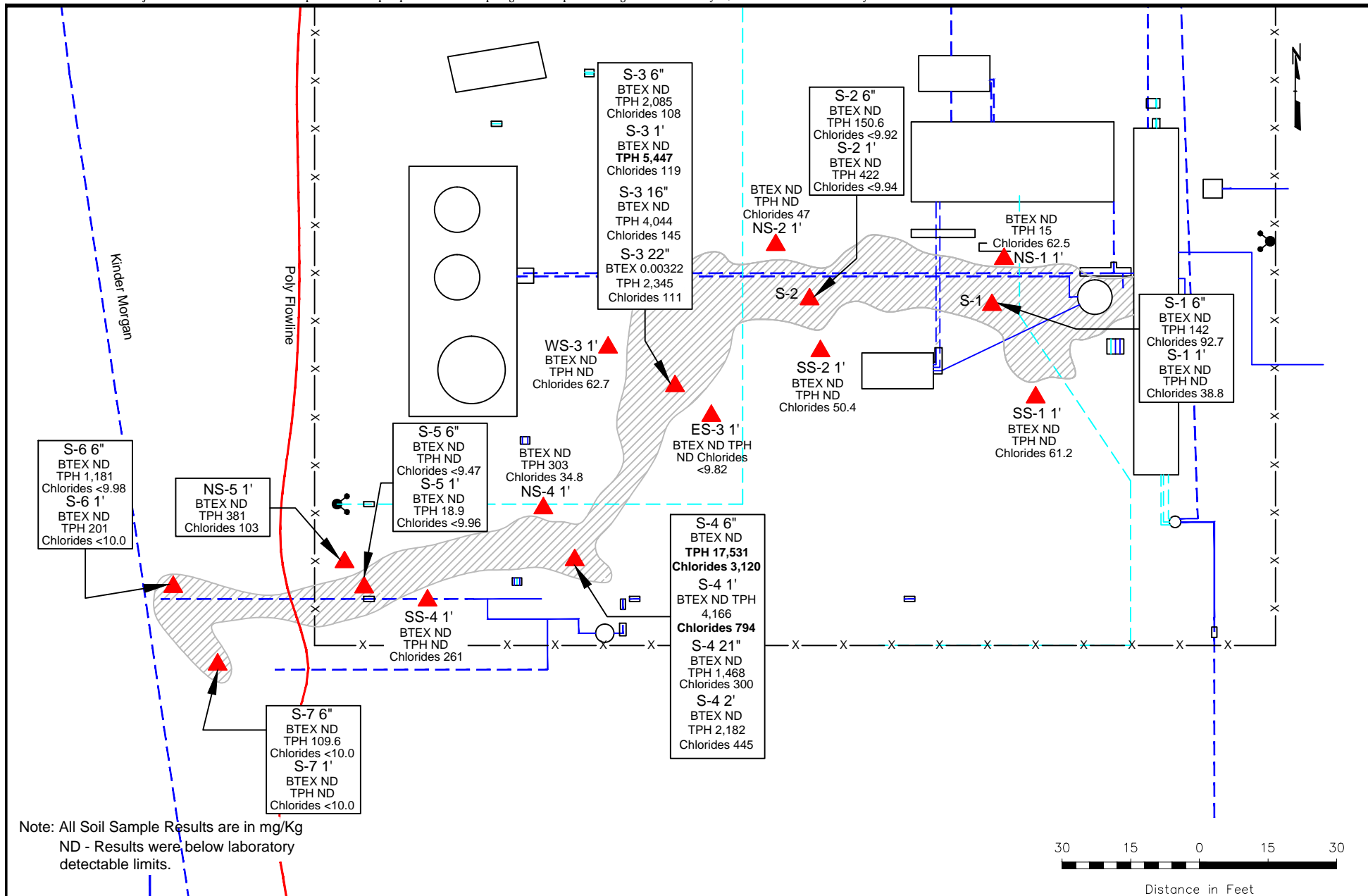


Figure 2
 Site Detail and
 Soil Sample Location Map
 ETC Field Services, LLC
 A-14 Compressor Station
 Sump Release
 Lea County, NM

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	





LEGEND:

- Pipeline
- Electric
- Light Pole
- Fence
- Flowline
- Soil Sample Location

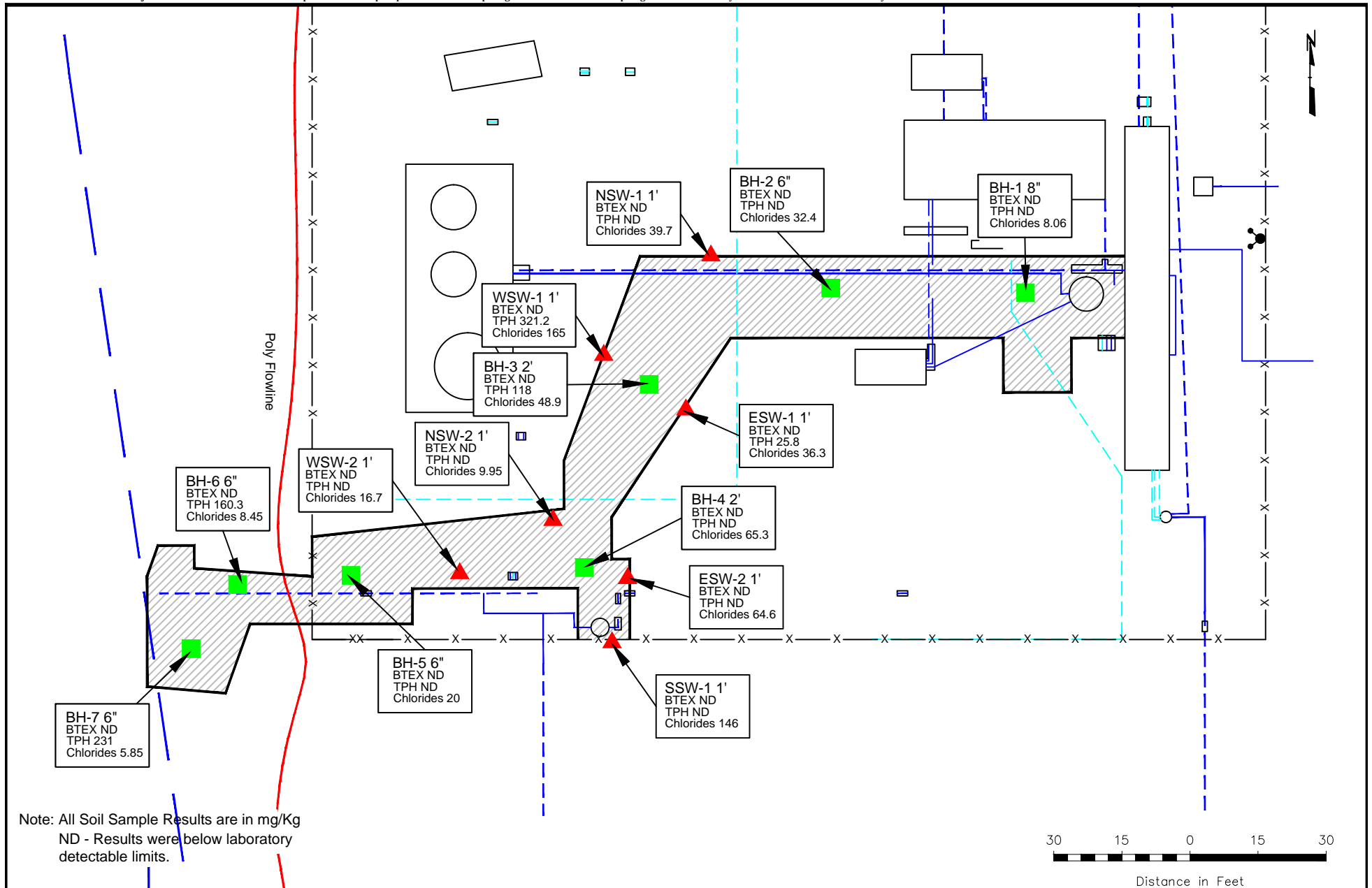
Figure 3
Site Details and
Soil Sample Locations
ETC Field Services, LLC
A-14 Compressor Station
Sump Release
Lea County, NM

Scale: 1" = 30'

CAD By: TA	Checked By: NG
Draft: April 4, 2017	
Lat. N 32.246183° , Long. W 103.402000°	
SE1/4 NE1/4 Sec 6 T24S R35E	
TRC Proj. No.: 273817	

TRC

2057 Commerce Drive
Midland, Texas 79703
432.520.7720



LEGEND:		Pipeline		Soil Sample Location
		Electric		Floor Soil Sample Location
		Light Pole		
		Fence		
		Flowline		

Figure 4
Site Details and Confirmation
Soil Sample Locations
ETC Field Services, LLC
A-14 Compressor Station
Below Ground Sump
Lea County, NM

Scale: 1" = 30'	
CAD By: TA	Checked By: NG
Draft: April 4, 2017	
Lat. N 32.246183° , Long. W 103.402000°	
SE1/4 NE1/4 Sec 6 T24S R35E	
TRC Proj. No.: 273817	

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

ETC FIELD SERVICES, LLC
A14 COMPRESSOR STATION BELOW GROUND SUMP
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
S-1 6"	03/22/17	Trench	<0.00148	<0.00198	<0.00198	<0.00198	<0.00296	<0.00296	<15.0	79.9	62.3	142.2	92.7
S-1 1'	03/22/17	Trench	<0.00146	<0.00194	<0.00194	<0.00194	<0.00291	<0.00291	<15.0	<15.0	<15.0	<15.0	38.8
S-2 6"	03/22/17	Trench	<0.00146	<0.00195	<0.00195	<0.00195	<0.00292	<0.00292	<15.0	80.5	70.1	150.6	<9.92
S-2 1'	03/22/17	Trench	<0.00148	<0.00197	<0.00197	<0.00197	<0.00296	<0.00296	<15.0	179	243	422	<9.94
S-3 6"	03/22/17	Trench	<0.00147	<0.00196	<0.00196	<0.00196	<0.00294	<0.00294	72.8	1,500	512	2,084.8	108
S-3 1'	03/22/17	Trench	<0.00147	<0.00196	<0.00196	<0.00196	<0.00294	<0.00294	445	4,030	972	5,447	119
S-3 16"	03/23/17	Trench	<0.00148	<0.00198	<0.00198	<0.00198	<0.00296	<0.00296	281	2,810	953	4,044	145
S-3 22"	03/23/17	Trench	<0.00152	<0.00202	<0.00202	0.00322	<0.00303	0.00322	296	1,820	229	2,345	111
S-4 6"	03/22/17	Trench	<0.00146	<0.00195	<0.00195	<0.00195	<0.00293	<0.00293	771	15,100	1,660	17,531	3,120
S-4 1'	03/22/17	Trench	<0.00146	<0.00195	<0.00195	<0.00195	<0.00292	<0.00292	84.2	3,630	452	4,166.2	794
S-4 21"	03/23/17	Trench	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	18.0	1,290	160	1,468.0	300
S-4 2'	03/23/17	Trench	<0.00150	<0.00200	<0.00200	<0.00200	<0.00301	<0.00301	25.4	1,930	227	2,182.4	445
S-5 6"	03/23/17	Trench	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	<9.47
S-5 1'	03/22/17	Trench	<0.00147	<0.00196	<0.00196	<0.00196	<0.00295	<0.00295	<15.0	18.9	<15.0	18.9	<9.96
S-6 6"	03/23/17	Trench	<0.00146	<0.00195	<0.00195	<0.00195	<0.00292	<0.00292	<14.9	889	292	1,181	<9.98
S-6 1'	03/23/17	Trench	<0.00148	<0.00198	<0.00198	<0.00198	<0.00296	<0.00296	<15.0	120	81.0	201.0	<10.0
S-7 6"	03/23/17	Trench	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	59.0	50.6	109.6	<10.0
S-7 1'	03/23/17	Trench	<0.00148	<0.00197	<0.00197	<0.00197	<0.00296	<0.00296	<15.0	<15.0	<15.0	<15.0	<10.0
NS-1 1'	03/23/17	Trench	<0.00147	<0.00196	<0.00196	<0.00196	<0.00295	<0.00295	<15.0	<15.0	15.0	15.0	62.5
SS-1 1'	03/23/17	Trench	<0.00147	<0.00196	<0.00196	<0.00196	<0.00294	<0.00294	<15.0	<15.0	<15.0	<15.0	61.2
NS-2 1'	03/23/17	Trench	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	47.0
SS-2 1'	03/23/17	Trench	<0.00151	<0.00201	<0.00201	<0.00201	<0.00301	<0.00301	<15.0	<15.0	<15.0	<15.0	50.4

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

ETC FIELD SERVICES, LLC
A14 COMPRESSOR STATION BELOW GROUND SUMP
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
WS-3 1'	03/23/17	Trench	<0.00150	<0.00200	<0.00200	<0.00200	<0.00301	<0.00301	<15.0	<15.0	<15.0	<15.0	62.7
ES-3 1'	03/23/17	Trench	<0.00148	<0.00197	<0.00197	<0.00197	<0.00296	<0.00296	<15.0	<15.0	<15.0	<15.0	<9.82
NS-4 1'	03/23/17	Trench	<0.00255	<0.00340	<0.00340	<0.00340	<0.00510	<0.00510	<15.0	258	45.0	303.0	34.8
SS-4 1'	03/23/17	Trench	<0.00148	<0.00198	<0.00198	<0.00198	<0.00296	<0.00296	<15.0	<15.0	<15.0	<15.0	261
NS-5 1'	03/23/17	Trench	<0.00150	<0.00200	<0.00200	<0.00200	<0.00301	<0.00301	<15.0	351	29.5	380.5	103
BG-1 1'	03/23/17	Trench	<0.00151	<0.00201	<0.00201	<0.00301	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<9.96
BH-1 @ 8"	05/23/17	In-Situ	<0.00353	<0.00353	<0.00353	<0.00707	<0.00353	<0.00707	<15.0	203	303	506	8.06
BH-6 6"	06/15/17	In-Situ	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<15.0	97.1	63.2	160.3	8.45
BH-7 6"	06/15/17	In-Situ	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	<0.00399	<15.0	109	122	231	5.85
BH-2 6"	06/15/17	In-Situ	<0.00198	<0.00198	<0.00198	<0.00397	<0.00198	<0.00397	<15.0	<15.0	<15.0	<15.0	32.4
BH-3 2'	06/19/17	In-Situ	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<15.0	53.3	64.7	118	48.9
ESW-1 1'	06/19/17	In-Situ	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	<0.00399	<15.0	25.8	<15.0	25.8	36.3
WSW-1 1'	06/19/17	In-Situ	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<15.0	255	66.2	321.2	165.0
BH-5 6"	06/19/17	In-Situ	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<14.9	<14.9	<14.9	<14.9	20.0
BH-4 2'	06/20/17	In-Situ	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<15.0	<15.0	<15.0	<15.0	65.3
NSW-1 1'	06/20/17	In-Situ	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<15.0	<15.0	<15.0	<15.0	39.7
ESW-2 1'	06/20/17	In-Situ	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<15.0	<15.0	<15.0	<15.0	64.6
SSW-1 1'	06/20/17	In-Situ	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	<0.00399	<15.0	<15.0	<15.0	<15.0	146
NSW-2 1'	06/20/17	In-Situ	<0.00202	<0.00202	<0.00202	<0.00403	<0.00202	<0.00403	<15.0	<15.0	<15.0	<15.0	9.95

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

ETC FIELD SERVICES, LLC
A14 COMPRESSOR STATION BELOW GROUND SUMP
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
WSW-2 1'	06/20/17	In-Situ	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<15.0	<15.0	<15.0	<15.0	16.7
Hydrovac Solids	05/23/17	In-Situ	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<15.0	187	265	452	52.5

Photographic Documentation

Client: ETC Field Services, LLC

Prepared by: TRC Environmental Corp.

