Approval given to Backfill 10/20/16
Kristen Lynch
NMOCD

REMEDIATION SUMMARY AND SITE CLOSURE REQUEST

ETC FIELD SERVICES, LLC
Boyd 4 Inch Historical West
Lea County, New Mexico
UNIT LTR "P", Section 23, Township 22 South, Range 37 East
Latitude 32.372181° North, Longitude 103.127236° West
NMOCD Reference # 1RP-4277

APPROVED
By Olivia Yu at 3:22 pm, Apr 14, 2017

1RP-4277 approved for closure.

Prepared For:

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

HOBBS OCD
OCT 20 2016
RECEIVED

Prepared By:

TRC Environmental Corporation
2057 Commerce
Midland, Texas 79703

October 2016

Nikki Green
Project Manager

Jeffrey Kindley, P.G.
Senior Project Manager

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INTRODUCTION

TRC Environmental Corporation (TRC), on behalf of ETC Field Services, LLC (ETC), formerly known as Southern Union Gas Services (SUGS) and Regency Field Services, LLC (Regency), has prepared this Remediation Summary and Site Closure Request for the Release Site known as Boyd 4 Inch Historical West. The legal description of the Release Site is Unit Letter "P", Section 23, Township 22 South, Range 37 East, in Lea County, New Mexico. The subject property is owned by Mr. Irvin Boyd of Eunice, New Mexico. The Release Site GPS coordinates are 32.372181º North and 103. 127236º West. Please reference Figure 1 for the Site Location Map and Figure 4 for the Site Details and Confirmation Soil Sample Location Map. The Release Notification and Corrective Action (Form C-141) is provided as Appendix D.

In September 2012, SUGS discovered a release had occurred on a four (4) inch lateral pipeline and the release was initially deemed to be non-reportable to the New Mexico Oil Conservation Division (NMOCD). On May 12, 2016, ETC filed a NMOCD Form C-141 documenting the release, information as to the volume and date of the release is not available. General photographs of the site are provided as Appendix B.

NMOCD SITE CLASSIFICATION

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) did not identify any registered water wells in Section 23, Township 22 South, Range 37 East. A reference map utilized by the NMOCD Hobbs District Office, indicates groundwater should be encountered at approximately fifty-three (53) feet below ground surface (bgs). Analytical results derived from preliminary soil samples collected from the floor of the existing Release Site excavation indicates hydrocarbon impact exists at approximately twenty (20) feet bgs. Based on the NMOCD site classification system, twenty (20) points will be assigned to the Boyd 4 Inch Historical West Release Site as a result of this criterion.

An unregistered water well (windmill) is located approximately nine hundred seventy-eight (978) feet north-northwest (upgradient) of the Release Site. Based on the NMOCD site classification system, twenty (20) 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.

The NMOCD guidelines indicate the Boyd 4 Inch Historical West Release Site has a ranking score of forty (40). Based on this score, the soil remediation levels for a site with a ranking score of forty (40) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- BTEX – 50 mg/Kg (ppm)
- TPH – 100 mg/Kg (ppm)
- Chloride – 250 mg/Kg (ppm)

SUMMARY OF SOIL REMEDIATION ACTIVITIES

From September 18, 2012 through December 11, 2013, a previous contractor excavated approximately 587 cubic yards (cy) of impacted from the area of impact. Impacted soil was transported to Sundance Services, Inc. (Sundance), in Eunice, New Mexico. The area excavated by the previous contractor was left exposed and is referred to as, the existing remediation project.

On January 29, 2016, TRC, on behalf of ETC, collected six (6) preliminary soil status samples (Floor-1 @ 10', SSW-1 @ 8', NSW-1 @ 7', Floor-2 @ 4', SSW-2 @ 3', and NSW-2 @ 2.5') from the existing excavation to determine the current levels of impact at the Release Site. Based on field observations, it was determined the analytical results from soil samples collected were likely not an accurate representation of the remaining soil impacted at the Release site.

On March 8, 2016, eighteen (18) soil samples (Sample-1 BOE 2', Sample-1 BOE 8.5', Sample-1 BOE 10', Sample-2 BOE 2', Sample-2 BOE 4', Sample-2 BOE 4.6', Sample-3 2', Sample-3 6', Sample-3 10', Sample-4 2', Sample-4 6', Sample-4 10', Sample-5 2', Sample-5 6', Sample-5 10', Sample-6 Surface, Sample-7 Surface, and Sample-8 Surface) were collected from and in the vicinity of the existing excavation utilizing a hand auger. Soil samples were submitted to the laboratory and analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA Method SW 846-8021B, Total Petroleum Hydrocarbons (TPH) using EPA Method SW 846-8015M, and chloride using EPA Method E 300.0. A review of laboratory analytical results indicated additional vertical and horizontal delineation activities were necessary.

On April 5, 2016, delineation of the impacted soil with heavy equipment began at the Release Site. Six (6) soil samples (Sample-1 @ 21', T-SSW-1 @ 6', T-NSW-1 @ 7', T-WSW-1 @ 11', Sample-2 @ 20', and Sample-10 @ 2.5') were collected, field screened for concentrations of chloride and submitted to the laboratory for BTEX, TPH, and chloride analysis. Please reference Figure 2 for site details and soil sampling locations.

On May 16, 2016, representatives of ETC (formerly SUGS and Regency) and TRC met with a NMOCD representative and submitted the "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 31, 2016, TRC commenced excavation activities from the west wall of the existing remediation project to the east, north, and south. Chloride field screening was utilized to guide the excavation activities. Excavated soil was stockpiled to the west of the excavation, pending final disposition of the soil.

On June 7, 2016, TRC began transporting the excavated material to Sundance concurrent with excavation activities. Approximately 16,672 cubic yards of excavated soil was transported to Sundance Services, Inc. The Sundance Disposal Tickets are provided as Appendix C (included on the provided disc).

On June 27, 2016, fifteen (15) soil samples (West Excavation Floor-1 @ 20', West Excavation SSW-1 @ 19', West Excavation NSW-1 @ 19', West Excavation ESW-1 @ 19', West Excavation

Floor-2 @ 20', West Excavation SSW-2 @ 19', West Excavation NSW-2 @ 19', West Excavation Floor-3 @ 20', West Excavation SSW-3 @ 19', West Excavation NSW-3 @ 19', West Excavation WSW-3 @ 19', West Excavation Floor-4 @ 20', West Excavation ESW-4 @ 19', West Excavation WSW-4 @ 19', West Excavation NSW-4 @ 19', and West Excavation Floor-5 @ 15') were collected from the floor and side walls of the excavated area. The soil samples were submitted to the laboratory and analyzed for concentrations of Total Petroleum Hydrocarbons (TPH) using EPA Method SW 846-8015M and chloride using EPA Method E 300.0. The analytical results indicated TPH concentrations were less than the laboratory Method Detection Limit (MDL) of 15 mg/Kg for all collected soil samples, with the exception of West Excavation SSW-2 @ 19', which exhibited a TPH concentration of 608.7 mg/Kg. In addition, analytical results indicated chloride concentrations ranged from less than laboratory MDL of 10 mg/Kg for soil sample West Excavation SSW-2 @ 19' to 1,600 mg/Kg for soil sample West Excavation ESW-1 @ 19'. A review of laboratory analytical results indicated additional excavation activities were necessary toward the north, south, and west. Table 1 summarizes the Concentrations of Benzene, BTEX, TPH, and Chlorides in Soil. Analytical reports are provided as Appendix A.

On June 28, 2016, one (1) soil sample (West Excavation Floor-6 @ 25') was collected from the floor of the excavated area. Soil sample West Excavation Floor-6 @ 25' was collected approximately 25 feet below ground surface (bgs). The soil sample was submitted to the laboratory and the analytical results indicated soil sample West Excavation Floor-6 @ 25' exhibited a TPH concentrations of 2,154 mg/Kg and a chloride concentration below laboratory MDL of 10 mg/Kg.

An additional composite soil sample (West Excavation Stockpile-1) was collected from the overburdened non-impacted soil excavated during remediation activities. The soil sample was submitted to the laboratory for TPH and chloride analysis. Laboratory analytical results indicated TPH concentrations were below laboratory MDL of 14.9 mg/Kg and exhibited a chloride concentration of 177 mg/Kg, which are below NMOCD guidelines. At the request of the landowner, excavated material will not be used as backfill and was transported for disposal at Sundance.