Project Name: A-14 Compressor Station Below Ground Sump **Location:** Lea County, NM

Photograph No. 1

Date:
February 23, 2017

Direction:
Northeast

Description:
View of impacted area and below ground tank (sump) release point.



Photograph No. 2

Date:
February 23, 2017

Direction:
Northeast

Description:
View of impacted area. Sump is located toward the upper right of photo.



Photographic Documentation

Client: ETC Field Services, LLC

Prepared by: TRC Environmental Corp.

Project Name: A-14 Compressor Station Below Ground Sump Location: Lea County, NM

Photograph No. 3

Date:
March 23, 2017

Direction:
East

Description:
View of hydro-vac
trenches utilized to
locate
underground
equipment.



Photograph No. 4

Date:
March 23, 2017

Direction:
Southwest

Description:
View of hydro-vac
trenches utilized to
locate
underground
equipment.



Photographic Documentation

Client: ETC Field Services, LLC

Prepared by: TRC Environmental Corp.

Project Name: A-14 Compressor Station Below Ground Sump **Location:** Lea County, NM

Photograph No. 5

Date:
March 23, 2017

Direction:
East

Description:
View of hydro-vac
trenches utilized to
locate
underground
equipment.



Photograph No. 6

Date:
March 23, 2017

Direction:
Southwest

Description:
View of hydro-vac
trenches utilized to
locate
underground
equipment.



Photographic Documentation

Client: ETC Field Services, LLC

Prepared by: TRC Environmental Corp.

Project Name: A-14 Compressor Station Below Ground Sump **Location:** Lea County, NM

Photograph No. 7

Date:
June 20, 2017

Direction:
West

Description:
View of excavated
area.



Photograph No. 8

Date:
June 20, 2017

Direction:
South

Description:
View of excavated
area.



Photographic Documentation

Client: ETC Field Services, LLC

Prepared by: TRC Environmental Corp.

Project Name: A-14 Compressor Station Below Ground Sump **Location:** Lea County, NM

Photograph No. 9

Date:
June 20, 2017

Direction:
Southwest

Description:
View of excavated
area.



Photograph No. 10

Date:
June 20, 2017

Direction:
South

Description:
View of excavated
area.



Analytical Report 549416

for
TRC Solutions, Inc

Project Manager: Nikki Green

A14 Compressor Station Sump

TRC# 273818

05-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)



05-APR-17

Project Manager: **Nikki Green**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **549416**

A14 Compressor Station Sump

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) 549416. 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. 549416 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

TRC Solutions, Inc, Midland, TX

A14 Compressor Station Sump

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-1 6"	S	03-22-17 13:00	- 6 In	549416-001
S-1 1'	S	03-22-17 13:05	- 1 ft	549416-002
S-2 6"	S	03-22-17 13:15	- 6 In	549416-003
S-2 1'	S	03-22-17 13:20	- 1 ft	549416-004
S-3 6"	S	03-22-17 13:35	- 6 In	549416-005
S-3 1'	S	03-22-17 13:40	- 1 ft	549416-006
S-4 6"	S	03-22-17 15:30	- 6 In	549416-007
S-4 1'	S	03-22-17 15:35	- 1 ft	549416-008
S-5 1'	S	03-22-17 15:55	- 1 ft	549416-009
S-6 6"	S	03-23-17 09:30	- 6 In	549416-010
S-6 1'	S	03-23-17 09:45	- 1 ft	549416-011
S-7 6"	S	03-23-17 09:50	- 6 In	549416-012
S-7 1'	S	03-23-17 10:05	- 1 ft	549416-013
NS-1 1'	S	03-23-17 10:10	- 1 ft	549416-014
SS-1 1'	S	03-23-17 10:20	- 1 ft	549416-015
NS-2 1'	S	03-23-17 11:00	- 1 ft	549416-016
SS-2 1'	S	03-23-17 11:15	- 1 ft	549416-017
S-3 16"	S	03-23-17 11:20	- 16 In	549416-018
S-3 22"	S	03-23-17 11:28	- 22 In	549416-019
WS-3 1'	S	03-23-17 11:39	- 1 ft	549416-020
ES-3 1'	S	03-23-17 11:42	- 1 ft	549416-021
S-4 21"	S	03-23-17 11:45	- 1 ft	549416-022
S-4 2'	S	03-23-17 11:50	- 2 ft	549416-023
NS-4 1'	S	03-23-17 13:00	- 1 ft	549416-024
SS-4 1'	S	03-23-17 13:10	- 1 ft	549416-025
NS-5 1'	S	03-23-17 13:20	- 1 ft	549416-026
S-5 6"	S	03-22-17 15:50	- 6 In	549416-027



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: A14 Compressor Station Sump

Project ID: TRC# 273818
Work Order Number(s): 549416

Report Date: 05-APR-17
Date Received: 03/24/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3013449 BTEX by EPA 8021B

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

Batch: LBA-3013451 BTEX by EPA 8021B

Lab Sample ID 549416-002 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). m_p-Xylenes recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 549416-002, -003, -004, -010.

The Laboratory Control Sample for m_p-Xylenes is within laboratory Control Limits, therefore the data was accepted.

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

Batch: LBA-3013527 BTEX by EPA 8021B

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

Batch: LBA-3013589 BTEX by EPA 8021B

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

Lab Sample ID 549416-026 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). m_p-Xylenes recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 549416-025, -026, -027.

The Laboratory Control Sample for m_p-Xylenes is within laboratory Control Limits, therefore the data was accepted.

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 549416

TRC Solutions, Inc, Midland, TX

Project Name: A14 Compressor Station Sump



Project Id: TRC# 273818
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-24-17 02:55 pm
Report Date: 05-APR-17
Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	549416-001	549416-002	549416-003	549416-004	549416-005	549416-006
	<i>Field Id:</i>	S-1 6"	S-1 1'	S-2 6"	S-2 1'	S-3 6"	S-3 1'
	<i>Depth:</i>	6 In	1 ft	6 In	1 ft	6 In	1 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-22-17 13:00	Mar-22-17 13:05	Mar-22-17 13:15	Mar-22-17 13:20	Mar-22-17 13:35	Mar-22-17 13:40
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-27-17 08:00	Mar-27-17 16:40	Mar-27-17 16:40	Mar-27-17 16:40	Mar-28-17 08:00	Mar-28-17 08:00
	<i>Analyzed:</i>	Mar-27-17 08:55	Mar-27-17 21:58	Mar-27-17 22:14	Mar-28-17 01:13	Mar-28-17 09:29	Mar-28-17 09:46
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.00148	ND 0.00146	ND 0.00146	ND 0.00148	ND 0.00147	ND 0.00147
Toluene		ND 0.00198	ND 0.00194	ND 0.00195	ND 0.00197	ND 0.00196	ND 0.00196
Ethylbenzene		ND 0.00198	ND 0.00194	ND 0.00195	ND 0.00197	ND 0.00196	ND 0.00196
m_p-Xylenes		ND 0.00198	ND 0.00194	ND 0.00195	ND 0.00197	ND 0.00196	ND 0.00196
o-Xylene		ND 0.00296	ND 0.00291	ND 0.00292	ND 0.00296	ND 0.00294	ND 0.00294
Total Xylenes		ND 0.00198	ND 0.00194	ND 0.00195	ND 0.00197	ND 0.00196	ND 0.00196
Total BTEX		ND 0.00148	ND 0.00146	ND 0.00146	ND 0.00148	ND 0.00147	ND 0.00147
Chloride by EPA 300 SUB: TX104704215	<i>Extracted:</i>	Apr-01-17 12:04	Apr-01-17 12:04	Apr-01-17 12:04	Apr-01-17 12:04	Apr-01-17 12:04	Apr-01-17 12:04
	<i>Analyzed:</i>	Apr-01-17 22:01	Apr-01-17 22:10	Apr-01-17 22:38	Apr-01-17 22:47	Apr-01-17 23:15	Apr-01-17 23:25
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		92.7 9.69	38.8 9.88	ND 9.92	ND 9.94	108 9.98	119 10.0
TPH By SW8015 Mod	<i>Extracted:</i>	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 16:00
	<i>Analyzed:</i>	Mar-25-17 00:20	Mar-25-17 01:37	Mar-25-17 02:02	Mar-25-17 02:29	Mar-25-17 02:57	Mar-25-17 03:24
	<i>Units/RL:</i>	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	72.8 15.0	445 74.9
C10-C28 Diesel Range Organics		79.9 15.0	ND 15.0	80.5 15.0	179 15.0	1500 15.0	4030 74.9
C28-C35 Oil Range Hydrocarbons		62.3 15.0	ND 15.0	70.1 15.0	243 15.0	512 15.0	972 74.9
Total TPH		142 15.0	ND 15.0	151 15.0	422 15.0	2080 15.0	5450 74.9

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

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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 549416

TRC Solutions, Inc, Midland, TX



Project Name: A14 Compressor Station Sump

Project Id: TRC# 273818
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-24-17 02:55 pm
Report Date: 05-APR-17
Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	549416-007	549416-008	549416-009	549416-010	549416-011	549416-012
	<i>Field Id:</i>	S-4 6"	S-4 1'	S-5 1'	S-6 6"	S-6 1'	S-7 6"
	<i>Depth:</i>	6 In	1 ft	1 ft	6 In	1 ft	6 In
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-22-17 15:30	Mar-22-17 15:35	Mar-22-17 15:55	Mar-23-17 09:30	Mar-23-17 09:45	Mar-23-17 09:50
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-28-17 08:00	Mar-28-17 08:00	Mar-28-17 08:00	Mar-27-17 16:40	Mar-28-17 08:00	Mar-28-17 08:00
	<i>Analyzed:</i>	Mar-28-17 10:02	Mar-28-17 10:19	Mar-28-17 10:35	Mar-28-17 06:14	Mar-28-17 10:51	Mar-28-17 11:08
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.00146	ND 0.00146	ND 0.00147	ND 0.00146	ND 0.00148	ND 0.00149
Toluene		ND 0.00195	ND 0.00195	ND 0.00196	ND 0.00195	ND 0.00198	ND 0.00199
Ethylbenzene		ND 0.00195	ND 0.00195	ND 0.00196	ND 0.00195	ND 0.00198	ND 0.00199
m_p-Xylenes		ND 0.00195	ND 0.00195	ND 0.00196	ND 0.00195	ND 0.00198	ND 0.00199
o-Xylene		ND 0.00293	ND 0.00292	ND 0.00295	ND 0.00292	ND 0.00296	ND 0.00298
Total Xylenes		ND 0.00195	ND 0.00195	ND 0.00196	ND 0.00195	ND 0.00198	ND 0.00199
Total BTEX		ND 0.00146	ND 0.00146	ND 0.00147	ND 0.00146	ND 0.00148	ND 0.00149
Chloride by EPA 300 SUB: TX104704215	<i>Extracted:</i>	Apr-01-17 12:04	Apr-01-17 12:04	Apr-01-17 12:04	Apr-01-17 12:04	Apr-01-17 12:04	Apr-03-17 18:00
	<i>Analyzed:</i>	Apr-01-17 23:34	Apr-01-17 23:44	Apr-01-17 23:53	Apr-02-17 00:02	Apr-02-17 00:12	Apr-03-17 23:24
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		3120 D 98.8	794 9.82	ND 9.96	ND 9.98	ND 10.0	ND 10.0
TPH By SW8015 Mod	<i>Extracted:</i>	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 16:00
	<i>Analyzed:</i>	Mar-25-17 03:50	Mar-26-17 06:11	Mar-25-17 04:43	Mar-26-17 06:31	Mar-25-17 12:48	Mar-25-17 13:10
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		771 74.9	84.2 14.9	ND 15.0	ND 14.9	ND 15.0	ND 15.0
C10-C28 Diesel Range Organics		15100 74.9	3630 14.9	18.9 15.0	889 14.9	120 15.0	59.0 15.0
C28-C35 Oil Range Hydrocarbons		1660 74.9	452 14.9	ND 15.0	292 14.9	81.0 15.0	50.6 15.0
Total TPH		17500 74.9	4170 14.9	18.9 15.0	1180 14.9	201 15.0	110 15.0

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

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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 549416

TRC Solutions, Inc, Midland, TX



Project Name: A14 Compressor Station Sump

Project Id: TRC# 273818
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-24-17 02:55 pm
Report Date: 05-APR-17
Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	549416-013	549416-014	549416-015	549416-016	549416-017	549416-018
	<i>Field Id:</i>	S-7 1'	NS-1 1'	SS-1 1'	NS-2 1'	SS-2 1'	S-3 16"
	<i>Depth:</i>	1 ft	1 ft	1 ft	1 ft	1 ft	16 In
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-23-17 10:05	Mar-23-17 10:10	Mar-23-17 10:20	Mar-23-17 11:00	Mar-23-17 11:15	Mar-23-17 11:20
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-28-17 08:00	Mar-28-17 08:00	Mar-28-17 08:00	Mar-28-17 08:00	Mar-28-17 08:00	Mar-28-17 08:00
	<i>Analyzed:</i>	Mar-28-17 09:14	Mar-28-17 11:23	Mar-28-17 11:40	Mar-28-17 13:35	Mar-28-17 13:52	Mar-28-17 14:08
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.00148	ND 0.00147	ND 0.00147	ND 0.00149	ND 0.00151	ND 0.00148
Toluene		ND 0.00197	ND 0.00196	ND 0.00196	ND 0.00199	ND 0.00201	ND 0.00198
Ethylbenzene		ND 0.00197	ND 0.00196	ND 0.00196	ND 0.00199	ND 0.00201	ND 0.00198
m_p-Xylenes		ND 0.00197	ND 0.00196	ND 0.00196	ND 0.00199	ND 0.00201	ND 0.00198
o-Xylene		ND 0.00296	ND 0.00295	ND 0.00294	ND 0.00298	ND 0.00301	ND 0.00296
Total Xylenes		ND 0.00197	ND 0.00196	ND 0.00196	ND 0.00199	ND 0.00201	ND 0.00198
Total BTEX		ND 0.00148	ND 0.00147	ND 0.00147	ND 0.00149	ND 0.00151	ND 0.00148
Chloride by EPA 300 SUB: TX104704215	<i>Extracted:</i>	Apr-03-17 18:00	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
	<i>Analyzed:</i>	Apr-03-17 23:33	Apr-02-17 02:13	Apr-02-17 02:41	Apr-02-17 02:51	Apr-02-17 03:00	Apr-02-17 03:09
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		ND 10.0	62.5 9.98	61.2 9.88	47.0 9.84	50.4 9.98	145 10.0
TPH By SW8015 Mod	<i>Extracted:</i>	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 16:00
	<i>Analyzed:</i>	Mar-26-17 06:50	Mar-25-17 13:52	Mar-25-17 14:13	Mar-25-17 14:33	Mar-25-17 14:54	Mar-25-17 15:14
	<i>Units/RL:</i>	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 15.0	281 74.7
C10-C28 Diesel Range Organics		ND 15.0	ND 15.0	ND 15.0	ND 15.0	ND 15.0	2810 74.7
C28-C35 Oil Range Hydrocarbons		ND 15.0	15.0 15.0	ND 15.0	ND 15.0	ND 15.0	953 74.7
Total TPH		ND 15.0	15.0 15.0	ND 15.0	ND 15.0	ND 15.0	4040 74.7

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

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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 549416

TRC Solutions, Inc, Midland, TX



Project Name: A14 Compressor Station Sump

Project Id: TRC# 273818
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-24-17 02:55 pm
Report Date: 05-APR-17
Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	549416-019	549416-020	549416-021	549416-022	549416-023	549416-024
	<i>Field Id:</i>	S-3 22"	WS-3 1'	ES-3 1'	S-4 21"	S-4 2'	NS-4 1'
	<i>Depth:</i>	22 In	1 ft	1 ft	1 ft	2 ft	1 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-23-17 11:28	Mar-23-17 11:39	Mar-23-17 11:42	Mar-23-17 11:45	Mar-23-17 11:50	Mar-23-17 13:00
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-28-17 08:00	Mar-28-17 08:00	Mar-28-17 08:00	Mar-28-17 08:00	Mar-28-17 08:00	Mar-28-17 16:50
	<i>Analyzed:</i>	Mar-28-17 14:25	Mar-28-17 14:41	Mar-28-17 14:57	Mar-28-17 15:21	Mar-28-17 15:37	Mar-29-17 07:08
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.00152	ND 0.00150	ND 0.00148	ND 0.00149	ND 0.00150	ND 0.00255
Toluene		ND 0.00202	ND 0.00200	ND 0.00197	ND 0.00198	ND 0.00200	ND 0.00340
Ethylbenzene		ND 0.00202	ND 0.00200	ND 0.00197	ND 0.00198	ND 0.00200	ND 0.00340
m_p-Xylenes		0.00322 0.00202	ND 0.00200	ND 0.00197	ND 0.00198	ND 0.00200	ND 0.00340
o-Xylene		ND 0.00303	ND 0.00301	ND 0.00296	ND 0.00298	ND 0.00301	ND 0.00510
Total Xylenes		0.00322 0.00202	ND 0.00200	ND 0.00197	ND 0.00198	ND 0.00200	ND 0.00340
Total BTEX		0.00322 0.00152	ND 0.00150	ND 0.00148	ND 0.00149	ND 0.00150	ND 0.00255
Chloride by EPA 300 SUB: TX104704215	<i>Extracted:</i>	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
	<i>Analyzed:</i>	Apr-02-17 03:37	Apr-02-17 03:47	Apr-02-17 03:56	Apr-02-17 04:05	Apr-02-17 04:15	Apr-02-17 04:24
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		111 9.62	62.7 9.65	ND 9.82	300 9.73	445 9.98	34.8 9.88
TPH By SW8015 Mod	<i>Extracted:</i>	Mar-24-17 16:00	Mar-24-17 16:00	Mar-24-17 17:00	Mar-24-17 17:00	Mar-24-17 17:00	Mar-24-17 17:00
	<i>Analyzed:</i>	Mar-25-17 15:35	Mar-25-17 15:57	Mar-26-17 03:23	Mar-26-17 03:43	Mar-27-17 06:44	Mar-26-17 04:27
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		296 74.7	ND 15.0	ND 15.0	18.0 15.0	25.4 15.0	ND 15.0
C10-C28 Diesel Range Organics		1820 74.7	ND 15.0	ND 15.0	1290 15.0	1930 15.0	258 15.0
C28-C35 Oil Range Hydrocarbons		229 74.7	ND 15.0	ND 15.0	160 15.0	227 15.0	45.0 15.0
Total TPH		2350 74.7	ND 15.0	ND 15.0	1470 15.0	2180 15.0	303 15.0

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

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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 549416

TRC Solutions, Inc, Midland, TX

Project Name: A14 Compressor Station Sump



Project Id: TRC# 273818
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-24-17 02:55 pm
Report Date: 05-APR-17
Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	549416-025	549416-026	549416-027			
	Field Id:	SS-4 1'	NS-5 1'	S-5 6"			
	Depth:	1 ft	1 ft	6 In			
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	Mar-23-17 13:10	Mar-23-17 13:20	Mar-22-17 15:50			
BTEX by EPA 8021B	Extracted:	Mar-28-17 15:30	Mar-28-17 15:30	Mar-28-17 15:30			
	Analyzed:	Mar-28-17 23:47	Mar-28-17 18:05	Mar-28-17 18:22			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		ND 0.00148	ND 0.00150	ND 0.00149			
Toluene		ND 0.00198	ND 0.00200	ND 0.00199			
Ethylbenzene		ND 0.00198	ND 0.00200	ND 0.00199			
m_p-Xylenes		ND 0.00198	ND 0.00200	ND 0.00199			
o-Xylene		ND 0.00296	ND 0.00301	ND 0.00298			
Total Xylenes		ND 0.00198	ND 0.00200	ND 0.00199			
Total BTEX		ND 0.00148	ND 0.00150	ND 0.00149			
Chloride by EPA 300 SUB: TX104704215	Extracted:	Apr-01-17 13:54	Apr-01-17 13:54	Apr-01-17 13:54			
	Analyzed:	Apr-02-17 04:52	Apr-02-17 05:01	Apr-02-17 05:29			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		261 9.65	103 9.58	ND 9.47			
TPH By SW8015 Mod	Extracted:	Mar-24-17 17:00	Mar-24-17 17:00	Mar-24-17 17:00			
	Analyzed:	Mar-26-17 04:47	Mar-26-17 05:07	Mar-26-17 05:29			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
C6-C10 Gasoline Range Hydrocarbons		ND 15.0	ND 15.0	ND 15.0			
C10-C28 Diesel Range Organics		ND 15.0	351 15.0	ND 15.0			
C28-C35 Oil Range Hydrocarbons		ND 15.0	29.5 15.0	ND 15.0			
Total TPH		ND 15.0	381 15.0	ND 15.0			

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

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

Kelsey Brooks
Project Manager

- 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

4147 Greenbriar Dr, Stafford, TX 77477
 9701 Harry Hines Blvd , Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 1211 W Florida Ave, Midland, TX 79701
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Sump

Work Orders : 549416,

Lab Batch #: 3013499

Sample: 549416-001 / SMP

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 00:20

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	99.9	93	70-135	
o-Terphenyl	48.0	50.0	96	70-135	

Lab Batch #: 3013499

Sample: 549416-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 01:37

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.5	99.8	93	70-135	
o-Terphenyl	47.0	49.9	94	70-135	

Lab Batch #: 3013499

Sample: 549416-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 02:02

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.7	103	70-135	
o-Terphenyl	51.4	49.9	103	70-135	

Lab Batch #: 3013499

Sample: 549416-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 02:29

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	50.6	50.0	101	70-135	

Lab Batch #: 3013499

Sample: 549416-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 02:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.1	99.8	90	70-135	
o-Terphenyl	45.3	49.9	91	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 Sump

Work Orders : 549416,

Lab Batch #: 3013499

Sample: 549416-006 / SMP

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 03:24

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.2	99.8	99	70-135	
o-Terphenyl	51.2	49.9	103	70-135	

Lab Batch #: 3013499

Sample: 549416-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 03:50

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.5	99.8	99	70-135	
o-Terphenyl	45.8	49.9	92	70-135	

Lab Batch #: 3013499

Sample: 549416-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 04:43

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.6	99.7	95	70-135	
o-Terphenyl	48.2	49.9	97	70-135	

Lab Batch #: 3013499

Sample: 549416-011 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 12:48

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.7	99.9	97	70-135	
o-Terphenyl	49.7	50.0	99	70-135	

Lab Batch #: 3013499

Sample: 549416-012 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 13:10

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.3	99.8	91	70-135	
o-Terphenyl	46.9	49.9	94	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Sump

Work Orders : 549416,

Lab Batch #: 3013499

Sample: 549416-014 / SMP

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 13:52

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.7	105	70-135	
o-Terphenyl	53.1	49.9	106	70-135	

Lab Batch #: 3013499

Sample: 549416-015 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 14:13

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.9	102	70-135	
o-Terphenyl	51.8	50.0	104	70-135	

Lab Batch #: 3013499

Sample: 549416-016 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 14:33

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.8	99.8	89	70-135	
o-Terphenyl	45.5	49.9	91	70-135	

Lab Batch #: 3013499

Sample: 549416-017 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 14:54

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	99.8	88	70-135	
o-Terphenyl	44.8	49.9	90	70-135	

Lab Batch #: 3013499

Sample: 549416-018 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 15:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.7	99.6	92	70-135	
o-Terphenyl	45.5	49.8	91	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 Sump

Work Orders : 549416,

Lab Batch #: 3013499

Sample: 549416-019 / SMP

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 15:35

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.7	99.6	92	70-135	
o-Terphenyl	46.2	49.8	93	70-135	

Lab Batch #: 3013499

Sample: 549416-020 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 15:57

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	49.7	49.9	100	70-135	

Lab Batch #: 3013501

Sample: 549416-021 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 03:23

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.4	99.8	90	70-135	
o-Terphenyl	46.2	49.9	93	70-135	

Lab Batch #: 3013501

Sample: 549416-022 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 03:43

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.9	99.7	97	70-135	
o-Terphenyl	40.5	49.9	81	70-135	

Lab Batch #: 3013501

Sample: 549416-024 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 04:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.8	99.9	86	70-135	
o-Terphenyl	44.0	50.0	88	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 Sump

Work Orders : 549416,

Lab Batch #: 3013501

Sample: 549416-025 / SMP

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 04:47

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	89.3	100	89	70-135	
o-Terphenyl	46.1	50.0	92	70-135	

Lab Batch #: 3013501

Sample: 549416-026 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 05:07

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	92.7	99.8	93	70-135	
o-Terphenyl	44.0	49.9	88	70-135	

Lab Batch #: 3013501

Sample: 549416-027 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 05:29

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	85.0	99.8	85	70-135	
o-Terphenyl	43.0	49.9	86	70-135	

Lab Batch #: 3013499

Sample: 549416-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 06:11

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	96.4	99.6	97	70-135	
o-Terphenyl	40.0	49.8	80	70-135	

Lab Batch #: 3013499

Sample: 549416-010 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 06:31

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	94.2	99.6	95	70-135	
o-Terphenyl	42.9	49.8	86	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 Sump

Work Orders : 549416,

Lab Batch #: 3013499

Sample: 549416-013 / SMP

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 06:50

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	51.8	50.0	104	70-135	

Lab Batch #: 3013501

Sample: 549416-023 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/27/17 06:44

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.7	101	70-135	
o-Terphenyl	43.2	49.9	87	70-135	

Lab Batch #: 3013449

Sample: 549416-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/27/17 08:55

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	0.0297	0.0300	99	80-120	

Lab Batch #: 3013451

Sample: 549416-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/27/17 21:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0349	0.0300	116	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 3013451

Sample: 549416-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/27/17 22:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0338	0.0300	113	80-120	
4-Bromofluorobenzene	0.0342	0.0300	114	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Sump

Work Orders : 549416,

Lab Batch #: 3013451

Sample: 549416-004 / SMP

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 01:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0332	0.0300	111	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 3013451

Sample: 549416-010 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 06:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 3013527

Sample: 549416-013 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 09:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 3013527

Sample: 549416-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 09:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 3013527

Sample: 549416-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 09:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0256	0.0300	85	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 Sump

Work Orders : 549416,

Lab Batch #: 3013527

Sample: 549416-007 / SMP

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 10:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0354	0.0300	118	80-120	
4-Bromofluorobenzene	0.0247	0.0300	82	80-120	

Lab Batch #: 3013527

Sample: 549416-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 10:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 3013527

Sample: 549416-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 10:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0327	0.0300	109	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 3013527

Sample: 549416-011 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 10:51

SURROGATE RECOVERY STUDY

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

Lab Batch #: 3013527

Sample: 549416-012 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 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	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	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 Sump

Work Orders : 549416,

Lab Batch #: 3013527

Sample: 549416-014 / SMP

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 11:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 3013527

Sample: 549416-015 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 11:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 3013527

Sample: 549416-016 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 13:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 3013527

Sample: 549416-017 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 13:52

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	0.0278	0.0300	93	80-120	

Lab Batch #: 3013527

Sample: 549416-018 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 14:08

SURROGATE RECOVERY STUDY

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



Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Sump

Work Orders : 549416,

Lab Batch #: 3013527

Sample: 549416-019 / SMP

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 14:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0243	0.0300	81	80-120	

Lab Batch #: 3013527

Sample: 549416-020 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 14:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0241	0.0300	80	80-120	

Lab Batch #: 3013527

Sample: 549416-021 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 14:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 3013527

Sample: 549416-022 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 15:21

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0350	0.0300	117	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 3013527

Sample: 549416-023 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 15:37

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	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 Sump

Work Orders : 549416,

Lab Batch #: 3013589

Sample: 549416-026 / SMP

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 18:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 3013589

Sample: 549416-027 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 18:22

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 3013589

Sample: 549416-025 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 23:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0326	0.0300	109	80-120	
4-Bromofluorobenzene	0.0254	0.0300	85	80-120	

Lab Batch #: 3013602

Sample: 549416-024 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/29/17 07:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0343	0.0300	114	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 3013499

Sample: 722212-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/24/17 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	94.8	100	95	70-135	
o-Terphenyl	49.0	50.0	98	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 Sump

Work Orders : 549416,

Lab Batch #: 3013501

Sample: 722214-1-BLK / BLK

Project ID: TRC# 273818

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/26/17 01:18

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	52.7	50.0	105	70-135	

Lab Batch #: 3013449

Sample: 722180-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/27/17 08:39

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0355	0.0300	118	80-120	
4-Bromofluorobenzene	0.0341	0.0300	114	80-120	

Lab Batch #: 3013527

Sample: 722233-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/27/17 08:39

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0355	0.0300	118	80-120	
4-Bromofluorobenzene	0.0341	0.0300	114	80-120	

Lab Batch #: 3013451

Sample: 722182-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/27/17 21:41

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0332	0.0300	111	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

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	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0341	0.0300	114	80-120	
4-Bromofluorobenzene	0.0272	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 Sump

Work Orders : 549416,

Lab Batch #: 3013602

Sample: 722269-1-BLK / BLK

Project ID: TRC# 273818

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/29/17 01:42

SURROGATE RECOVERY STUDY

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

Lab Batch #: 3013499

Sample: 722212-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/24/17 23:06

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	55.2	50.0	110	70-135	

Lab Batch #: 3013501

Sample: 722214-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/26/17 01:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	92.4	100	92	70-135	
o-Terphenyl	46.3	50.0	93	70-135	

Lab Batch #: 3013449

Sample: 722180-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/27/17 07:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 3013527

Sample: 722233-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/27/17 07:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Sump

Work Orders : 549416,

Lab Batch #: 3013451

Sample: 722182-1-BKS / BKS

Project ID: TRC# 273818

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/27/17 20:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0339	0.0300	113	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