Based on field observations and information provided by the landowner, no additional excavation activities can be conducted northwest of the excavation due to the presence of a buried drilling pit.

On July 15, 2016, following additional excavation activities in the area represented by soil sample West Excavation Floor-6 @ 25, two (2) soil samples (West Excavation Floor-6 @ 32' and ESW-6 @ 28') were collected and submitted to the laboratory for TPH and chloride analysis. A review of laboratory analytical results indicated TPH concentrations were below the laboratory MDL of 15 mg/Kg and chloride concentrations did not exceed 46 mg/Kg, which are below NMOCD guidelines.

On July 20 through 22, 2016, based on increasing chloride concentrations on the northeast excavation sidewall, excavation activities were halted and additional chloride field screen activities were conducted with a hand auger to delineate the vertical and horizontal extent of the impacted area northeast of the excavation. The auger samples were collected approximately twenty (20) feet north east of the north wall at depths of five (5) feet bgs, ten (10) feet bgs, and fifteen (15) feet bgs. On July 21, 2016, nine (9) soil samples (NW AH-1 @ 5' through NW AH-1 @ 15', NC AH-1 @ 5' through NC AH-1 @ 15', and NE AH-1 @ 5' through NE AH-1 @ 15') were collected during hand auger activities and submitted to the laboratory to confirm chloride

field screen results. A review of laboratory analytical results indicated chloride concentrations for the samples collected at five (5) feet bgs ranged from 712 mg/Kg for soil sample NW AH-1 @ 5' to 881 mg/Kg for soil sample NC AH-1 @ 5'. Chloride concentrations for soil samples collected at ten (10) feet bgs ranged from 284 mg/Kg for soil sample NW AH-1 @ 10' to 355 mg/Kg for soil sample NC AH-1 @ 10'. Chloride concentrations for soil samples collected at fifteen (15) feet bgs ranged from 15 mg/Kg for soil sample NC AH-1 @ 15' to 308 mg/Kg for soil sample NE AH-1 @ 15'.

On August 22 through September 9, 2016, excavation activities resumed, moving in a northeast direction from the northeast side wall. Six (6) soil samples (NW Floor @ 5', NC Wall @ 4', NC Floor @ 5', NE Floor A @ 5', NE Floor B @ 5', and NE Wall @ 4') were collected from the recently excavated northeast section and submitted for chloride analysis. Laboratory analytical results indicated chloride concentrations for soil samples NC Floor @ 5' and NE Floor A @ 5' were below NMOCD guidelines. Chloride concentrations for soil samples NW Floor @ 5', NC Wall @ 4', NE Floor B @ 5', and NE Wall @ 4' ranged from 271 mg/Kg for soil samples NW Floor @ 5' to 423 mg/Kg for soil sample NE Wall @ 4'.

On October 5, 2016, representatives of ETC, TRC, and the landowner met at the Site to discuss the project. During the meeting, a representative of TRC and an environmental contractor retained by the landowner, collected and split confirmation soil samples from the excavation. TRC submitted twenty-five (25) confirmation soil samples (Confirmation Floor-1 @ 32',Confirmation Floor-2 @ 28', Confirmation Floor-3 @ 20', Confirmation SW-1 @ 19', Confirmation SW-2 @ 19', Confirmation Floor-4 @ 20', Confirmation Floor-5 @ 20', Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', Confirmation EW-3 @ 19', Confirmation NW-1 @ 19', Confirmation Floor-7 @ 20', Confirmation Floor-6 @ 20', Confirmation NW-2 @ 19', Confirmation WW-1 @ 19', Confirmation WW-2 @ 19', Confirmation NW-3 @ 7.5', Confirmation NW-4 @ 10', Confirmation NW-5 @ 12', Confirmation WW-3 @ 19') to Xenco Laboratories in Midland, Texas and analyzed the soil samples for BTEX, TPH, and chloride using Method E-300.1. A review of laboratory analytical results indicated TPH and BTEX concentrations for all submitted soil samples were below the laboratory MDL and NMOCD guidelines. Laboratory results indicated chloride concentrations for all collected soil samples ranged from below the laboratory MDL of 5 mg/Kg for soil samples Confirmation Floor-2 @ 28', Confirmation Floor-3 @ 20', and Confirmation Floor-7 @ 20' to 134 mg/Kg for soil sample Confirmation Floor-5 @ 20', with the exception of soil samples Confirmation NW-2 @ 19', Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', Confirmation EW-3 @ 19, Confirmation WW-2 @ 19', Confirmation WW-3 @ 19', and Confirmation SW-1 @ 19'. Soil sample Confirmation NW-2 @ 19' exhibited a chloride concentration of 263 mg/Kg. A review of laboratory results indicated chloride concentrations for soil samples Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', Confirmation EW-3 @ 19', collected from the eastern sidewall, were 808 mg/Kg, 383 mg/Kg, and 671 mg/Kg, respectively. Laboratory results indicated chloride concentrations for soil samples Confirmation WW-2 @ 19' and Confirmation WW-3 @ 19', collected from the western sidewall in close proximity to a buried drilling pit, were 272 mg/Kg and 2,670 mg/Kg, respectively. Laboratory analytical results indicated chloride concentrations for Confirmation SW-1 @ 19', collected from the southern sidewall in close proximity to the John H. Hendrix Corporation Lee # 2 Well location and pump jack.

Based on the laboratory results from the sampling event on October 5, 2016, no additional excavation activities can be conducted in the areas represented by soil samples Confirmation WW-

2 @ 19' and Confirmation WW-3 @ 19' due to the close proximity of a buried drilling pit and the risk of encroaching on the pit boundaries.

In addition, no additional excavation activities can be conducted in the area represented by soil sample Confirmation SW-1 @ 19' due to the close proximity of the John H. Hendrix Corporation Lee #2 Well Location due to well and pump jack stability safety concerns.

In addition, the areas represented by soil samples Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', and Confirmation EW-3 @ 19', will be remediated at a later date and submitted under a separate cover (Boyd 4-Inch Historical East Site #1RP-4278).

On October 14, 2016, Mr. Irvin Boyd verbally granted ETC permission to backfill the existing excavation with locally obtained caliche and topsoil purchased from the landowner.

Pending NMOCD approval, ETC will backfill the existing excavation with non-impacted soil purchased from the landowner. On completion of backfilling activities, the impacted area will be contoured to fit the surrounding area and be reseeded with vegetation approved by the landowner.

SITE CLOSURE REQUEST

Based on the analytical results and landowner approval to backfill the excavation, ETC requests NMOCD permission to backfill the Boyd 4 Historical West excavation and grant Site Closure Status to the Boyd 4 Inch (Historical) West incident.

LIMITATIONS

TRC has prepared this Remediation Summary and Site Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

TRC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. TRC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. TRC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. TRC also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of ETC Field Services, LLC. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of TRC and/or ETC Field Services, LLC.

DISTRIBUTION

Copy 1: Jamie Keyes
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San Antonio, Texas 78258