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	

Lab Batch #: 3013499

Sample: 722212-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/24/17 23:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	100	117	70-135	
o-Terphenyl	55.7	50.0	111	70-135	

Lab Batch #: 3013501

Sample: 722214-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/26/17 02:00

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	50.8	50.0	102	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Sump

Work Orders : 549416,

Lab Batch #: 3013449

Sample: 722180-1-BSD / BSD

Project ID: TRC# 273818

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/27/17 07:33

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	80-120	

Lab Batch #: 3013527

Sample: 722233-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/27/17 07:33

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	80-120	

Lab Batch #: 3013451

Sample: 722182-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/27/17 20:35

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0347	0.0300	116	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

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

Work Orders : 549416,

Lab Batch #: 3013499

Sample: 549416-001 S / MS

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 00:44

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.9	103	70-135	
o-Terphenyl	47.5	50.0	95	70-135	

Lab Batch #: 3013501

Sample: 549418-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 02:41

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.5	99.9	97	70-135	
o-Terphenyl	48.2	50.0	96	70-135	

Lab Batch #: 3013449

Sample: 549416-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/27/17 07:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 3013451

Sample: 549416-002 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/27/17 20:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0357	0.0300	119	80-120	
4-Bromofluorobenzene	0.0351	0.0300	117	80-120	

Lab Batch #: 3013527

Sample: 549416-013 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 08:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station Sump

Work Orders : 549416,

Lab Batch #: 3013589

Sample: 549416-026 S / MS

Project ID: TRC# 273818

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	

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 #: 3013499

Sample: 549416-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/25/17 01:10

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.3	99.7	99	70-135	
o-Terphenyl	46.2	49.9	93	70-135	

Lab Batch #: 3013501

Sample: 549418-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 03:03

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.0	99.9	89	70-135	
o-Terphenyl	43.7	50.0	87	70-135	

Lab Batch #: 3013449

Sample: 549416-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/27/17 08:06

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0350	0.0300	117	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	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 Sump

Work Orders : 549416,

Lab Batch #: 3013451

Sample: 549416-002 SD / MSD

Project ID: TRC# 273818

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/27/17 21:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0358	0.0300	119	80-120	
4-Bromofluorobenzene	0.0338	0.0300	113	80-120	

Lab Batch #: 3013527

Sample: 549416-013 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/28/17 08:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0339	0.0300	113	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

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 Sump

Work Order #: 549416

Project ID: TRC# 273818

Analyst: ALJ

Date Prepared: 03/27/2017

Date Analyzed: 03/27/2017

Lab Batch ID: 3013449

Sample: 722180-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.00150	0.0998	0.0829	83	0.100	0.0801	80	3	70-130	35	
Toluene	<0.00200	0.0998	0.0936	94	0.100	0.0851	85	10	70-130	35	
Ethylbenzene	<0.00200	0.0998	0.0919	92	0.100	0.0876	88	5	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.178	89	0.201	0.173	86	3	70-135	35	
o-Xylene	<0.00299	0.0998	0.0940	94	0.100	0.0892	89	5	71-133	35	

Analyst: ALJ

Date Prepared: 03/27/2017

Date Analyzed: 03/27/2017

Lab Batch ID: 3013451

Sample: 722182-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.00150	0.0998	0.0802	80	0.0992	0.0878	89	9	70-130	35	
Toluene	<0.00200	0.0998	0.0850	85	0.0992	0.0947	95	11	70-130	35	
Ethylbenzene	<0.00200	0.0998	0.0833	83	0.0992	0.0958	97	14	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.161	81	0.198	0.186	94	14	70-135	35	
o-Xylene	<0.00299	0.0998	0.0845	85	0.0992	0.0966	97	13	71-133	35	

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

Blank Spike Recovery [D] = $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



Project Name: A14 Compressor Station Sump

Work Order #: 549416

Project ID: TRC# 273818

Analyst: ALJ

Date Prepared: 03/28/2017

Date Analyzed: 03/27/2017

Lab Batch ID: 3013527

Sample: 722233-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.00150	0.0998	0.0829	83	0.100	0.0799	80	4	70-130	35	
Toluene	<0.00200	0.0998	0.0936	94	0.100	0.0849	85	10	70-130	35	
Ethylbenzene	<0.00200	0.0998	0.0919	92	0.100	0.0875	88	5	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.178	89	0.200	0.173	87	3	70-135	35	
o-Xylene	<0.00299	0.0998	0.0940	94	0.100	0.0890	89	5	71-133	35	

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	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.00150	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	

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 Sump

Work Order #: 549416

Project ID: TRC# 273818

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	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.00149	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	

Analyst: ALA

Date Prepared: 04/01/2017

Date Analyzed: 04/01/2017

Lab Batch ID: 3013911

Sample: 722455-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<1.00	10.0	9.91	99	10.0	10.0	100	1	80-120	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 Sump

Work Order #: 549416

Project ID: TRC# 273818

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

Analyst: ALA

Date Prepared: 04/03/2017

Date Analyzed: 04/03/2017

Lab Batch ID: 3014002

Sample: 722515-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<2.00	20.0	20.2	101	20.0	19.8	99	2	80-120	20	

Analyst: ARM

Date Prepared: 03/24/2017

Date Analyzed: 03/24/2017

Lab Batch ID: 3013499

Sample: 722212-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	1070	107	1000	1150	115	7	70-135	35	
C10-C28 Diesel Range Organics	<15.0	1000	1060	106	1000	1130	113	6	70-135	35	

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

Blank Spike Recovery [D] = $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



Project Name: A14 Compressor Station Sump

Work Order #: 549416

Project ID: TRC# 273818

Analyst: ARM

Date Prepared: 03/24/2017

Date Analyzed: 03/26/2017

Lab Batch ID: 3013501

Sample: 722214-1-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	908	91	1000	1040	104	14	70-135	35	
C10-C28 Diesel Range Organics	<15.0	1000	885	89	1000	1000	100	12	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 Sump

Work Order #: 549416

Project ID: TRC# 273818

Lab Batch ID: 3013449

QC- Sample ID: 549416-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 03/27/2017

Date Prepared: 03/27/2017

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	0.0740	74	0.0994	0.0741	75	0	70-130	35	
Toluene	<0.00200	0.0998	0.0771	77	0.0994	0.0743	75	4	70-130	35	
Ethylbenzene	<0.00200	0.0998	0.0752	75	0.0994	0.0704	71	7	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.149	75	0.199	0.142	71	5	70-135	35	
o-Xylene	<0.00299	0.0998	0.0818	82	0.0994	0.0756	76	8	71-133	35	

Lab Batch ID: 3013451

QC- Sample ID: 549416-002 S

Batch #: 1 Matrix: Soil

Date Analyzed: 03/27/2017

Date Prepared: 03/27/2017

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	<0.00149	0.0990	0.0701	71	0.0994	0.0736	74	5	70-130	35	
Toluene	<0.00198	0.0990	0.0732	74	0.0994	0.0717	72	2	70-130	35	
Ethylbenzene	<0.00198	0.0990	0.0708	72	0.0994	0.0702	71	1	71-129	35	
m_p-Xylenes	<0.00198	0.198	0.143	72	0.199	0.133	67	7	70-135	35	X
o-Xylene	<0.00297	0.0990	0.0736	74	0.0994	0.0727	73	1	71-133	35	

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

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

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

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



Form 3 - MS / MSD Recoveries



Project Name: A14 Compressor Station Sump

Work Order #: 549416

Project ID: TRC# 273818

Lab Batch ID: 3013527

QC- Sample ID: 549416-013 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	<0.00151	0.101	0.0864	86	0.101	0.0755	75	13	70-130	35	
Toluene	<0.00201	0.101	0.0896	89	0.101	0.0767	76	16	70-130	35	
Ethylbenzene	<0.00201	0.101	0.0860	85	0.101	0.0735	73	16	71-129	35	
m_p-Xylenes	<0.00201	0.201	0.166	83	0.202	0.143	71	15	70-135	35	
o-Xylene	<0.00302	0.101	0.0928	92	0.101	0.0735	73	23	71-133	35	

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	

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

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

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

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



Form 3 - MS / MSD Recoveries



Project Name: A14 Compressor Station Sump

Work Order #: 549416

Project ID: TRC# 273818

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	

Lab Batch ID: 3013911

QC- Sample ID: 549265-021 S

Batch #: 1 Matrix: Soil

Date Analyzed: 04/01/2017

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	1160	99.4	1380	221	99.4	1360	201	1	80-120	20	X

Lab Batch ID: 3013911

QC- Sample ID: 549416-002 S

Batch #: 1 Matrix: Soil

Date Analyzed: 04/01/2017

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	38.8	98.8	142	104	98.8	141	103	1	80-120	20	

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

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

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

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



Form 3 - MS / MSD Recoveries



Project Name: A14 Compressor Station Sump

Work Order #: 549416

Project ID: TRC# 273818

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: 3014002

QC- Sample ID: 549470-012 S

Batch #: 1 Matrix: Solid

Date Analyzed: 04/03/2017

Date Prepared: 04/03/2017

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	8090	100	7970	0	100	7980	0	0	80-120	20	X

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

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

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

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



Form 3 - MS / MSD Recoveries



Project Name: A14 Compressor Station Sump

Work Order #: 549416

Project ID: TRC# 273818

Lab Batch ID: 3014002

QC- Sample ID: 549470-020 S

Batch #: 1 Matrix: Solid

Date Analyzed: 04/04/2017

Date Prepared: 04/03/2017

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	43.6	100	148	104	100	147	103	1	80-120	20	

Lab Batch ID: 3013499

QC- Sample ID: 549416-001 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	999	1050	105	997	998	100	5	70-135	35	
C10-C28 Diesel Range Organics	79.9	999	1030	95	997	993	92	4	70-135	35	

Lab Batch ID: 3013501

QC- Sample ID: 549418-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 03/26/2017

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	999	972	97	999	879	88	10	70-135	35	
C10-C28 Diesel Range Organics	<15.0	999	951	95	999	872	87	9	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

143

Project Manager: Nikki Green

Project Name: A14 Compressor Station Sump

Company Name: TRC Environmental Corporation

Project #: TRC #: 273818

Company Address: 2057 Commerce Drive

Project Loc: Lea County, NM

City/State/Zip: Midland, Texas 79703

PO #:

Telephone No: 432.520.7720

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: *Nikki Green*

e-mail:

rose.slade@energytransfer.com
nigreen@trcsolutions.com

(lab use only)

ORDER #: 549416

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , 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	
5-1	6"			3/22	1300		1	X								Soil	X														X
5-1	1'				1305		1	X								Soil	X														X
5-2	6"				1315		1	X								Soil	X														X
5-2	1'				1320		1	X								Soil	X														X
5-3	6"				1335		1	X								Soil	X														X
5-3	1'				1340		1	X								Soil	X														X
5-4	6"				1530		1	X								Soil	X														X
5-4	1'				1535		1	X								Soil	X														X
5-5	1'				1555		1	X								Soil	X														X
5-6	6"				930		1	X								Soil	X														X
5-6	1'				945		1	X								Soil	X														X

Special Instructions:

Bill to Rose Slade at Energy Transfer.

Relinquished by: *Nikki Green*

Date

Time

Received by:

RECEIVED

Date

Time

Relinquished by:

Date

Time

Received by:

RECEIVED

Date

Time

Relinquished by:

Date

Time

Received by ELOT:

RECEIVED

Date

Time

Laboratory Comments:

Sample Containers Intact? ☒

VOCs Free of Headspace? ☒

Labels on container(s) ☒

Custody seals on container(s) ☒

Custody seals on cooler(s) ☒

Sample Hand Delivered by Sampler/Client Rep. ? ☒

by Courier? ☒

Temperature Up ☒

Temp: 21.3-2

CF: +0.1

Corrected Temp: *21.3-2*

IR ID: R-8

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

243

Project Manager: Nikki Green

Project Name: A14 Compressor Station Sump

Company Name: TRC Environmental Corporation

Project #: TRC # 273818

Company Address: 2057 Commerce Drive

Project Loc: Lea County, NM

City/State/Zip: Midland, Texas 79703

PO #:

Telephone No: 432.520.7720

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: *Nikki Green*

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

(lab use only)

ORDER #: 549416

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Matrix	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , 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
	S-7 6"			5/23	9:50		1	X									Soil	X													X
	S-7 1'				10:05		1	X									Soil	X													X
	NS-1 1'				10:10		1	X									Soil	X													X
	SS-1 1'				10:20		1	X									Soil	X													X
	NS-2 1'				11:00		1	X									Soil	X													X
	SS-2 1'				11:15		1	X									Soil	X													X
	S-3 16"				11:20		1	X									Soil	X													X
	S-3 22"				11:28		1	X									Soil	X													X
	WS-3 1'				11:39		1	X									Soil	X													X
	ES-3 1'				11:42		1	X									Soil	X													X
	S-4 21"				11:45		1	X									Soil	X													X

Special Instructions:

Bill to Rose Slade at Energy Transfer.

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by ELOT:

Date

Time

Laboratory Comments:
Sample Containers Intact? Y
VOCs Free of Headspace? Y
Labels on container(s) Y
Custody seals on container(s) Y
Custody seals on cooler(s) Y
Sample Hand Delivered Y
by Sr Y
by Cl Y
Temp: 21.22
CF: +0.1
Corrected Temp: 22.2
IR ID: R-8
ne Star
°C



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

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

Work Order #: 549416

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 549418

**for
TRC Solutions, Inc**

Project Manager: Nikki Green

A14 Compressor Station

03-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)



03-APR-17

Project Manager: **Nikki Green**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **549418**

A14 Compressor Station

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) 549418. 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. 549418 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 549418



TRC Solutions, Inc, Midland, TX

A14 Compressor Station

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BG-1 1'	S	03-23-17 16:45	- 1 ft	549418-001



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: A14 Compressor Station

Project ID:

Work Order Number(s): 549418

Report Date: 03-APR-17

Date Received: 03/24/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

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 549418

TRC Solutions, Inc, Midland, TX

Project Name: A14 Compressor Station



Project Id:

Contact: Nikki Green

Project Location: Lea County, NM

Date Received in Lab: Fri Mar-24-17 02:55 pm

Report Date: 03-APR-17

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	549418-001					
	Field Id:	BG-1 1'					
	Depth:	1 ft					
	Matrix:	SOIL					
	Sampled:	Mar-23-17 16:45					
BTEX by EPA 8021B	Extracted:	Mar-28-17 16:50					
	Analyzed:	Mar-29-17 01:58					
	Units/RL:	mg/kg RL					
	Benzene	ND 0.00151					
	Toluene	ND 0.00201					
	Ethylbenzene	ND 0.00201					
	m_p-Xylenes	ND 0.00201					
	o-Xylene	ND 0.00301					
	Total Xylenes	ND 0.00201					
	Total BTEX	ND 0.00151					
Chloride by EPA 300 SUB: TX104704215	Extracted:	Apr-01-17 14:14					
	Analyzed:	Apr-02-17 11:11					
	Units/RL:	mg/kg RL					
	Chloride	ND 9.96					
TPH By SW8015 Mod	Extracted:	Mar-24-17 17:00					
	Analyzed:	Mar-26-17 02:20					
	Units/RL:	mg/kg RL					
	C6-C10 Gasoline Range Hydrocarbons	ND 15.0					
	C10-C28 Diesel Range Organics	ND 15.0					
	C28-C35 Oil Range Hydrocarbons	ND 15.0					
	Total TPH	ND 15.0					

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

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

Kelsey Brooks
Project Manager

- 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

4147 Greenbriar Dr, Stafford, TX 77477
 9701 Harry Hines Blvd , Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 1211 W Florida Ave, Midland, TX 79701
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: A14 Compressor Station

Work Orders : 549418,

Lab Batch #: 3013501

Sample: 549418-001 / SMP

Project ID:

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 02:20

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.8	103	70-135	
o-Terphenyl	52.6	49.9	105	70-135	

Lab Batch #: 3013602

Sample: 549418-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/29/17 01:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0358	0.0300	119	80-120	
4-Bromofluorobenzene	0.0356	0.0300	119	80-120	

Lab Batch #: 3013501

Sample: 722214-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/26/17 01:18

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	52.7	50.0	105	70-135	

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 #: 3013501

Sample: 722214-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/26/17 01:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.4	100	92	70-135	
o-Terphenyl	46.3	50.0	93	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

Work Orders : 549418,

Lab Batch #: 3013602

Sample: 722269-1-BKS / BKS

Project ID:

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	

Lab Batch #: 3013501

Sample: 722214-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/26/17 02:00

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	50.8	50.0	102	70-135	

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 #: 3013501

Sample: 549418-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 02:41

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.5	99.9	97	70-135	
o-Terphenyl	48.2	50.0	96	70-135	

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	

* 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

Work Orders : 549418,

Lab Batch #: 3013501

Sample: 549418-001 SD / MSD

Project ID:

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/26/17 03:03

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.0	99.9	89	70-135	
o-Terphenyl	43.7	50.0	87	70-135	

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

Work Order #: 549418

Project ID:

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	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.00149	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	

Analyst: ALA

Date Prepared: 04/01/2017

Date Analyzed: 04/02/2017

Lab Batch ID: 3013954

Sample: 722482-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<1.00	10.0	9.91	99	10.0	9.77	98	1	80-120	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

Work Order #: 549418

Project ID:

Analyst: ARM

Date Prepared: 03/24/2017

Date Analyzed: 03/26/2017

Lab Batch ID: 3013501

Sample: 722214-1-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	908	91	1000	1040	104	14	70-135	35	
C10-C28 Diesel Range Organics	<15.0	1000	885	89	1000	1000	100	12	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

Work Order #: 549418

Project ID:

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	

Lab Batch ID: 3013954

QC- Sample ID: 549418-001 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	104	104	99.6	103	103	1	80-120	20	

Lab Batch ID: 3013954

QC- Sample ID: 549469-007 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	29.4	99.0	132	104	99.0	131	103	1	80-120	20	

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

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

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

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



Form 3 - MS / MSD Recoveries



Project Name: A14 Compressor Station

Work Order # : 549418

Project ID:

Lab Batch ID: 3013501

QC- Sample ID: 549418-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 03/26/2017

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	999	972	97	999	879	88	10	70-135	35	
C10-C28 Diesel Range Organics	<15.0	999	951	95	999	872	87	9	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
Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

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

Work Order #: 549418

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



Certificate of Analysis Summary 553893

TRC Solutions, Inc, Midland, TX

Project Name: A-14 Compressor Station Sump



Project Id: TRC#273818
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Wed May-24-17 04:10 pm
Report Date: 30-MAY-17
Project Manager: Liz Givens

Analysis Requested	Lab Id: 553893-001 Field Id: BH-1@ 8" Depth: 8 In Matrix: SOIL Sampled: May-23-17 11:25					
BTEX by EPA 8021B	Extracted: May-25-17 08:00 Analyzed: May-25-17 10:36 Units/RL: mg/kg RL					
Benzene	<0.00353 0.00353					
Toluene	<0.00353 0.00353					
Ethylbenzene	<0.00353 0.00353					
m,p-Xylenes	<0.00707 0.00707					
o-Xylene	<0.00353 0.00353					
Total Xylenes	<0.00353 0.00353					
Total BTEX	<0.00353 0.00353					
Chloride by EPA 300	Extracted: May-26-17 08:00 Analyzed: May-26-17 09:47 Units/RL: mg/kg RL					
Chloride	8.06 4.98					
TPH by SW8015 Mod	Extracted: May-26-17 17:00 Analyzed: May-27-17 14:48 Units/RL: mg/kg RL					
C6-C10 Gasoline Range Hydrocarbons	<15.0 15.0					
C10-C28 Diesel Range Organics	203 15.0					
C28-C35 Oil Range Hydrocarbons	303 15.0					
Total TPH	506 15.0					

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

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

Brandi Ritcherson

Brandi Ritcherson
Project Manager

Analytical Report 553893

**for
TRC Solutions, Inc**

**Project Manager: Nikki Green
A-14 Compressor Station Sump**

TRC#273818

30-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)



30-MAY-17

Project Manager: **Nikki Green**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **553893**

A-14 Compressor Station Sump

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) 553893. 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. 553893 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,

Brandi Ritcherson

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 553893



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH-1@ 8"	S	05-23-17 11:25	- 8 In	553893-001



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: A-14 Compressor Station Sump

Project ID: TRC#273818
Work Order Number(s): 553893

Report Date: 30-MAY-17
Date Received: 05/24/2017

Sample receipt non conformances and comments:

5/30/17: 1.001 corrected project name.

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3018244 BTEX by EPA 8021B

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



Certificate of Analytical Results 553893



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **BH-1@ 8"**

Lab Sample Id: 553893-001

Matrix: Soil

Date Collected: 05.23.17 11.25

Date Received: 05.24.17 16.10

Sample Depth: 8 In

Analytical Method: Chloride by EPA 300

Tech: MGO

Analyst: MGO

Seq Number: 3018325

Date Prep: 05.26.17 08.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.06	4.98	mg/kg	05.26.17 09.47		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3018367

Date Prep: 05.26.17 17.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	05.27.17 14.48	U	1
C10-C28 Diesel Range Organics	C10C28DRO	203	15.0	mg/kg	05.27.17 14.48		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	303	15.0	mg/kg	05.27.17 14.48		1
Total TPH	PHC635	506	15.0	mg/kg	05.27.17 14.48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	05.27.17 14.48	
o-Terphenyl	84-15-1	102	%	70-135	05.27.17 14.48	



Certificate of Analytical Results 553893



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **BH-1@ 8"**

Lab Sample Id: 553893-001

Matrix: Soil

Date Collected: 05.23.17 11.25

Date Received: 05.24.17 16.10

Sample Depth: 8 In

Analytical Method: BTEX by EPA 8021B

Tech: ALJ

Analyst: ALJ

Seq Number: 3018244

Date Prep: 05.25.17 08.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00353	0.00353	mg/kg	05.25.17 10.36	U	1
Toluene	108-88-3	<0.00353	0.00353	mg/kg	05.25.17 10.36	U	1
Ethylbenzene	100-41-4	<0.00353	0.00353	mg/kg	05.25.17 10.36	U	1
m,p-Xylenes	179601-23-1	<0.00707	0.00707	mg/kg	05.25.17 10.36	U	1
o-Xylene	95-47-6	<0.00353	0.00353	mg/kg	05.25.17 10.36	U	1
Total Xylenes	1330-20-7	<0.00353	0.00353	mg/kg	05.25.17 10.36	U	1
Total BTEX		<0.00353	0.00353	mg/kg	05.25.17 10.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	93	%	80-120	05.25.17 10.36		
4-Bromofluorobenzene	460-00-4	113	%	80-120	05.25.17 10.36		

- 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 **SQL** 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

4147 Greenbriar Dr, Stafford, TX 77477
 9701 Harry Hines Blvd, Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 1211 W Florida Ave, Midland, TX 79701
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



QC Summary 553893

TRC Solutions, Inc A-14 Compressor Station Sump

Analytical Method: Chloride by EPA 300

Seq Number: 3018325

MB Sample Id: 725214-1-BLK

Matrix: Solid

LCS Sample Id: 725214-1-BKS

Prep Method: E300P

Date Prep: 05.26.17

LCSD Sample Id: 725214-1-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	264	106	263	105	90-110	0	20	mg/kg	05.26.17 09:09	

Analytical Method: Chloride by EPA 300

Seq Number: 3018325

Parent Sample Id: 553892-001

Matrix: Soil

MS Sample Id: 553892-001 S

Prep Method: E300P

Date Prep: 05.26.17

MSD Sample Id: 553892-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	52.5	247	301	101	302	101	90-110	0	20	mg/kg	05.26.17 09:32	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3018367

MB Sample Id: 725298-1-BLK

Matrix: Solid

LCS Sample Id: 725298-1-BKS

Prep Method: TX1005P

Date Prep: 05.26.17

LCSD Sample Id: 725298-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	1010	101	1110	111	70-135	9	35	mg/kg	05.27.17 13:04	
C10-C28 Diesel Range Organics	<15.0	1000	1030	103	1070	107	70-135	4	35	mg/kg	05.27.17 13:04	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	118		105		120		70-135	%	05.27.17 13:04			
o-Terphenyl	117		104		117		70-135	%	05.27.17 13:04			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3018367

Parent Sample Id: 553892-001

Matrix: Soil

MS Sample Id: 553892-001 S

Prep Method: TX1005P

Date Prep: 05.26.17

MSD Sample Id: 553892-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	999	981	98	1030	103	70-135	5	35	mg/kg	05.27.17 14:06	
C10-C28 Diesel Range Organics	187	999	1130	94	1150	96	70-135	2	35	mg/kg	05.27.17 14:06	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane			100		118		70-135	%	05.27.17 14:06			
o-Terphenyl			76		108		70-135	%	05.27.17 14:06			



QC Summary 553893

TRC Solutions, Inc A-14 Compressor Station Sump

Analytical Method: BTEX by EPA 8021B

Seq Number: 3018244

MB Sample Id: 725225-1-BLK

Matrix: Solid

LCS Sample Id: 725225-1-BKS

Prep Method: SW5030B

Date Prep: 05.25.17

LCSD Sample Id: 725225-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0826	83	0.0767	76	70-130	7	35	mg/kg	05.25.17 07:20	
Toluene	<0.00201	0.100	0.0823	82	0.0810	80	70-130	2	35	mg/kg	05.25.17 07:20	
Ethylbenzene	<0.00201	0.100	0.0915	92	0.0810	80	71-129	12	35	mg/kg	05.25.17 07:20	
m,p-Xylenes	<0.00402	0.201	0.177	88	0.165	82	70-135	7	35	mg/kg	05.25.17 07:20	
o-Xylene	<0.00201	0.100	0.0865	87	0.0803	80	71-133	7	35	mg/kg	05.25.17 07:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		115		101		80-120	%	05.25.17 07:20
4-Bromofluorobenzene	92		118		101		80-120	%	05.25.17 07:20

Analytical Method: BTEX by EPA 8021B

Seq Number: 3018244

Parent Sample Id: 553764-001

Matrix: Soil

MS Sample Id: 553764-001 S

Prep Method: SW5030B

Date Prep: 05.25.17

MSD Sample Id: 553764-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0527	53	0.0647	65	70-130	20	35	mg/kg	05.25.17 07:52	X
Toluene	<0.00201	0.100	0.0553	55	0.0688	69	70-130	22	35	mg/kg	05.25.17 07:52	X
Ethylbenzene	<0.00201	0.100	0.0562	56	0.0640	64	71-129	13	35	mg/kg	05.25.17 07:52	X
m,p-Xylenes	<0.00402	0.201	0.102	51	0.125	63	70-135	20	35	mg/kg	05.25.17 07:52	X
o-Xylene	<0.00201	0.100	0.0543	54	0.0658	66	71-133	19	35	mg/kg	05.25.17 07:52	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		100		80-120	%	05.25.17 07:52
4-Bromofluorobenzene	117		118		80-120	%	05.25.17 07:52



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 05/24/2017 04:10:00 PM

Work Order #: 553893

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)?	1.6
#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
#21 VOC samples have zero headspace?	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

Marithza Anaya

Date: 05/24/2017

Checklist reviewed by:

Holly Taylor

Holly Taylor

Date: 05/26/2017



Certificate of Analysis Summary 555846

TRC Solutions, Inc, Midland, TX

Project Name: A-14 Sump



Project Id:

Contact: Nikki Green

Project Location: Lea County, NM

Date Received in Lab: Wed Jun-21-17 08:40 am

Report Date: 26-JUN-17

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	555846-001	555846-002	555846-003			
	Field Id:	BH-6 6"	BH-7 6"	BH-2 6"			
	Depth:	6- In	6- In	6- In			
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	Jun-15-17 16:00	Jun-15-17 16:10	Jun-16-17 11:00			
BTEX by EPA 8021B	Extracted:	Jun-24-17 11:30	Jun-24-17 11:30	Jun-24-17 11:30			
	Analyzed:	Jun-25-17 05:48	Jun-25-17 06:04	Jun-25-17 06:20			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198			
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198			
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198			
m,p-Xylenes		<0.00402 0.00402	<0.00399 0.00399	<0.00397 0.00397			
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198			
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198			
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198			
Chloride by EPA 300	Extracted:	Jun-26-17 10:05	Jun-26-17 10:05	Jun-26-17 10:05			
	Analyzed:	Jun-26-17 12:20	Jun-26-17 12:28	Jun-26-17 12:51			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		8.45 4.96	5.85 4.93	32.4 4.99			
TPH by SW8015 Mod	Extracted:	Jun-24-17 16:00	Jun-24-17 16:00	Jun-24-17 16:00			
	Analyzed:	Jun-25-17 05:08	Jun-25-17 05:29	Jun-25-17 06:33			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons		<15.0 15.0	<15.0 15.0	<15.0 15.0			
Diesel Range Organics		97.1 15.0	109 15.0	<15.0 15.0			
Oil Range Hydrocarbons		63.2 15.0	122 15.0	<15.0 15.0			
Total TPH		160 15.0	231 15.0	<15.0 15.0			

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

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

Kelsey Brooks
Project Manager

Analytical Report 555846

**for
TRC Solutions, Inc**

Project Manager: Nikki Green

A-14 Sump

26-JUN-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-JUN-17

Project Manager: **Nikki Green**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **555846**

A-14 Sump

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) 555846. 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. 555846 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 555846



TRC Solutions, Inc, Midland, TX

A-14 Sump

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH-6 6"	S	06-15-17 16:00	6 In	555846-001
BH-7 6"	S	06-15-17 16:10	6 In	555846-002
BH-2 6"	S	06-16-17 11:00	6 In	555846-003



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: A-14 Sump

Project ID:

Work Order Number(s): 555846

Report Date: 26-JUN-17

Date Received: 06/21/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3020665 BTEX by EPA 8021B

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



Certificate of Analytical Results 555846



TRC Solutions, Inc, Midland, TX

A-14 Sump

Sample Id: **BH-6 6"**
Lab Sample Id: 555846-001

Matrix: Soil
Date Collected: 06.15.17 16.00

Date Received: 06.21.17 08.40
Sample Depth: 6 In

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3020684

Date Prep: 06.26.17 10.05

Prep Method: E300P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.45	4.96	mg/kg	06.26.17 12.20		1

Analytical Method: TPH by SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3020771