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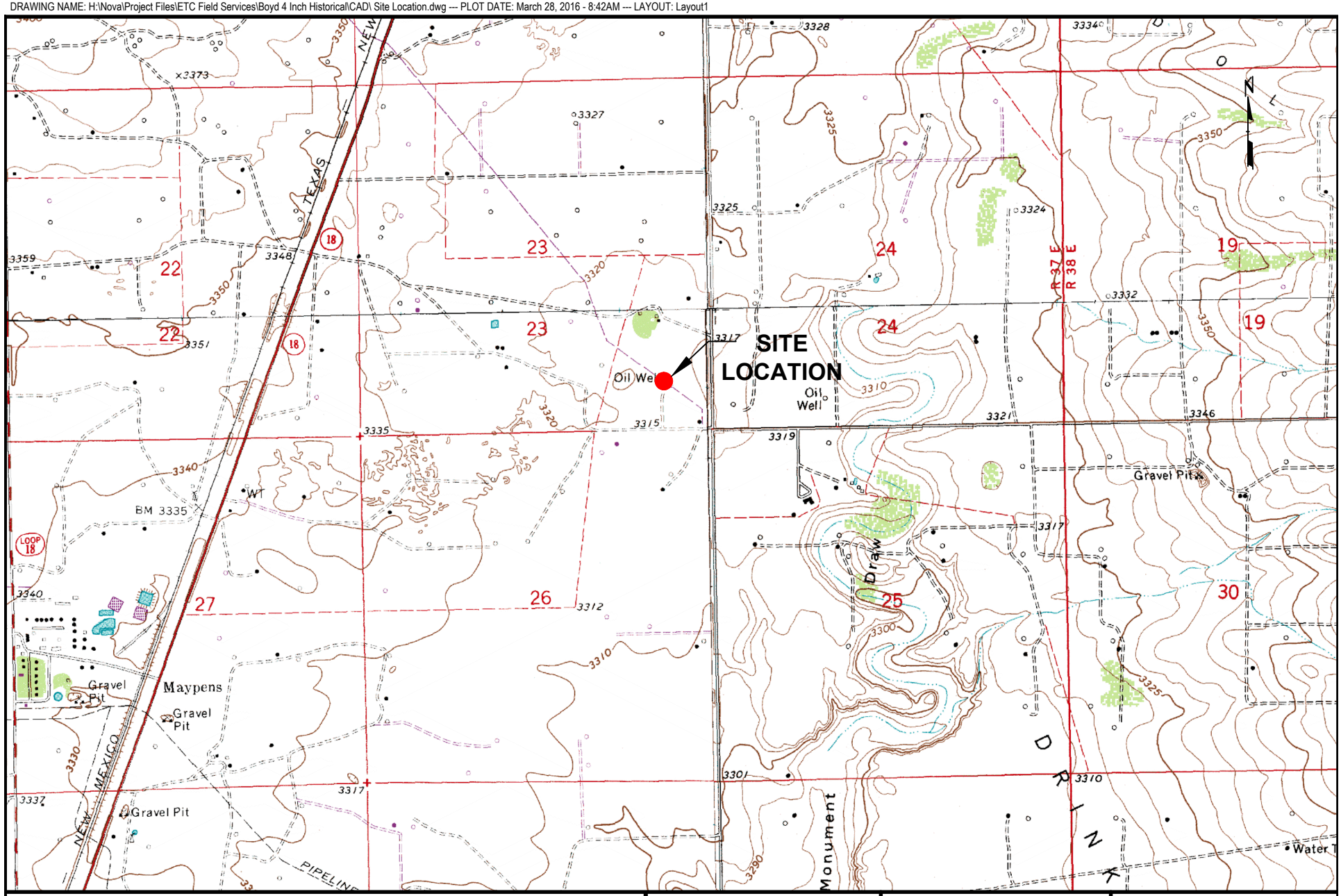
2057 Commerce Street
Midland, Texas 79703

DRAWING NAME: H:\Nova\Project Files\ETC Field Services\Boyd 4 Inch Historical\CAD\ Site Location.dwg --- PLOT DATE: March 28, 2016 - 8:42AM --- LAYOUT: Layout1



LEGEND:

2000 1000 0 1000 2000

Distance in Feet

Figure 1

Site Location Map
ETC Field Services, LLC
Boyd 4" Historical
Lea County, NM

Scale: 1" = 2000'	
CAD By: TA	Checked By: CS
Draft: February 3, 2016	
Lat. N 32.372074° , Long. W 103.127151°	
SW1/4 SW1/4 Sec 23 T22S R37E	
TRC Proj. No.: 251737	

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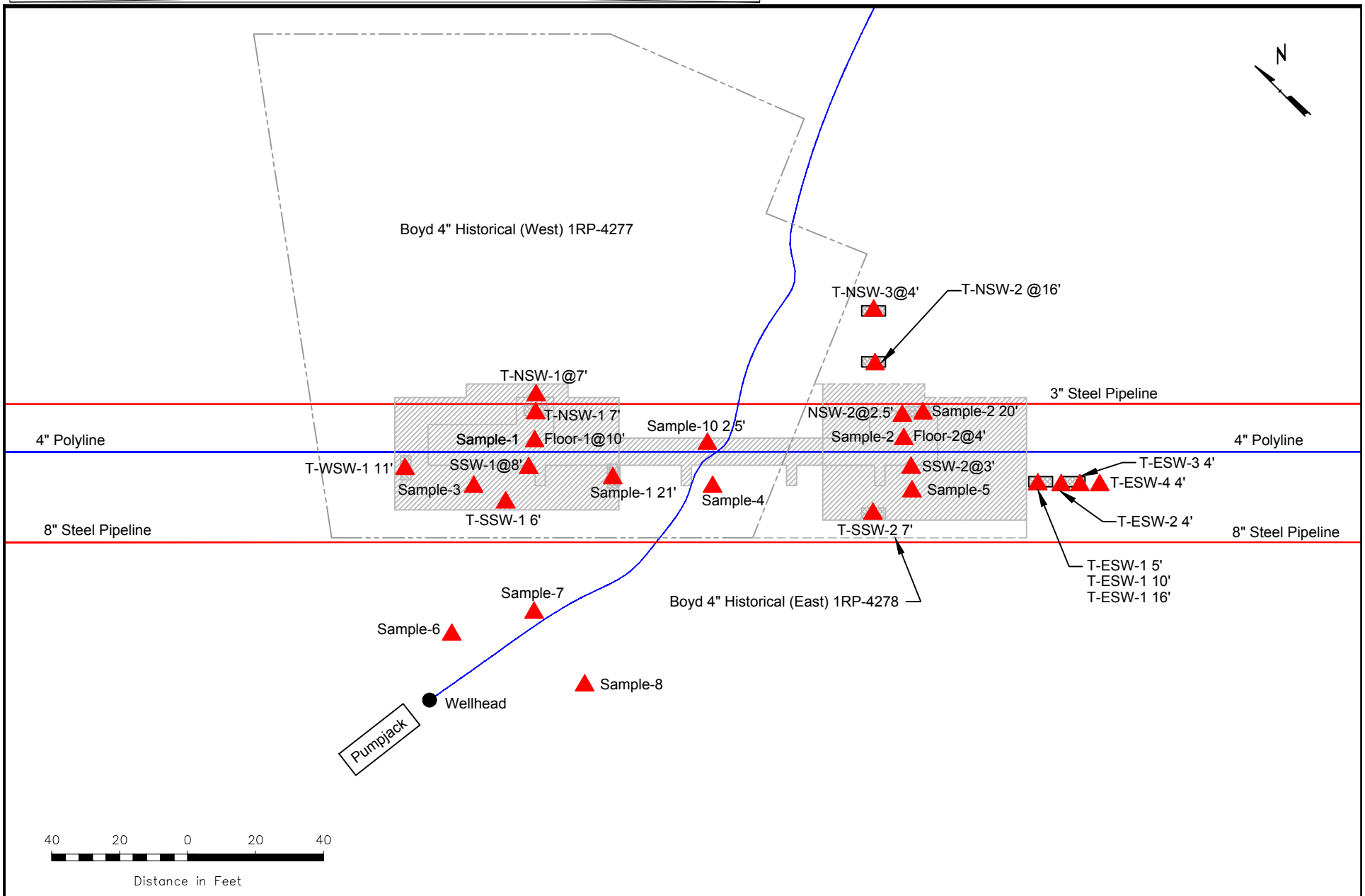

LEGEND:

- Steel Pipeline
- Polyline
- Soil Sample Location

Figure 2
Site Detail and Initial
Soil Sample Locations
ETC Field Services, LLC
Boyd 4" Historical (West)
Lea County, NM

Scale: 1" = 40'	
CAD By: TA	Checked By: CS
Draft: February 3, 2016	
Lat. N 32.372074° , Long. W 103.127151°	
SW1/4 SW1/4 Sec 23 T22S R37E	
TRC Proj. No.: 251737	