Date Prep: 06.24.17 16.00

Prep Method: TX1005P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.25.17 05.08	U	1
Diesel Range Organics	C10C28DRO	97.1	15.0	mg/kg	06.25.17 05.08		1
Oil Range Hydrocarbons	PHCG2835	63.2	15.0	mg/kg	06.25.17 05.08		1
Total TPH	PHC635	160	15.0	mg/kg	06.25.17 05.08		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	109	%	70-135	06.25.17 05.08		
o-Terphenyl	84-15-1	104	%	70-135	06.25.17 05.08		



Certificate of Analytical Results 555846



TRC Solutions, Inc, Midland, TX

A-14 Sump

Sample Id: **BH-6 6"**
Lab Sample Id: 555846-001

Matrix: Soil
Date Collected: 06.15.17 16.00

Date Received: 06.21.17 08.40
Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Tech: ALJ

Analyst: ALJ

Seq Number: 3020665

Date Prep: 06.24.17 11.30

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.25.17 05.48	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.25.17 05.48	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.25.17 05.48	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.25.17 05.48	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.25.17 05.48	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.25.17 05.48	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.25.17 05.48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	84	%	80-120	06.25.17 05.48		
4-Bromofluorobenzene	460-00-4	91	%	80-120	06.25.17 05.48		



Certificate of Analytical Results 555846



TRC Solutions, Inc, Midland, TX

A-14 Sump

Sample Id: **BH-7 6"**
Lab Sample Id: 555846-002

Matrix: Soil
Date Collected: 06.15.17 16.10

Date Received: 06.21.17 08.40
Sample Depth: 6 In

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3020684

Date Prep: 06.26.17 10.05

Prep Method: E300P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.85	4.93	mg/kg	06.26.17 12.28		1

Analytical Method: TPH by SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3020771

Date Prep: 06.24.17 16.00

Prep Method: TX1005P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.25.17 05.29	U	1
Diesel Range Organics	C10C28DRO	109	15.0	mg/kg	06.25.17 05.29		1
Oil Range Hydrocarbons	PHCG2835	122	15.0	mg/kg	06.25.17 05.29		1
Total TPH	PHC635	231	15.0	mg/kg	06.25.17 05.29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	06.25.17 05.29	
o-Terphenyl	84-15-1	107	%	70-135	06.25.17 05.29	



Certificate of Analytical Results 555846



TRC Solutions, Inc, Midland, TX

A-14 Sump

Sample Id: **BH-7 6"**
Lab Sample Id: 555846-002

Matrix: Soil
Date Collected: 06.15.17 16.10

Date Received: 06.21.17 08.40
Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Tech: ALJ

Analyst: ALJ

Seq Number: 3020665

Date Prep: 06.24.17 11.30

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.25.17 06.04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.25.17 06.04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.25.17 06.04	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.25.17 06.04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.25.17 06.04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.25.17 06.04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.25.17 06.04	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	89	%	80-120	06.25.17 06.04	
1,4-Difluorobenzene		540-36-3	88	%	80-120	06.25.17 06.04	



Certificate of Analytical Results 555846



TRC Solutions, Inc, Midland, TX

A-14 Sump

Sample Id: **BH-2 6"**
Lab Sample Id: 555846-003

Matrix: Soil
Date Collected: 06.16.17 11.00

Date Received: 06.21.17 08.40
Sample Depth: 6 In

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3020684

Date Prep: 06.26.17 10.05

Prep Method: E300P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	32.4	4.99	mg/kg	06.26.17 12.51		1

Analytical Method: TPH by SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3020771

Date Prep: 06.24.17 16.00

Prep Method: TX1005P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.25.17 06.33	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.25.17 06.33	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.25.17 06.33	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.25.17 06.33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	108	%	70-135	06.25.17 06.33		
o-Terphenyl	84-15-1	106	%	70-135	06.25.17 06.33		



Certificate of Analytical Results 555846



TRC Solutions, Inc, Midland, TX

A-14 Sump

Sample Id: **BH-2 6"**
Lab Sample Id: 555846-003

Matrix: Soil
Date Collected: 06.16.17 11.00

Date Received: 06.21.17 08.40
Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 06.24.17 11.30

Basis: Wet Weight

Seq Number: 3020665

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.25.17 06.20	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.25.17 06.20	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.25.17 06.20	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.25.17 06.20	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.25.17 06.20	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.25.17 06.20	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.25.17 06.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	84	%	80-120	06.25.17 06.20		
1,4-Difluorobenzene	540-36-3	87	%	80-120	06.25.17 06.20		

- 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 **SQL** 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

4147 Greenbriar Dr, Stafford, TX 77477
 9701 Harry Hines Blvd, Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 1211 W Florida Ave, Midland, TX 79701
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



QC Summary 555846

TRC Solutions, Inc A-14 Sump

Analytical Method: Chloride by EPA 300

Seq Number: 3020684

MB Sample Id: 726721-1-BLK

Matrix: Solid

LCS Sample Id: 726721-1-BKS

Prep Method: E300P

Date Prep: 06.26.17

LCSD Sample Id: 726721-1-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	247	99	248	99	90-110	0	20	mg/kg	06.26.17 10:21	

Analytical Method: Chloride by EPA 300

Seq Number: 3020684

Parent Sample Id: 555846-002

Matrix: Soil

MS Sample Id: 555846-002 S

Prep Method: E300P

Date Prep: 06.26.17

MSD Sample Id: 555846-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5.85	247	245	97	244	96	90-110	0	20	mg/kg	06.26.17 12:36	

Analytical Method: Chloride by EPA 300

Seq Number: 3020684

Parent Sample Id: 556064-003

Matrix: Soil

MS Sample Id: 556064-003 S

Prep Method: E300P

Date Prep: 06.26.17

MSD Sample Id: 556064-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	16.6	246	261	99	259	99	90-110	1	20	mg/kg	06.26.17 10:49	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3020771

MB Sample Id: 726685-1-BLK

Matrix: Solid

LCS Sample Id: 726685-1-BKS

Prep Method: TX1005P

Date Prep: 06.24.17

LCSD Sample Id: 726685-1-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	992	99	1020	102	70-135	3	35	mg/kg	06.25.17 00:55	
Diesel Range Organics	<15.0	1000	1010	101	979	98	70-135	3	35	mg/kg	06.25.17 00:55	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		108		114		70-135	%	06.25.17 00:55
o-Terphenyl	122		100		107		70-135	%	06.25.17 00:55



QC Summary 555846

TRC Solutions, Inc A-14 Sump

Analytical Method: TPH by SW8015 Mod

Seq Number: 3020771

Parent Sample Id: 555795-001

Matrix: Soil

MS Sample Id: 555795-001 S

Prep Method: TX1005P

Date Prep: 06.24.17

MSD Sample Id: 555795-001 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	997	1060	106	974	98	70-135	8	35	mg/kg	06.25.17 01:58	
Diesel Range Organics	<15.0	997	998	100	987	99	70-135	1	35	mg/kg	06.25.17 01:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		100		70-135	%	06.25.17 01:58
o-Terphenyl	101		98		70-135	%	06.25.17 01:58

Analytical Method: BTEX by EPA 8021B

Seq Number: 3020665

MB Sample Id: 726706-1-BLK

Matrix: Solid

LCS Sample Id: 726706-1-BKS

Prep Method: SW5030B

Date Prep: 06.24.17

LCSD Sample Id: 726706-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.107	107	0.0950	96	70-130	12	35	mg/kg	06.25.17 03:55	
Toluene	<0.00200	0.100	0.101	101	0.0876	88	70-130	14	35	mg/kg	06.25.17 03:55	
Ethylbenzene	<0.00200	0.100	0.111	111	0.0966	97	71-129	14	35	mg/kg	06.25.17 03:55	
m,p-Xylenes	<0.00401	0.200	0.200	100	0.173	87	70-135	14	35	mg/kg	06.25.17 03:55	
o-Xylene	<0.00200	0.100	0.106	106	0.0914	92	71-133	15	35	mg/kg	06.25.17 03:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		90		93		80-120	%	06.25.17 03:55
4-Bromofluorobenzene	98		93		92		80-120	%	06.25.17 03:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3020665

Parent Sample Id: 556138-002

Matrix: Soil

MS Sample Id: 556138-002 S

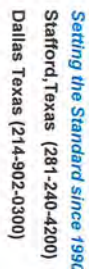
Prep Method: SW5030B

Date Prep: 06.24.17

MSD Sample Id: 556138-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0785	79	0.0898	90	70-130	13	35	mg/kg	06.25.17 04:27	
Toluene	<0.00200	0.100	0.0785	79	0.0795	80	70-130	1	35	mg/kg	06.25.17 04:27	
Ethylbenzene	<0.00200	0.100	0.0770	77	0.0764	76	71-129	1	35	mg/kg	06.25.17 04:27	
m,p-Xylenes	0.00688	0.200	0.144	69	0.135	64	70-135	6	35	mg/kg	06.25.17 04:27	X
o-Xylene	<0.00200	0.100	0.0771	77	0.0762	76	71-133	1	35	mg/kg	06.25.17 04:27	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		112		80-120	%	06.25.17 04:27
4-Bromofluorobenzene	116		112		80-120	%	06.25.17 04:27



Page 1 Of 1

Setting the Standard since 1990
Stafford, Texas (281-240-4200)
Dallas Texas (214-902-0300)

www.xenco.com

Xenco Quote #

Xenco Job #

55844

Final 1.000



XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 06/21/2017 08:40:00 AM

Work Order #: 555846

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)?	3.5
#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

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Marithza Anaya

Marithza Anaya

Date: 06/21/2017

Checklist reviewed by:

Kelsey Brooks

Kelsey Brooks

Date: 06/21/2017



Certificate of Analysis Summary 556209

TRC Solutions, Inc, Midland, TX

Project Name: A-14 Compressor Station Sump



Project Id:

Contact: Nikki Green

Project Location: Lea County, NM

Date Received in Lab: Fri Jun-23-17 03:33 pm

Report Date: 28-JUN-17

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	556209-001	556209-002	556209-003	556209-004	556209-005	556209-006
	<i>Field Id:</i>	BH-3 2'	ESW-1 1'	WSW-1 1'	BH-5 6"	BH-4 2'	NSW-1 1'
	<i>Depth:</i>	2- ft	1- ft	1- ft	6- In	2- ft	1- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Jun-19-17 16:00	Jun-19-17 16:15	Jun-19-17 16:17	Jun-19-17 16:30	Jun-20-17 10:00	Jun-20-17 10:05
BTEX by EPA 8021B	<i>Extracted:</i>	Jun-27-17 15:00	Jun-27-17 15:00	Jun-27-17 15:00	Jun-27-17 15:00	Jun-27-17 15:00	Jun-27-17 15:00
	<i>Analyzed:</i>	Jun-27-17 21:53	Jun-27-17 22:09	Jun-27-17 22:25	Jun-27-17 22:42	Jun-27-17 22:58	Jun-27-17 23:14
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00199 0.00199
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00199 0.00199
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00199 0.00199
m,p-Xylenes		<0.00402 0.00402	<0.00399 0.00399	<0.00400 0.00400	<0.00402 0.00402	<0.00398 0.00398	<0.00398 0.00398
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00199 0.00199
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00199 0.00199
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	Jun-27-17 13:50	Jun-27-17 13:50	Jun-27-17 13:50	Jun-27-17 13:50	Jun-27-17 13:50	Jun-27-17 13:50
	<i>Analyzed:</i>	Jun-27-17 22:47	Jun-27-17 22:55	Jun-27-17 23:17	Jun-27-17 23:25	Jun-27-17 23:48	Jun-27-17 23:55
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		48.9 4.96	36.3 4.99	165 4.91	20.0 4.97	65.3 4.98	39.7 4.98
TPH by SW8015 Mod	<i>Extracted:</i>	Jun-26-17 07:00	Jun-26-17 07:00	Jun-26-17 07:00	Jun-26-17 07:00	Jun-26-17 07:00	Jun-26-17 07:00
	<i>Analyzed:</i>	Jun-26-17 11:36	Jun-26-17 12:36	Jun-26-17 12:56	Jun-26-17 13:16	Jun-26-17 13:36	Jun-26-17 13:56
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons		<15.0 15.0	<15.0 15.0	<15.0 15.0	<14.9 14.9	<15.0 15.0	<15.0 15.0
Diesel Range Organics		53.3 15.0	25.8 15.0	255 15.0	<14.9 14.9	<15.0 15.0	<15.0 15.0
Oil Range Hydrocarbons		64.7 15.0	<15.0 15.0	66.2 15.0	<14.9 14.9	<15.0 15.0	<15.0 15.0
Total TPH		118 15.0	25.8 15.0	321 15.0	<14.9 14.9	<15.0 15.0	<15.0 15.0

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

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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 553892

TRC Solutions, Inc, Midland, TX

Project Name: A14 Compressor Station Sump



Project Id: TRC#273818
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Wed May-24-17 04:10 pm
Report Date: 30-MAY-17
Project Manager: Liz Givens

Analysis Requested	Lab Id: 553892-001 Field Id: Hydrovac Solids Depth: Matrix: SOIL Sampled: May-23-17 11:30					
BTEX by EPA 8021B	Extracted: May-25-17 08:00 Analyzed: May-25-17 10:02 Units/RL: mg/kg RL					
Benzene	<0.00201 0.00201					
Toluene	<0.00201 0.00201					
Ethylbenzene	<0.00201 0.00201					
m,p-Xylenes	<0.00402 0.00402					
o-Xylene	<0.00201 0.00201					
Total Xylenes	<0.00201 0.00201					
Total BTEX	<0.00201 0.00201					
Chloride by EPA 300	Extracted: May-26-17 08:00 Analyzed: May-26-17 09:24 Units/RL: mg/kg RL					
Chloride	52.5 4.93					
TPH by SW8015 Mod	Extracted: May-26-17 17:00 Analyzed: May-27-17 13:45 Units/RL: mg/kg RL					
C6-C10 Gasoline Range Hydrocarbons	<15.0 15.0					
C10-C28 Diesel Range Organics	187 15.0					
C28-C35 Oil Range Hydrocarbons	265 15.0					
Total TPH	452 15.0					

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

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

Version: 1.9%

Brandi Ritcherson

Brandi Ritcherson
Project Manager



Certificate of Analysis Summary 556209

TRC Solutions, Inc, Midland, TX

Project Name: A-14 Compressor Station Sump



Project Id:

Contact: Nikki Green

Project Location: Lea County, NM

Date Received in Lab: Fri Jun-23-17 03:33 pm

Report Date: 28-JUN-17

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	556209-007	556209-008	556209-009	556209-010		
	Field Id:	ESW-2 1'	SSW-1 1'	NSW-2 1'	WSW-2 1'		
	Depth:	1- ft	1- ft	1- ft	1- ft		
	Matrix:	SOIL	SOIL	SOIL	SOIL		
	Sampled:	Jun-20-17 10:10	Jun-20-17 10:15	Jun-20-17 11:00	Jun-20-17 11:15		
BTEX by EPA 8021B	Extracted:	Jun-27-17 15:00	Jun-27-17 15:00	Jun-27-17 15:00	Jun-27-17 15:00		
	Analyzed:	Jun-27-17 23:30	Jun-27-17 23:46	Jun-28-17 00:02	Jun-28-17 00:18		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
		mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201		
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201		
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201		
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00403 0.00403	<0.00402 0.00402		
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201		
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201		
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201		
Chloride by EPA 300	Extracted:	Jun-27-17 13:50	Jun-27-17 13:50	Jun-27-17 13:50	Jun-27-17 13:50		
	Analyzed:	Jun-28-17 00:03	Jun-28-17 00:11	Jun-28-17 00:18	Jun-28-17 00:26		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
		mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		64.6 4.97	146 4.97	9.95 4.93	16.7 4.96		
TPH by SW8015 Mod	Extracted:	Jun-26-17 07:00	Jun-26-17 07:00	Jun-26-17 07:00	Jun-26-17 07:00		
	Analyzed:	Jun-26-17 14:16	Jun-26-17 14:36	Jun-26-17 14:56	Jun-26-17 15:16		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
		mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0		
Diesel Range Organics		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0		
Oil Range Hydrocarbons		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0		
Total TPH		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0		

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

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

Kelsey Brooks
Project Manager

Analytical Report 556209

for
TRC Solutions, Inc

Project Manager: Nikki Green
A-14 Compressor Station Sump

28-JUN-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)



28-JUN-17

Project Manager: **Nikki Green**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **556209**

A-14 Compressor Station Sump

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) 556209. 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. 556209 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH-3 2'	S	06-19-17 16:00	2 ft	556209-001
ESW-1 1'	S	06-19-17 16:15	1 ft	556209-002
WSW-1 1'	S	06-19-17 16:17	1 ft	556209-003
BH-5 6"	S	06-19-17 16:30	6 In	556209-004
BH-4 2'	S	06-20-17 10:00	2 ft	556209-005
NSW-1 1'	S	06-20-17 10:05	1 ft	556209-006
ESW-2 1'	S	06-20-17 10:10	1 ft	556209-007
SSW-1 1'	S	06-20-17 10:15	1 ft	556209-008
NSW-2 1'	S	06-20-17 11:00	1 ft	556209-009
WSW-2 1'	S	06-20-17 11:15	1 ft	556209-010



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: A-14 Compressor Station Sump

Project ID:

Work Order Number(s): 556209

Report Date: 28-JUN-17

Date Received: 06/23/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3020931 BTEX by EPA 8021B

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

Lab Sample ID 556209-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD).

Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Ethylbenzene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 556209-001, -002, -003, -004, -005, -006, -007, -008, -009, -010.

The Laboratory Control Sample for Toluene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **BH-3 2'**
Lab Sample Id: 556209-001

Matrix: Soil
Date Collected: 06.19.17 16.00

Date Received: 06.23.17 15.33
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3020947

Prep Method: E300P
% Moisture:
Date Prep: 06.27.17 13.50
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	48.9	4.96	mg/kg	06.27.17 22.47		1

Analytical Method: TPH by SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3021003

Prep Method: TX1005P
% Moisture:
Date Prep: 06.26.17 07.00
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.26.17 11.36	U	1
Diesel Range Organics	C10C28DRO	53.3	15.0	mg/kg	06.26.17 11.36		1
Oil Range Hydrocarbons	PHCG2835	64.7	15.0	mg/kg	06.26.17 11.36		1
Total TPH	PHC635	118	15.0	mg/kg	06.26.17 11.36		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-135	06.26.17 11.36		
o-Terphenyl	84-15-1	109	%	70-135	06.26.17 11.36		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **BH-3 2'**
Lab Sample Id: 556209-001

Matrix: Soil
Date Collected: 06.19.17 16.00

Date Received: 06.23.17 15.33
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 06.27.17 15.00

Basis: Wet Weight

Seq Number: 3020931

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.27.17 21.53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.27.17 21.53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.27.17 21.53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.27.17 21.53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.27.17 21.53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.27.17 21.53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.27.17 21.53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	80-120	06.27.17 21.53		
4-Bromofluorobenzene	460-00-4	115	%	80-120	06.27.17 21.53		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **ESW-1 1'**
Lab Sample Id: 556209-002

Matrix: Soil
Date Collected: 06.19.17 16.15

Date Received: 06.23.17 15.33
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3020947

Prep Method: E300P
% Moisture:
Date Prep: 06.27.17 13.50
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	36.3	4.99	mg/kg	06.27.17 22.55		1

Analytical Method: TPH by SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3021003

Prep Method: TX1005P
% Moisture:
Date Prep: 06.26.17 07.00
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.26.17 12.36	U	1
Diesel Range Organics	C10C28DRO	25.8	15.0	mg/kg	06.26.17 12.36		1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.26.17 12.36	U	1
Total TPH	PHC635	25.8	15.0	mg/kg	06.26.17 12.36		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-135	06.26.17 12.36		
o-Terphenyl	84-15-1	106	%	70-135	06.26.17 12.36		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **ESW-1 1'**

Matrix: Soil

Date Received: 06.23.17 15.33

Lab Sample Id: 556209-002

Date Collected: 06.19.17 16.15

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 06.27.17 15.00

Basis: Wet Weight

Seq Number: 3020931

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.27.17 22.09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.27.17 22.09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.27.17 22.09	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.27.17 22.09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.27.17 22.09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.27.17 22.09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.27.17 22.09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	80-120	06.27.17 22.09		
1,4-Difluorobenzene	540-36-3	87	%	80-120	06.27.17 22.09		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **WSW-1 1'**
Lab Sample Id: 556209-003

Matrix: Soil
Date Collected: 06.19.17 16.17

Date Received: 06.23.17 15.33
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3020947

Prep Method: E300P
% Moisture:
Date Prep: 06.27.17 13.50
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	165	4.91	mg/kg	06.27.17 23.17		1

Analytical Method: TPH by SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3021003

Prep Method: TX1005P
% Moisture:
Date Prep: 06.26.17 07.00
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.26.17 12.56	U	1
Diesel Range Organics	C10C28DRO	255	15.0	mg/kg	06.26.17 12.56		1
Oil Range Hydrocarbons	PHCG2835	66.2	15.0	mg/kg	06.26.17 12.56		1
Total TPH	PHC635	321	15.0	mg/kg	06.26.17 12.56		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	107	%	70-135	06.26.17 12.56		
o-Terphenyl	84-15-1	110	%	70-135	06.26.17 12.56		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **WSW-1 1'**

Lab Sample Id: 556209-003

Matrix: Soil

Date Collected: 06.19.17 16.17

Date Received: 06.23.17 15.33

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Tech: ALJ

Analyst: ALJ

Seq Number: 3020931

Date Prep: 06.27.17 15.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.27.17 22.25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.27.17 22.25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.27.17 22.25	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.27.17 22.25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.27.17 22.25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.27.17 22.25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.27.17 22.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	80-120	06.27.17 22.25		
1,4-Difluorobenzene	540-36-3	98	%	80-120	06.27.17 22.25		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **BH-5 6"**
Lab Sample Id: 556209-004

Matrix: Soil
Date Collected: 06.19.17 16.30

Date Received: 06.23.17 15.33
Sample Depth: 6 In

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3020947

Prep Method: E300P
% Moisture:
Date Prep: 06.27.17 13.50
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.0	4.97	mg/kg	06.27.17 23.25		1

Analytical Method: TPH by SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3021003

Prep Method: TX1005P
% Moisture:
Date Prep: 06.26.17 07.00
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	06.26.17 13.16	U	1
Diesel Range Organics	C10C28DRO	<14.9	14.9	mg/kg	06.26.17 13.16	U	1
Oil Range Hydrocarbons	PHCG2835	<14.9	14.9	mg/kg	06.26.17 13.16	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	06.26.17 13.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	06.26.17 13.16		
o-Terphenyl	84-15-1	104	%	70-135	06.26.17 13.16		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **BH-5 6"**
Lab Sample Id: 556209-004

Matrix: Soil
Date Collected: 06.19.17 16.30

Date Received: 06.23.17 15.33
Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Tech: ALJ

Analyst: ALJ

Seq Number: 3020931

Date Prep: 06.27.17 15.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.27.17 22.42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.27.17 22.42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.27.17 22.42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.27.17 22.42	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.27.17 22.42	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.27.17 22.42	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.27.17 22.42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	80-120	06.27.17 22.42		
4-Bromofluorobenzene	460-00-4	98	%	80-120	06.27.17 22.42		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **BH-4 2'**
Lab Sample Id: 556209-005

Matrix: Soil
Date Collected: 06.20.17 10.00

Date Received: 06.23.17 15.33
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3020947

Prep Method: E300P
% Moisture:
Date Prep: 06.27.17 13.50
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	65.3	4.98	mg/kg	06.27.17 23.48		1

Analytical Method: TPH by SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3021003

Prep Method: TX1005P
% Moisture:
Date Prep: 06.26.17 07.00
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.26.17 13.36	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.26.17 13.36	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.26.17 13.36	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.26.17 13.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	06.26.17 13.36		
o-Terphenyl	84-15-1	107	%	70-135	06.26.17 13.36		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **BH-4 2'**
Lab Sample Id: 556209-005

Matrix: Soil
Date Collected: 06.20.17 10.00

Date Received: 06.23.17 15.33
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 06.27.17 15.00

Basis: Wet Weight

Seq Number: 3020931

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.27.17 22.58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.27.17 22.58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.27.17 22.58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.27.17 22.58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.27.17 22.58	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.27.17 22.58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.27.17 22.58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	114	%	80-120	06.27.17 22.58		
1,4-Difluorobenzene	540-36-3	96	%	80-120	06.27.17 22.58		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: NSW-1 1'

Lab Sample Id: 556209-006

Matrix: Soil

Date Collected: 06.20.17 10.05

Date Received: 06.23.17 15.33

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: MGO

Analyst: MGO

Seq Number: 3020947

Date Prep: 06.27.17 13.50

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	39.7	4.98	mg/kg	06.27.17 23.55		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3021003

Date Prep: 06.26.17 07.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.26.17 13.56	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.26.17 13.56	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.26.17 13.56	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.26.17 13.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.26.17 13.56	
o-Terphenyl	84-15-1	105	%	70-135	06.26.17 13.56	



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: NSW-1 1'

Lab Sample Id: 556209-006

Matrix: Soil

Date Collected: 06.20.17 10.05

Date Received: 06.23.17 15.33

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Tech: ALJ

Analyst: ALJ

Seq Number: 3020931

Date Prep: 06.27.17 15.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.27.17 23.14	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.27.17 23.14	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.27.17 23.14	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.27.17 23.14	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.27.17 23.14	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.27.17 23.14	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.27.17 23.14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	92	%	80-120	06.27.17 23.14		
4-Bromofluorobenzene	460-00-4	115	%	80-120	06.27.17 23.14		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: ESW-2 1'

Lab Sample Id: 556209-007

Matrix: Soil

Date Collected: 06.20.17 10.10

Date Received: 06.23.17 15.33

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: MGO

Analyst: MGO

Seq Number: 3020947

Date Prep: 06.27.17 13.50

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	64.6	4.97	mg/kg	06.28.17 00.03		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3021003

Date Prep: 06.26.17 07.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.26.17 14.16	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.26.17 14.16	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.26.17 14.16	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.26.17 14.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.26.17 14.16	
o-Terphenyl	84-15-1	106	%	70-135	06.26.17 14.16	



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **ESW-2 1'**

Matrix: Soil

Date Received: 06.23.17 15.33

Lab Sample Id: 556209-007

Date Collected: 06.20.17 10.10

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 06.27.17 15.00

Basis: Wet Weight

Seq Number: 3020931

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.27.17 23.30	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.27.17 23.30	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.27.17 23.30	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.27.17 23.30	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.27.17 23.30	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.27.17 23.30	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.27.17 23.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	113	%	80-120	06.27.17 23.30		
1,4-Difluorobenzene	540-36-3	108	%	80-120	06.27.17 23.30		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: SSW-1 1'

Lab Sample Id: 556209-008

Matrix: Soil

Date Collected: 06.20.17 10.15

Date Received: 06.23.17 15.33

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: MGO

Analyst: MGO

Seq Number: 3020947

Date Prep: 06.27.17 13.50

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	146	4.97	mg/kg	06.28.17 00.11		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3021003

Date Prep: 06.26.17 07.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.26.17 14.36	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.26.17 14.36	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.26.17 14.36	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.26.17 14.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.26.17 14.36	
o-Terphenyl	84-15-1	106	%	70-135	06.26.17 14.36	



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: SSW-1 1'

Matrix: Soil

Date Received: 06.23.17 15.33

Lab Sample Id: 556209-008

Date Collected: 06.20.17 10.15

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 06.27.17 15.00

Basis: Wet Weight

Seq Number: 3020931

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.27.17 23.46	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.27.17 23.46	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.27.17 23.46	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.27.17 23.46	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.27.17 23.46	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.27.17 23.46	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.27.17 23.46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	80-120	06.27.17 23.46		
1,4-Difluorobenzene	540-36-3	100	%	80-120	06.27.17 23.46		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: NSW-2 1'

Lab Sample Id: 556209-009

Matrix: Soil

Date Collected: 06.20.17 11.00

Date Received: 06.23.17 15.33

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: MGO

Analyst: MGO

Seq Number: 3020947

Date Prep: 06.27.17 13.50

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.95	4.93	mg/kg	06.28.17 00.18		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3021003

Date Prep: 06.26.17 07.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.26.17 14.56	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.26.17 14.56	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.26.17 14.56	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.26.17 14.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.26.17 14.56	
o-Terphenyl	84-15-1	103	%	70-135	06.26.17 14.56	



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: NSW-2 1'

Matrix: Soil

Date Received: 06.23.17 15.33

Lab Sample Id: 556209-009

Date Collected: 06.20.17 11.00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 06.27.17 15.00

Basis: Wet Weight

Seq Number: 3020931

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.28.17 00.02	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.28.17 00.02	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.28.17 00.02	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.28.17 00.02	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.28.17 00.02	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.28.17 00.02	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.28.17 00.02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	80-120	06.28.17 00.02		
1,4-Difluorobenzene	540-36-3	107	%	80-120	06.28.17 00.02		



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **WSW-2 1'**

Lab Sample Id: 556209-010

Matrix: Soil

Date Collected: 06.20.17 11.15

Date Received: 06.23.17 15.33

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: MGO

Analyst: MGO

Seq Number: 3020947

Date Prep: 06.27.17 13.50

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.7	4.96	mg/kg	06.28.17 00.26		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3021003

Date Prep: 06.26.17 07.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.26.17 15.16	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.26.17 15.16	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.26.17 15.16	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.26.17 15.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.26.17 15.16	
o-Terphenyl	84-15-1	105	%	70-135	06.26.17 15.16	



Certificate of Analytical Results 556209



TRC Solutions, Inc, Midland, TX

A-14 Compressor Station Sump

Sample Id: **WSW-2 1'**

Matrix: Soil

Date Received: 06.23.17 15.33

Lab Sample Id: 556209-010

Date Collected: 06.20.17 11.15

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 06.27.17 15.00

Basis: Wet Weight

Seq Number: 3020931

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.28.17 00.18	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.28.17 00.18	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.28.17 00.18	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.28.17 00.18	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.28.17 00.18	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.28.17 00.18	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.28.17 00.18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	92	%	80-120	06.28.17 00.18		
4-Bromofluorobenzene	460-00-4	103	%	80-120	06.28.17 00.18		