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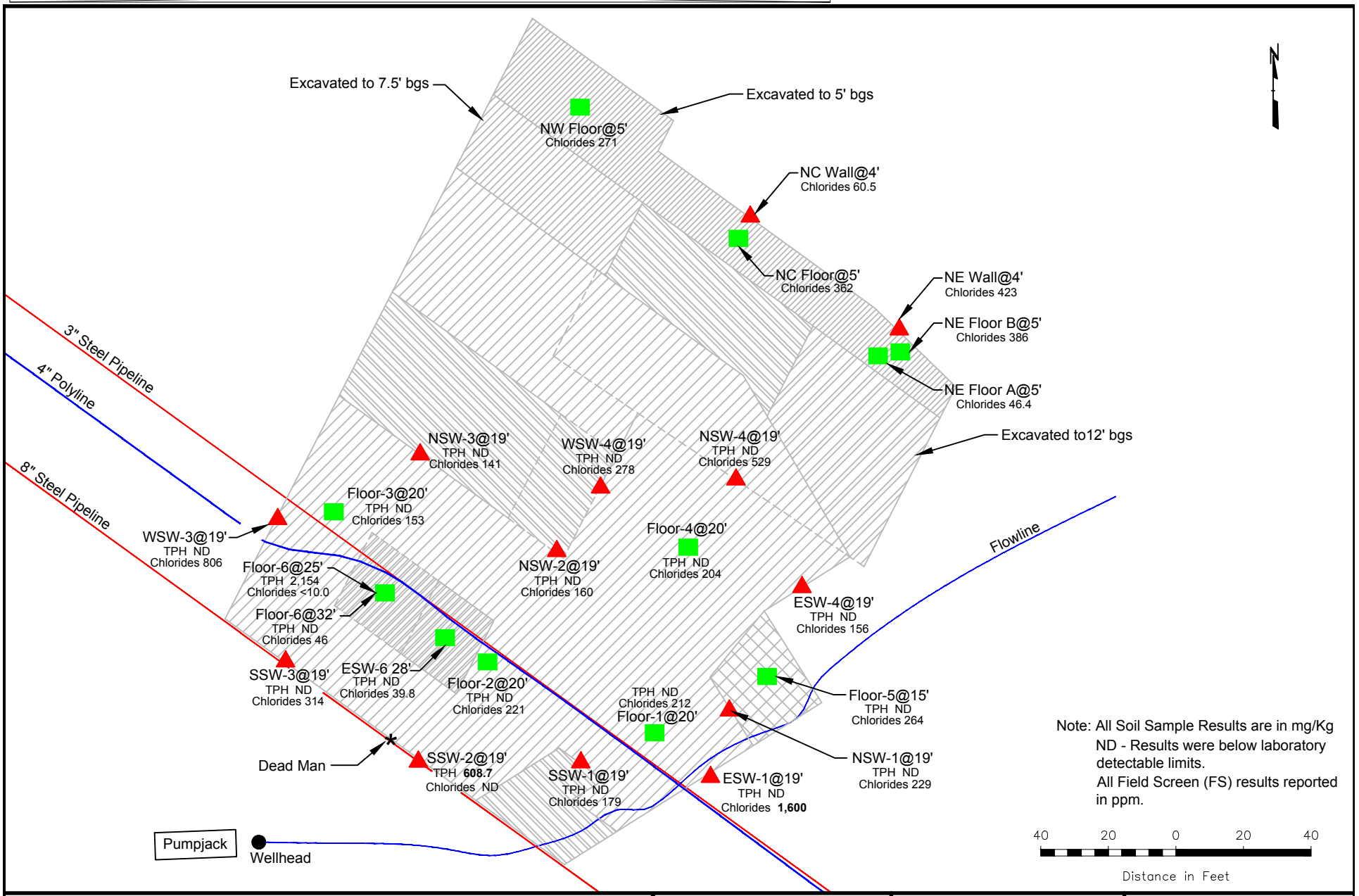

Figure 3
Site Detail and Exploratory Soil Sample Locations
ETC Field Services, LLC
Boyd 4" Historical (West)
Lea County, NM

Scale: 1" = 40'	
CAD By: TA	Checked By: CS
Draft: February 3, 2016	
Lat. N 32.372074° , Long. W 103.127151°	
SW1/4 SW1/4 Sec 23 T22S R37E	
TRC Proj. No.: 258926	

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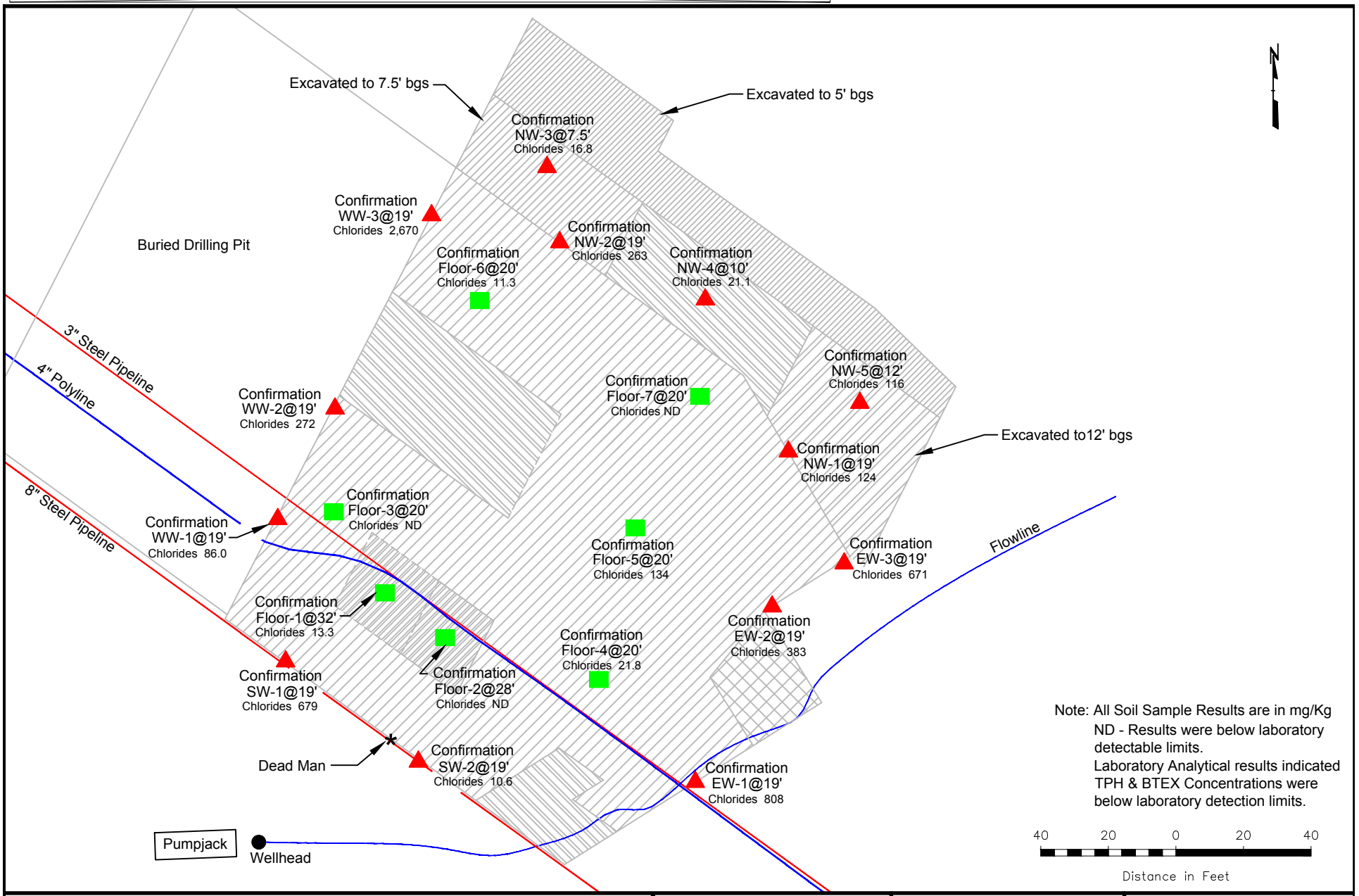

Figure 4
Site Detail and Confirmation Soil Sample Locations
ETC Field Services, LLC
Boyd 4" Historical (West)
Lea County, NM

Scale: 1" = 40'	
CAD By: TA	Checked By: CS
Draft: February 3, 2016	
Lat. N 32.372074° , Long. W 103.127151°	
SW1/4 SW1/4 Sec 23 T22S R37E	
TRC Proj. No.: 258926	

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TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