- 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

4147 Greenbriar Dr, Stafford, TX 77477
 9701 Harry Hines Blvd , Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 1211 W Florida Ave, Midland, TX 79701
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



QC Summary 556209

TRC Solutions, Inc A-14 Compressor Station Sump

Analytical Method: Chloride by EPA 300

Seq Number: 3020947

MB Sample Id: 726861-1-BLK

Matrix: Solid

LCS Sample Id: 726861-1-BKS

Prep Method: E300P

Date Prep: 06.27.17

LCSD Sample Id: 726861-1-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	249	100	240	96	90-110	4	20	mg/kg	06.27.17 20:53	

Analytical Method: Chloride by EPA 300

Seq Number: 3020947

Parent Sample Id: 555795-008

Matrix: Soil

MS Sample Id: 555795-008 S

Prep Method: E300P

Date Prep: 06.27.17

MSD Sample Id: 555795-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.20	246	253	99	254	100	90-110	0	20	mg/kg	06.27.17 21:16	

Analytical Method: Chloride by EPA 300

Seq Number: 3020947

Parent Sample Id: 556209-002

Matrix: Soil

MS Sample Id: 556209-002 S

Prep Method: E300P

Date Prep: 06.27.17

MSD Sample Id: 556209-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	36.3	250	289	101	290	101	90-110	0	20	mg/kg	06.27.17 23:02	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3021003

MB Sample Id: 726785-1-BLK

Matrix: Solid

LCS Sample Id: 726785-1-BKS

Prep Method: TX1005P

Date Prep: 06.26.17

LCSD Sample Id: 726785-1-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	1030	103	1030	103	70-135	0	35	mg/kg	06.26.17 10:55	
Diesel Range Organics	<15.0	1000	1050	105	1040	104	70-135	1	35	mg/kg	06.26.17 10:55	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		101		102		70-135	%	06.26.17 10:55
o-Terphenyl	115		100		99		70-135	%	06.26.17 10:55



QC Summary 556209

TRC Solutions, Inc A-14 Compressor Station Sump

Analytical Method: TPH by SW8015 Mod

Seq Number: 3021003

Parent Sample Id: 556209-001

Matrix: Soil

MS Sample Id: 556209-001 S

Prep Method: TX1005P

Date Prep: 06.26.17

MSD Sample Id: 556209-001 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	998	1030	103	1020	102	70-135	1	35	mg/kg	06.26.17 11:56	
Diesel Range Organics	53.3	998	1050	100	1040	99	70-135	1	35	mg/kg	06.26.17 11:56	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		101		70-135	%	06.26.17 11:56
o-Terphenyl	99		96		70-135	%	06.26.17 11:56

Analytical Method: BTEX by EPA 8021B

Seq Number: 3020931

MB Sample Id: 726847-1-BLK

Matrix: Solid

LCS Sample Id: 726847-1-BKS

Prep Method: SW5030B

Date Prep: 06.27.17

LCSD Sample Id: 726847-1-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	0.103	102	0.103	103	70-130	0	35	mg/kg	06.27.17 20:16	
Toluene	<0.00202	0.101	0.0908	90	0.0903	90	70-130	1	35	mg/kg	06.27.17 20:16	
Ethylbenzene	<0.00202	0.101	0.0968	96	0.0998	100	71-129	3	35	mg/kg	06.27.17 20:16	
m,p-Xylenes	<0.00404	0.202	0.176	87	0.177	88	70-135	1	35	mg/kg	06.27.17 20:16	
o-Xylene	<0.00202	0.101	0.0917	91	0.0933	93	71-133	2	35	mg/kg	06.27.17 20:16	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		92		101		80-120	%	06.27.17 20:16
4-Bromofluorobenzene	99		107		100		80-120	%	06.27.17 20:16

Analytical Method: BTEX by EPA 8021B

Seq Number: 3020931

Parent Sample Id: 556209-001

Matrix: Soil

MS Sample Id: 556209-001 S

Prep Method: SW5030B

Date Prep: 06.27.17

MSD Sample Id: 556209-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0814	81	0.0750	74	70-130	8	35	mg/kg	06.27.17 20:48	
Toluene	<0.00200	0.100	0.0665	67	0.0653	65	70-130	2	35	mg/kg	06.27.17 20:48	X
Ethylbenzene	<0.00200	0.100	0.0708	71	0.0610	60	71-129	15	35	mg/kg	06.27.17 20:48	X
m,p-Xylenes	<0.00400	0.200	0.117	59	0.105	52	70-135	11	35	mg/kg	06.27.17 20:48	X
o-Xylene	<0.00200	0.100	0.0656	66	0.0628	62	71-133	4	35	mg/kg	06.27.17 20:48	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		116		80-120	%	06.27.17 20:48
4-Bromofluorobenzene	91		117		80-120	%	06.27.17 20:48

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 Sump

Company Name: TRC Environmental Corporation

Project #: TRC #: 273818

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 #:

556209

Analyze For:

TCLP:

TOTAL:

Metals: As Ag Ba Cd Cr Pb Hg Se

Volatiles

Semivolatiles

BTEX 80215/5030 or BTEX 8260

RCI

N.O.R.M.

Chlorides E 300.1

RUSH TAT (Pre-Schedule) 24, 48, 72 hrs

Standard 3-Day TAT

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 80215/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard 3-Day TAT
	BH-3 2'			6/19/2017	1600		1	X								Soil	X													X
	ESW-1 1'			6/19/2017	1615		1	X								Soil	X													X
	WSW-1 1'			6/19/2017	1617		1	X								Soil	X													X
	BH-5 6"			6/19/2017	1630		1	X								Soil	X													X
	BH-4 2'			6/20/2017	1000		1	X								Soil	X													X
	NSW-1 1'			6/20/2017	1005		1	X								Soil	X													X
	ESW-2 1'			6/20/2017	1010		1	X								Soil	X													X
	SSW-1 1'			6/20/2017	1015		1	X								Soil	X													X
	NSW-2 1'			6/20/2017	1100		1	X								Soil	X													X
	WSW-2 1'			6/20/2017	1115		1	X								Soil	X													X

Special Instructions:

Bill to Rose Slade at Energy Transfer.

Relinquished by: Nikki Green Date: 6/23/17 Time: 1533 Received by: [Signature] Date: 6/23/17 Time: 1533

Relinquished by: [Signature] Date: 6/23/17 Time: 1533 Recd: [Signature] Date: 6/23/17 Time: 1533

Relinquished by: [Signature] Date: 6/23/17 Time: 1533 Recd: [Signature] Date: 6/23/17 Time: 1533

Temp: 84 IR ID: R-8 CF: (0-6: -0.2°C) (6-23: +0.2°C) Corrected Temp: 74

Laboratory Comments:

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

Temperature Upon Receipt: °C



XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 06/23/2017 03:33:00 PM

Work Order #: 556209

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)?	2.4
#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

*** 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: 06/23/2017

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks

Date: 06/26/2017

Analytical Report 553892

for
TRC Solutions, Inc

Project Manager: Nikki Green

A14 Compressor Station Sump

TRC#273818

30-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)



30-MAY-17

Project Manager: **Nikki Green**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **553892**

A14 Compressor Station Sump

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) 553892. 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. 553892 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,

Brandi Ritcherson

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 553892



TRC Solutions, Inc, Midland, TX

A14 Compressor Station Sump

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Hydrovac Solids	S	05-23-17 11:30		553892-001



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: A14 Compressor Station Sump

Project ID: TRC#273818
Work Order Number(s): 553892

Report Date: 30-MAY-17
Date Received: 05/24/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3018244 BTEX by EPA 8021B

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



Certificate of Analytical Results 553892



TRC Solutions, Inc, Midland, TX

A14 Compressor Station Sump

Sample Id: **Hydrovac Solids**

Matrix: Soil

Date Received: 05.24.17 16.10

Lab Sample Id: 553892-001

Date Collected: 05.23.17 11.30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 05.26.17 08.00

Basis: Wet Weight

Seq Number: 3018325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	52.5	4.93	mg/kg	05.26.17 09.24		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 05.26.17 17.00

Basis: Wet Weight

Seq Number: 3018367

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	05.27.17 13.45	U	1
C10-C28 Diesel Range Organics	C10C28DRO	187	15.0	mg/kg	05.27.17 13.45		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	265	15.0	mg/kg	05.27.17 13.45		1
Total TPH	PHC635	452	15.0	mg/kg	05.27.17 13.45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	05.27.17 13.45	
o-Terphenyl	84-15-1	110	%	70-135	05.27.17 13.45	



Certificate of Analytical Results 553892



TRC Solutions, Inc, Midland, TX

A14 Compressor Station Sump

Sample Id: **Hydrovac Solids**

Matrix: Soil

Date Received: 05.24.17 16.10

Lab Sample Id: 553892-001

Date Collected: 05.23.17 11.30

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 05.25.17 08.00

Basis: Wet Weight

Seq Number: 3018244

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.25.17 10.02	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.25.17 10.02	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.25.17 10.02	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.25.17 10.02	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.25.17 10.02	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.25.17 10.02	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.25.17 10.02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	111	%	80-120	05.25.17 10.02		
1,4-Difluorobenzene	540-36-3	86	%	80-120	05.25.17 10.02		

- 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

4147 Greenbriar Dr, Stafford, TX 77477
 9701 Harry Hines Blvd , Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 1211 W Florida Ave, Midland, TX 79701
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



QC Summary 553892

TRC Solutions, Inc A14 Compressor Station Sump

Analytical Method: Chloride by EPA 300

Seq Number: 3018325

MB Sample Id: 725214-1-BLK

Matrix: Solid

LCS Sample Id: 725214-1-BKS

Prep Method: E300P

Date Prep: 05.26.17

LCSD Sample Id: 725214-1-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	264	106	263	105	90-110	0	20	mg/kg	05.26.17 09:09	

Analytical Method: Chloride by EPA 300

Seq Number: 3018325

Parent Sample Id: 553892-001

Matrix: Soil

MS Sample Id: 553892-001 S

Prep Method: E300P

Date Prep: 05.26.17

MSD Sample Id: 553892-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	52.5	247	301	101	302	101	90-110	0	20	mg/kg	05.26.17 09:32	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3018367

MB Sample Id: 725298-1-BLK

Matrix: Solid

LCS Sample Id: 725298-1-BKS

Prep Method: TX1005P

Date Prep: 05.26.17

LCSD Sample Id: 725298-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	1010	101	1110	111	70-135	9	35	mg/kg	05.27.17 13:04	
C10-C28 Diesel Range Organics	<15.0	1000	1030	103	1070	107	70-135	4	35	mg/kg	05.27.17 13:04	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	118		105		120		70-135	%	05.27.17 13:04			
o-Terphenyl	117		104		117		70-135	%	05.27.17 13:04			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3018367

Parent Sample Id: 553892-001

Matrix: Soil

MS Sample Id: 553892-001 S

Prep Method: TX1005P

Date Prep: 05.26.17

MSD Sample Id: 553892-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	999	981	98	1030	103	70-135	5	35	mg/kg	05.27.17 14:06	
C10-C28 Diesel Range Organics	187	999	1130	94	1150	96	70-135	2	35	mg/kg	05.27.17 14:06	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane			100		118		70-135	%	05.27.17 14:06			
o-Terphenyl			76		108		70-135	%	05.27.17 14:06			



QC Summary 553892

TRC Solutions, Inc A14 Compressor Station Sump

Analytical Method: BTEX by EPA 8021B

Seq Number: 3018244

MB Sample Id: 725225-1-BLK

Matrix: Solid

LCS Sample Id: 725225-1-BKS

Prep Method: SW5030B

Date Prep: 05.25.17

LCSD Sample Id: 725225-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0826	83	0.0767	76	70-130	7	35	mg/kg	05.25.17 07:20	
Toluene	<0.00201	0.100	0.0823	82	0.0810	80	70-130	2	35	mg/kg	05.25.17 07:20	
Ethylbenzene	<0.00201	0.100	0.0915	92	0.0810	80	71-129	12	35	mg/kg	05.25.17 07:20	
m,p-Xylenes	<0.00402	0.201	0.177	88	0.165	82	70-135	7	35	mg/kg	05.25.17 07:20	
o-Xylene	<0.00201	0.100	0.0865	87	0.0803	80	71-133	7	35	mg/kg	05.25.17 07:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		115		101		80-120	%	05.25.17 07:20
4-Bromofluorobenzene	92		118		101		80-120	%	05.25.17 07:20

Analytical Method: BTEX by EPA 8021B

Seq Number: 3018244

Parent Sample Id: 553764-001

Matrix: Soil

MS Sample Id: 553764-001 S

Prep Method: SW5030B

Date Prep: 05.25.17

MSD Sample Id: 553764-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0527	53	0.0647	65	70-130	20	35	mg/kg	05.25.17 07:52	X
Toluene	<0.00201	0.100	0.0553	55	0.0688	69	70-130	22	35	mg/kg	05.25.17 07:52	X
Ethylbenzene	<0.00201	0.100	0.0562	56	0.0640	64	71-129	13	35	mg/kg	05.25.17 07:52	X
m,p-Xylenes	<0.00402	0.201	0.102	51	0.125	63	70-135	20	35	mg/kg	05.25.17 07:52	X
o-Xylene	<0.00201	0.100	0.0543	54	0.0658	66	71-133	19	35	mg/kg	05.25.17 07:52	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		100		80-120	%	05.25.17 07:52
4-Bromofluorobenzene	117		118		80-120	%	05.25.17 07:52



XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 05/24/2017 04:10:00 PM

Work Order #: 553892

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)?	1.6
#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
#21 VOC samples have zero headspace?	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

Marithza Anaya

Date: 05/24/2017

Checklist reviewed by:

Holly Taylor

Holly Taylor

Date: 05/26/2017

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 (Below Ground Sump)	Facility Type: Gathering Pipeline	
Surface Owner: (BLM) Bureau of Land Management	Mineral Owner: N/A	API No. N/A

LOCATION OF RELEASE

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

Latitude: **32.246183** Longitude: **-103.402000**

NATURE OF RELEASE

Type of Release: Crude Oil/ Produced water	Volume of Release: <5bbls	Volume Recovered: O
Source of Release: Below Ground Sump	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 2/23/17
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Notification was made to Ms. Olivia Yu on 3/3/17 at approximately 8:19 AM	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.* N/A		


RECEIVED

By Olivia Yu at 12:56 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 a below ground sump located inside the ETC A-14 Compressor Station. The cause of the release was due to an over-run of the below ground sump. During the initial response activities the, ETC personnel had a vacuum truck come and remove all the remaining liquids from within the tank and the double wall of the tank.

Describe Area Affected and Cleanup Action Taken.* The area affected was estimated at an area impacted of approximately 1,700 square feet. The fluid ran outside the tank moving toward the southwest of the facility outside the fence line. ETC representative and an environmental consultant representing ETC conducted a site assessment of the release and will submit a work-plan to the NMOCD Hobbs District Office and the Bureau Of Land Management.

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: 	
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 <input checked="" type="checkbox"/>
Date: 3/3/17 Phone: 210-403-6525			

* Attach Additional Sheets If Necessary

1RP-4635

fOY1706953656

nOY1706954734

pOY1706955221

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-4635 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; C₆ thru C₃₆), 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; C₆ thru C₃₆), 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.

Jim Griswold

OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us