ETC FIELD SERVICES, LLC
BOYD 4 INCH HISTORICAL WEST RELEASE SITE
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
**Floor-1 @ 10'	01/29/16	Excavated	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<15.0	<15.0	<15.0	<15.0	24.4
**SSW-1 @ 8'	01/29/16	Excavated	<0.000996	<0.00199	<0.000996	<0.00199	<0.000996	<0.00199	<14.9	<14.9	<14.9	<14.9	2.64
**NSW-1 @ 7'	01/29/16	Excavated	<0.000992	<0.00198	<0.000992	<0.00198	<0.000992	<0.00198	<15.0	<15.0	<15.0	<15.0	2.42
**Floor-2 @ 4'	01/29/16	Excavated	<0.000998	<0.00200	<0.000998	<0.00200	<0.000998	<0.00200	<15.0	35.0	<15.0	35.0	<2.00
**SSW-2 @ 3'	01/29/16	Excavated	<0.000998	<0.00200	<0.000998	<0.00200	<0.000998	<0.00200	<15.0	469	<15.0	**469**	17.8
**NSW-2 @ 2.5'	01/29/16	Excavated	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<14.9	151	<14.9	**151**	7.69
Sample-1 BOE 2'	03/08/16	Excavated	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	15.0	<15.0	15.0	<9.98
Sample-1 BOE 8.5'	03/08/16	Excavated	<0.0149	0.177	1.49	6.40	1.20	9.267	613	2,810	35.0	**3,458**	<9.67
Sample-1 BOE 10'	03/08/16	Excavated	<0.0149	0.100	0.681	2.81	0.934	4.525	338	1,800	31.6	**2,169.6**	<9.88
*Sample-2 BOE 2'	03/08/16	1RP-4278	<0.00746	<0.00994	0.273	0.813	0.745	1.831	237	1,430	43.5	**1,710.5**	<9.98
*Sample-2 BOE 4'	03/08/16	1RP-4278	<0.0150	0.512	1.50	4.99	1.53	8.532	1,020	5,600	115	**6,735**	<9.96
*Sample-2 BOE 4.6'	03/08/16	1RP-4278	<0.0150	0.307	0.881	2.85	1.40	5.438	376	2,420	46.8	**2,842.8**	<10.0
Sample-3 2'	03/08/16	Excavated	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	**1,590**
Sample-3 6'	03/08/16	Excavated	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	<15.0	27.3	<15.0	27.3	**1,200**
Sample-3 10'	03/08/16	Excavated	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<14.9	20.6	<14.9	20.6	**616**
Sample-4 2'	03/08/16	Excavated	<0.00150	<0.00200	<0.00200	<0.00200	<0.00300	<0.00300	<15.0	<15.0	<15.0	<15.0	**506**
Sample-4 6'	03/08/16	Excavated	<0.00150	<0.00200	<0.00200	<0.000200	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	102
Sample-4 10'	03/08/16	Excavated	<0.00150	<0.00200	<0.00200	<0.000200	<0.00299	<0.00299	<15.0	28.1	<15.0	28.1	22.7
*Sample-5 2'	03/08/16	1RP-4278	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<14.9	<14.9	<14.9	<14.9	**627**
*Sample-5 6'	03/08/16	1RP-4278	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	**472**
*Sample-5 10'	03/08/16	1RP-4278	<0.00150	<0.00200	<0.00200	<0.00200	<0.00300	<0.00300	<15.0	<15.0	<15.0	<15.0	157
Sample-6 Surface	03/08/16	In-Situ	-	-	-	-	-	-	24.0	1,200	116	**1,340**	43.7
Sample-7 Surface	03/08/16	In-Situ	-	-	-	-	-	-	19.1	630	99.8	**748.9**	22.7
Sample-8 Surface	03/08/16	In-Situ	-	-	-	-	-	-	165	10,700	152	**11,017**	**1,400**
Sample-1 @ 21'	04/05/16	Excavated	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	9.07
T-SSW-1 @ 6'	04/05/16	Excavated	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	20.0
T-NSW-1 @ 7'	04/05/16	Excavated	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	3.65
T-WSW-1 @ 11'	04/05/16	Excavated	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	<15.0	51.7	<15.0	51.7	35.6
*Sample-2 @ 20'	04/05/16	1RP-4278	0.0264	0.0132	0.160	0.315	0.059	0.5736	444	1,920	26	**2,390.1**	32.3
Sample -10 @ 2.5'	04/05/16	Excavated	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	40.9
West Excavation													
West Excavation Floor-1 @ 20'	06/27/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	212
West Excavation SSW-1 @ 19'	06/27/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	179
West Excavation NSW-1 @ 19'	06/27/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	229
*West Excavation ESW-1 @ 19'	06/27/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**1,600**

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

ETC FIELD SERVICES, LLC
BOYD 4 INCH HISTORICAL WEST RELEASE SITE
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
West Excavation Floor-2 @ 20'	06/27/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	221
West Excavation SSW-2 @ 19'	06/27/16	Excavated	-	-	-	-	-	-	25.7	583	<15.0	**608.7**	<10.0
West Excavation NSW-2 @ 19'	06/27/16	Excavated	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	160
West Excavation Floor-3 @ 20'	06/27/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	153
West Excavation SSW-3 @ 19'	06/27/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**314**
West Excavation NSW-3 @ 19'	06/27/16	Excavated	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	141
West Excavation WSW-3 @ 19'	06/27/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**806**
West Excavation Floor-4 @ 20'	06/27/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	204
*West Excavation ESW-4 @ 19'	06/27/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	156
West Excavation WSW-4 @ 19'	06/27/16	Excavated	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**278**
West Excavation NSW-4 @ 19'	06/27/16	Excavated	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**529**
West Excavation Floor-5 @ 15'	06/27/16	Excavated	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**264**
West Excavation Floor-6 @ 25'	06/28/16	Excavated	-	-	-	-	-	-	174.0	1,980	<15.0	**2,154**	<10.0
West Excavation Stockpile-1	06/28/16	-	-	-	-	-	-	-	<14.9	<14.9	<14.9	<14.9	177
West Excavation Floor-6 @ 32'	07/15/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	46
ESW-6 @ 28'	07/15/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	39.8
NW AH-1 @ 5'	07/20/16	Excavated	-	-	-	-	-	-	-	-	-	-	**712**
NW AH-1 @ 10'	07/20/16	Excavated	-	-	-	-	-	-	-	-	-	-	**284**
NW AH-1 @ 15'	07/20/16	Excavated	-	-	-	-	-	-	-	-	-	-	**271**
NC AH-1 @ 5'	07/20/16	Excavated	-	-	-	-	-	-	-	-	-	-	**881**
NC AH-1 @ 10'	07/20/16	Excavated	-	-	-	-	-	-	-	-	-	-	**355**
NC AH-1 @ 15'	07/20/16	Excavated	-	-	-	-	-	-	-	-	-	-	155
NE AH-1 @ 5'	07/20/16	Excavated	-	-	-	-	-	-	-	-	-	-	**764**
NE AH-1 @ 10'	07/20/16	Excavated	-	-	-	-	-	-	-	-	-	-	**352**
NE AH-1 @ 15'	07/20/16	Excavated	-	-	-	-	-	-	-	-	-	-	**308**
NW Floor @ 5'	09/08/16	In-Situ	-	-	-	-	-	-	-	-	-	-	**271**
NC Wall @ 4'	09/08/16	In-Situ	-	-	-	-	-	-	-	-	-	-	**362**
NC Floor @ 5'	09/08/16	In-Situ	-	-	-	-	-	-	-	-	-	-	60.5
NE Floor A @ 5'	09/08/16	In-Situ	-	-	-	-	-	-	-	-	-	-	46.4
NE Floor B @ 5'	09/08/16	In-Situ	-	-	-	-	-	-	-	-	-	-	**386**
NE Wall @ 4'	09/08/16	In-Situ	-	-	-	-	-	-	-	-	-	-	**423**
Confirmation Floor-1 @ 32'	10/05/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	13.3
Confirmation Floor-2 @ 28'	10/05/16	In-Situ	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	<14.9	<14.9	<14.9	<14.9	<5.00
Confirmation Floor-3 @ 20'	10/05/16	In-Situ	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	<5.00

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

ETC FIELD SERVICES, LLC
BOYD 4 INCH HISTORICAL WEST RELEASE SITE
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
Confirmation SW-1 @ 19'	10/05/16	In-Situ	<0.00149	<0.00199	<0.00199	<0.00199	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	**679**
Confirmation SW-2 @ 19'	10/05/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00300	<0.00300	<15.0	<15.0	<15.0	<15.0	10.6
Confirmation Floor-4 @ 20'	10/05/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	21.8
Confirmation Floor-5 @ 20'	10/05/16	In-Situ	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	134
*Confirmation EW-1 @ 19'	10/05/16	In-Situ	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	**808**
*Confirmation EW-2 @ 19'	10/05/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	**383**
*Confirmation EW-3 @ 19'	10/05/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00300	<0.00300	<15.0	<15.0	<15.0	<15.0	**671**
Confirmation NW-1 @ 19'	10/05/16	In-Situ	<0.00149	<0.00199	<0.00199	<0.00199	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	124
Confirmation Floor-7 @ 20'	10/05/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	<5.00
Confirmation Floor-6 @ 20'	10/05/16	In-Situ	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	11.3
Confirmation NW-2 @ 19'	10/05/16	In-Situ	<0.00149	<0.00199	<0.00199	<0.00199	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	**263**
Confirmation WW-1 @ 19'	10/05/16	In-Situ	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	86.0
Confirmation WW-2 @ 19'	10/05/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00300	<0.00300	<15.0	<15.0	<15.0	<15.0	**272**
Confirmation NW-3 @ 7.5'	10/05/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	16.8
Confirmation NW-4 @ 10'	10/05/16	In-Situ	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	21.1
Confirmation NW-5 @ 12'	10/05/16	In-Situ	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	116
Confirmation WW-3 @ 19'	10/05/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<14.9	<14.9	<14.9	<14.9	**2,670**

** = Soil sample results do not appear to be representative

* = Soil samples are associated with the Boyd 4-Inch Historical East Release Site (1RP-4278), which will be remediated at a later date and submitted under separate cover.

Analytical Report 524056

for

TRC Solutions, Inc

Project Manager: Curt Stanley

Boyd 4 Inch Historical

ETC Field Services

08-FEB-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), 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 (T104704534-15-1)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)

08-FEB-16

Project Manager: **Curt Stanley**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **524056**
Boyd 4 Inch Historical
Project Address: Lea County, NM

Curt Stanley:

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) 524056. 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. 524056 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 524056

TRC Solutions, Inc, Midland, TX

Boyd 4 Inch Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 524056

TRC Solutions, Inc, Midland, TX

Project Name: Boyd 4 Inch Historical

Project Id: ETC Field Services
Contact: Curt Stanley
Project Location: Lea County, NM

Date Received in Lab: Mon Feb-01-16 04:38 pm
Report Date: 08-FEB-16
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	524056-001		524056-002		524056-003		524056-004		524056-005		524056-006	
	Field Id:	Floor-1 @ 10'		SSW-1 @ 8'		NSW-1 @ 7'		Floor-2 @ 4'		SSW-2 @ 3'		NSW-2 @ 2.5'	
	Depth:	10 ft		8 ft		7 ft		4 ft		3 ft		2.5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-29-16 14:00		Jan-29-16 14:05		Jan-29-16 14:10		Jan-29-16 14:30		Jan-29-16 14:35		Jan-29-16 14:40	
BTEX by EPA 8021B	***Extracted:***	Feb-03-16 17:30		Feb-03-16 17:30		Feb-03-16 17:30		Feb-03-16 17:30		Feb-03-16 17:30		Feb-03-16 17:30	
	Analyzed:	Feb-04-16 16:31		Feb-03-16 21:01		Feb-03-16 21:18		Feb-04-16 16:48		Feb-03-16 21:56		Feb-03-16 22:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00100	ND	0.000996	ND	0.000992	ND	0.000998	ND	0.000998	ND	0.00100
Toluene		ND	0.00200	ND	0.00199	ND	0.00198	ND	0.00200	ND	0.00200	ND	0.00200
Ethylbenzene		ND	0.00100	ND	0.000996	ND	0.000992	ND	0.000998	ND	0.000998	ND	0.00100
m_p-Xylenes		ND	0.00200	ND	0.00199	ND	0.00198	ND	0.00200	ND	0.00200	ND	0.00200
o-Xylene		ND	0.00100	ND	0.000996	ND	0.000992	ND	0.000998	ND	0.000998	ND	0.00100
Total Xylenes		ND	0.00100	ND	0.000996	ND	0.000992	ND	0.000998	ND	0.000998	ND	0.00100
Total BTEX		ND	0.00100	ND	0.000996	ND	0.000992	ND	0.000998	ND	0.000998	ND	0.00100
Inorganic Anions by EPA 300/300.1	***Extracted:***	Feb-04-16 13:00		Feb-04-16 13:00		Feb-04-16 13:00		Feb-04-16 13:00		Feb-04-16 13:00		Feb-04-16 13:00	
	Analyzed:	Feb-04-16 23:25		Feb-04-16 23:43		Feb-05-16 00:01		Feb-05-16 00:18		Feb-05-16 00:36		Feb-05-16 01:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		24.4	2.00	2.64	2.00	2.42	2.00	ND	2.00	17.8	2.00	7.69	2.00
TPH By SW8015B Mod	***Extracted:***	Feb-07-16 17:00		Feb-07-16 17:00		Feb-07-16 17:00		Feb-07-16 17:00		Feb-07-16 17:00		Feb-07-16 17:00	
	Analyzed:	Feb-07-16 23:57		Feb-08-16 01:11		Feb-08-16 01:35		Feb-08-16 01:58		Feb-08-16 02:24		Feb-08-16 02:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	14.9	ND	15.0	ND	15.0	ND	15.0	ND	14.9
C10-C28 Diesel Range Hydrocarbons		ND	15.0	ND	14.9	ND	15.0	35.0	15.0	469	15.0	151	14.9
C28-C35 Oil Range Hydrocarbons		ND	15.0	ND	14.9	ND	15.0	ND	15.0	ND	15.0	ND	14.9
Total TPH		ND	15.0	ND	14.9	ND	15.0	35.0	15.0	469	15.0	151	14.9

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: Boyd 4 Inch Historical

Work Orders : 524056,

Project ID: ETC Field Services

* 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: Boyd 4 Inch Historical

Work Order #: 524056

Project ID: ETC Field Services

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

Form 3 - MS Recoveries

Project Name: Boyd 4 Inch Historical

Work Order #: 524056

Project ID: ETC Field Services

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Boyd 4 Inch Historical

Work Order # : 524056

Project ID: ETC Field Services

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

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

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Curt Stanley

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature:

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

Project Name: ETC Field Services

Project #: Boyd 4 Inch Historical

Project Loc: Lea County, NM

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 524056

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1	8015M	8015B	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	Floor-1 @ 10'			1/29/2016	1400		1	x								Soil	X											X			X				X
	SSW-1 @ 8'			1/29/2016	1405		1	x								Soil	X											X			X				X
	NSW-1 @ 7'			1/29/2016	1410		1	x								Soil	X											X			X				X
	Floor-2 @ 4'			1/29/2016	1430		1	x								Soil	X											X			X				X
	SSW-2 @ 3'			1/29/2016	1435		1	x								Soil	X											X			X				X
	NSW-2 @ 2.5'			1/29/2016	1440		1	x								Soil	X											X			X				X

Special Instructions:

Bill to Rose

Relinquished by:	Date	Time	Received by:	Date	Time
	2/1/16	1638		2/1/16	1638
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

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

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: -0.9 °C

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 02/01/2016 04:38:00 PM

Work Order #: 524056

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)?	-.9
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**No**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**N/A**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**N/A**
#22 >10 for all samples preserved with 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: Carley Owens Date: 02/02/2016

Carley Owens

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

Kelsey Brooks

Analytical Report 526570

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical

15-MAR-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), 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 (T104704534-15-1)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)

15-MAR-16

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

Reference: XENCO Report No(s): **526570**
Energy Transfer Boyd 4" Historical
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) 526570. 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. 526570 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 526570

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample-1 BOE	S	03-08-16 10:30	- 2 ft	526570-001
Sample-1 BOE	S	03-08-16 11:03	- 8.5 ft	526570-002
Sample-1 BOE	S	03-08-16 11:21	- 10 ft	526570-003
Sample-2 BOE	S	03-08-16 11:50	- 2 ft	526570-004
Sample-2 BOE	S	03-08-16 12:30	- 4 ft	526570-005
Sample-2 BOE	S	03-08-16 12:45	- 4.6 ft	526570-006
Sample-3	S	03-08-16 13:17	- 2 ft	526570-007
Sample-3	S	03-08-16 13:50	- 6 ft	526570-008
Sample-3	S	03-08-16 14:33	- 10 ft	526570-009
Sample-4	S	03-08-16 15:01	- 2 ft	526570-010
Sample-4	S	03-08-16 15:36	- 6 ft	526570-011
Sample-4	S	03-08-16 15:49	- 10 ft	526570-012
Sample-5	S	03-08-16 16:01	- 2 ft	526570-013
Sample-5	S	03-08-16 16:15	- 6 ft	526570-014
Sample-5	S	03-08-16 16:45	- 10 ft	526570-015
Sample-6 Surface	S	03-08-16 16:50		526570-016
Sample-7 Surface	S	03-08-16 16:55		526570-017
Sample-8 Surface	S	03-08-16 17:00		526570-018

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-990191 BTEX by EPA 8021B
Lab Sample ID 526570-015 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m_p-Xylenes , o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 526570-002, -003, -004, -005, -006, -015.
The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 526570

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Wed Mar-09-16 04:30 pm
Report Date: 15-MAR-16
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	526570-001		526570-002		526570-003		526570-004		526570-005		526570-006	
	Field Id:	Sample-1 BOE		Sample-1 BOE		Sample-1 BOE		Sample-2 BOE		Sample-2 BOE		Sample-2 BOE	
	Depth:	2 ft		8.5 ft		10 ft		2 ft		4 ft		4.6 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-08-16 10:30		Mar-08-16 11:03		Mar-08-16 11:21		Mar-08-16 11:50		Mar-08-16 12:30		Mar-08-16 12:45	
BTEX by EPA 8021B	***Extracted:***	Mar-10-16 17:30		Mar-10-16 10:15		Mar-10-16 10:15		Mar-10-16 10:15		Mar-10-16 10:15		Mar-10-16 10:15	
	Analyzed:	Mar-11-16 07:38		Mar-11-16 18:39		Mar-11-16 17:50		Mar-11-16 18:55		Mar-11-16 18:23		Mar-11-16 18:06	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00150	ND	0.0149	ND	0.0149	ND	0.00746	ND	0.0150	ND	0.0150
Toluene		ND	0.00200	0.177	0.0198	0.100	0.0199	ND	0.00994	0.512	0.0200	0.307	0.0200
Ethylbenzene		ND	0.00200	1.49	0.0198	0.681	0.0199	0.273	0.00994	1.50	0.0200	0.881	0.0200
m_p-Xylenes		ND	0.00200	6.40	0.0198	2.81	0.0199	0.813	0.00994	4.99	0.0200	2.85	0.0200
o-Xylene		ND	0.00299	1.20	0.0298	0.934	0.0298	0.745	0.0149	1.53	0.0299	1.40	0.0299
Total Xylenes		ND	0.00200	7.60	0.0198	3.74	0.0199	1.56	0.00994	6.52	0.0200	4.25	0.0200
Total BTEX		ND	0.00150	9.27	0.0149	4.53	0.0149	1.83	0.00746	8.53	0.0150	5.44	0.0150
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	Mar-11-16 17:00		Mar-11-16 17:00		Mar-11-16 17:00		Mar-11-16 17:00		Mar-11-16 17:00		Mar-11-16 17:00	
	Analyzed:	Mar-11-16 18:05		Mar-11-16 18:49		Mar-11-16 19:32		Mar-11-16 19:46		Mar-11-16 20:01		Mar-11-16 20:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		ND	9.98	ND	9.67	ND	9.88	ND	9.98	ND	9.96	ND	10.0
TPH By SW8015B Mod	***Extracted:***	Mar-10-16 11:00		Mar-10-16 11:00		Mar-10-16 11:00		Mar-10-16 11:00		Mar-10-16 11:00		Mar-10-16 11:00	
	Analyzed:	Mar-10-16 14:43		Mar-10-16 16:06		Mar-10-16 16:34		Mar-10-16 17:02		Mar-11-16 08:00		Mar-10-16 18:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	613	15.0	338	15.0	237	15.0	1020	75.0	376	15.0
C10-C28 Diesel Range Hydrocarbons		15.0	15.0	2810	15.0	1800	15.0	1430	15.0	5600	75.0	2420	15.0
C28-C35 Oil Range Hydrocarbons		ND	15.0	35.0	15.0	31.6	15.0	43.5	15.0	115	75.0	46.8	15.0
Total TPH		15.0	15.0	3460	15.0	2170	15.0	1710	15.0	6740	75.0	2840	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 526570

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Wed Mar-09-16 04:30 pm
Report Date: 15-MAR-16
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	526570-007		526570-008		526570-009		526570-010		526570-011		526570-012	
	Field Id:	Sample-3		Sample-3		Sample-3		Sample-4		Sample-4		Sample-4	
	Depth:	2 ft		6 ft		10 ft		2 ft		6 ft		10 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-08-16 13:17		Mar-08-16 13:50		Mar-08-16 14:33		Mar-08-16 15:01		Mar-08-16 15:36		Mar-08-16 15:49	
BTEX by EPA 8021B	***Extracted:***	Mar-10-16 17:30		Mar-10-16 17:30		Mar-10-16 17:30		Mar-10-16 17:30		Mar-10-16 17:30		Mar-10-16 17:30	
	Analyzed:	Mar-11-16 07:55		Mar-11-16 08:11		Mar-11-16 08:28		Mar-11-16 08:44		Mar-11-16 09:01		Mar-11-16 09:18	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00150	ND	0.00149	ND	0.00149	ND	0.00150	ND	0.00150	ND	0.00150
Toluene		ND	0.00200	ND	0.00198	ND	0.00199	ND	0.00200	ND	0.00200	ND	0.00200
Ethylbenzene		ND	0.00200	ND	0.00198	ND	0.00199	ND	0.00200	ND	0.00200	ND	0.00200
m_p-Xylenes		ND	0.00200	ND	0.00198	ND	0.00199	ND	0.00200	ND	0.00200	ND	0.00200
o-Xylene		ND	0.00299	ND	0.00298	ND	0.00298	ND	0.00300	ND	0.00299	ND	0.00299
Total Xylenes		ND	0.00200	ND	0.00198	ND	0.00199	ND	0.00200	ND	0.00200	ND	0.00200
Total BTEX		ND	0.00150	ND	0.00149	ND	0.00149	ND	0.00150	ND	0.00150	ND	0.00150
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	Mar-11-16 17:00		Mar-11-16 17:00		Mar-11-16 17:00		Mar-11-16 17:00		Mar-11-16 17:00		Mar-11-16 17:00	
	Analyzed:	Mar-11-16 20:29		Mar-11-16 20:44		Mar-11-16 20:58		Mar-11-16 21:13		Mar-11-16 21:27		Mar-11-16 22:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1590	100	1200	100	616	99.0	506	99.8	102	48.8	22.7	9.67
TPH By SW8015B Mod	***Extracted:***	Mar-10-16 11:00		Mar-10-16 11:00		Mar-10-16 11:00		Mar-10-16 11:00		Mar-10-16 11:00		Mar-10-16 11:00	
	Analyzed:	Mar-10-16 18:29		Mar-10-16 18:57		Mar-10-16 19:25		Mar-10-16 19:52		Mar-10-16 20:51		Mar-10-16 21:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0	ND	14.9	ND	15.0	ND	15.0	ND	15.0
C10-C28 Diesel Range Hydrocarbons		ND	15.0	27.3	15.0	20.6	14.9	ND	15.0	ND	15.0	28.1	15.0
C28-C35 Oil Range Hydrocarbons		ND	15.0	ND	15.0	ND	14.9	ND	15.0	ND	15.0	ND	15.0
Total TPH		ND	15.0	27.3	15.0	20.6	14.9	ND	15.0	ND	15.0	28.1	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 526570

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Wed Mar-09-16 04:30 pm
Report Date: 15-MAR-16
Project Manager: Kelsey Brooks

Analysis Requested																			
	Lab Id:	526570-013		526570-014		526570-015		526570-016		526570-017		526570-018							
	Field Id:	Sample-5		Sample-5		Sample-5		Sample-6 Surface		Sample-7 Surface		Sample-8 Surface							
	Depth:	2 ft		6 ft		10 ft													
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL							
	Sampled:	Mar-08-16 16:01		Mar-08-16 16:15		Mar-08-16 16:45		Mar-08-16 16:50		Mar-08-16 16:55		Mar-08-16 17:00							
BTEX by EPA 8021B	***Extracted:***	Mar-10-16 17:30		Mar-10-16 17:30		Mar-10-16 10:15													
	Analyzed:	Mar-11-16 09:50		Mar-11-16 09:34		Mar-11-16 12:06													
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL												
Benzene		ND	0.00150	ND	0.00149	ND	0.00150												
Toluene		ND	0.00200	ND	0.00199	ND	0.00200												
Ethylbenzene		ND	0.00200	ND	0.00199	ND	0.00200												
m_p-Xylenes		ND	0.00200	ND	0.00199	ND	0.00200												
o-Xylene		ND	0.00299	ND	0.00298	ND	0.00300												
Total Xylenes		ND	0.00200	ND	0.00199	ND	0.00200												
Total BTEX		ND	0.00150	ND	0.00149	ND	0.00150												
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	Mar-11-16 17:00		Mar-11-16 17:00		Mar-11-16 17:00		Mar-11-16 17:00		Mar-11-16 17:00		Mar-11-16 17:00							
	Analyzed:	Mar-11-16 22:54		Mar-11-16 23:08		Mar-11-16 23:22		Mar-11-16 23:37		Mar-11-16 23:51		Mar-12-16 00:06							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Chloride		627	98.4	472	98.4	157	50.0	43.7	10.0	22.7	9.96	1400	99.6						
TPH By SW8015B Mod	***Extracted:***	Mar-10-16 11:00		Mar-10-16 11:00		Mar-10-16 11:00		Mar-10-16 11:00		Mar-10-16 11:00		Mar-10-16 11:00							
	Analyzed:	Mar-10-16 21:50		Mar-10-16 22:18		Mar-10-16 22:47		Mar-11-16 07:03		Mar-11-16 07:29		Mar-11-16 00:14							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL						
C6-C10 Gasoline Range Hydrocarbons		ND	14.9	ND	15.0	ND	15.0	24.0	15.0	19.1	15.0	165	74.9						
C10-C28 Diesel Range Hydrocarbons		ND	14.9	ND	15.0	ND	15.0	1200	15.0	630	15.0	10700	74.9						
C28-C35 Oil Range Hydrocarbons		ND	14.9	ND	15.0	ND	15.0	116	15.0	99.8	15.0	152	74.9						
Total TPH		ND	14.9	ND	15.0	ND	15.0	1340	15.0	749	15.0	11000	74.9						

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Orders : 526570,

Project ID:

Lab Batch #: 990033 **Sample:** 526570-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 14:43

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	99.9	112	70-130	
o-Terphenyl	57.0	50.0	114	70-135	

Lab Batch #: 990033 **Sample:** 526570-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 16:06

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	99.7	126	70-130	
o-Terphenyl	58.5	49.9	117	70-135	

Lab Batch #: 990033 **Sample:** 526570-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 16:34

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	99.9	116	70-130	
o-Terphenyl	56.0	50.0	112	70-135	

Lab Batch #: 990033 **Sample:** 526570-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 17:02

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	99.9	119	70-130	
o-Terphenyl	56.6	50.0	113	70-135	

Lab Batch #: 990033 **Sample:** 526570-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 18:01

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	99.7	123	70-130	
o-Terphenyl	57.0	49.9	114	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: Energy Transfer Boyd 4" Historical

Work Orders : 526570,

Project ID:

Lab Batch #: 990033 **Sample:** 526570-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 18:29

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.8	110	70-130	
o-Terphenyl	54.8	49.9	110	70-135	

Lab Batch #: 990033 **Sample:** 526570-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 18:57

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.8	109	70-130	
o-Terphenyl	54.4	49.9	109	70-135	

Lab Batch #: 990033 **Sample:** 526570-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 19:25

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.6	108	70-130	
o-Terphenyl	53.8	49.8	108	70-135	

Lab Batch #: 990033 **Sample:** 526570-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 19:52

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.9	108	70-130	
o-Terphenyl	54.1	50.0	108	70-135	

Lab Batch #: 990033 **Sample:** 526570-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 20:51

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.5	99.7	98	70-130	
o-Terphenyl	48.9	49.9	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: Energy Transfer Boyd 4" Historical

Work Orders : 526570,

Project ID:

Lab Batch #: 990033 **Sample:** 526570-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 21:20

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-130	
o-Terphenyl	53.8	50.0	108	70-135	

Lab Batch #: 990033 **Sample:** 526570-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 21:50

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.7	99.6	90	70-130	
o-Terphenyl	44.7	49.8	90	70-135	

Lab Batch #: 990033 **Sample:** 526570-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 22:18

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.7	110	70-130	
o-Terphenyl	54.7	49.9	110	70-135	

Lab Batch #: 990033 **Sample:** 526570-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 22:47

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.4	99.9	92	70-130	
o-Terphenyl	45.9	50.0	92	70-135	

Lab Batch #: 990033 **Sample:** 526570-018 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 00:14

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.4	99.9	88	70-130	
o-Terphenyl	45.9	50.0	92	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Orders : 526570,

Project ID:

Lab Batch #: 990033 **Sample:** 526570-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 07:03

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	99.8	111	70-130	
o-Terphenyl	52.4	49.9	105	70-135	

Lab Batch #: 990033 **Sample:** 526570-017 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 07:29

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.8	108	70-130	
o-Terphenyl	50.5	49.9	101	70-135	

Lab Batch #: 990116 **Sample:** 526570-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 07:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 990116 **Sample:** 526570-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 07:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 990033 **Sample:** 526570-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 08:00

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.9	100	97	70-130	
o-Terphenyl	56.5	50.0	113	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: Energy Transfer Boyd 4" Historical

Work Orders : 526570,

Project ID:

Lab Batch #: 990116 **Sample:** 526570-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 08:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 990116 **Sample:** 526570-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 08:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 990116 **Sample:** 526570-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 08:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 990116 **Sample:** 526570-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 09:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 990116 **Sample:** 526570-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 09:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Orders : 526570,

Project ID:

Lab Batch #: 990116 **Sample:** 526570-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 09:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 990116 **Sample:** 526570-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 09:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 990191 **Sample:** 526570-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 12:06

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 990191 **Sample:** 526570-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 17:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0244	0.0300	81	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 990191 **Sample:** 526570-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 18:06

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0347	0.0300	116	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: Energy Transfer Boyd 4" Historical

Work Orders : 526570,

Project ID:

Lab Batch #: 990191 **Sample:** 526570-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 18:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0247	0.0300	82	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 990191 **Sample:** 526570-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 18:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 990191 **Sample:** 526570-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 18:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0358	0.0300	119	80-120	

Lab Batch #: 990033 **Sample:** 706222-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/10/16 13:16

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-130	
o-Terphenyl	53.9	50.0	108	70-135	

Lab Batch #: 990116 **Sample:** 706268-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/10/16 19:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Orders : 526570,

Project ID:

Lab Batch #: 990191 **Sample:** 706321-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/11/16 11:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 990033 **Sample:** 706222-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/10/16 13:45

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-130	
o-Terphenyl	52.2	50.0	104	70-135	

Lab Batch #: 990116 **Sample:** 706268-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/10/16 17:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

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

Lab Batch #: 990191 **Sample:** 706321-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/11/16 10:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 990033 **Sample:** 706222-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/10/16 14:14

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-130	
o-Terphenyl	53.0	50.0	106	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: Energy Transfer Boyd 4" Historical

Work Orders : 526570,

Project ID:

Lab Batch #: 990116 **Sample:** 706268-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/10/16 17:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 990191 **Sample:** 706321-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/11/16 10:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 990033 **Sample:** 526570-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 15:11

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	120	99.8	120	70-130	
o-Terphenyl	53.3	49.9	107	70-135	

Lab Batch #: 990116 **Sample:** 526061-009 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 18:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0333	0.0300	111	80-120	

Lab Batch #: 990191 **Sample:** 526570-015 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 10:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0341	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: Energy Transfer Boyd 4" Historical

Work Orders : 526570,

Project ID:

Lab Batch #: 990033 **Sample:** 526570-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 15:39

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	99.8	117	70-130	
o-Terphenyl	52.1	49.9	104	70-135	

Lab Batch #: 990116 **Sample:** 526061-009 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/16 18:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0315	0.0300	105	80-120	

Lab Batch #: 990191 **Sample:** 526570-015 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/11/16 11:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Order #: 526570 **Project ID:**

Analyst: PJB **Date Prepared:** 03/10/2016 **Date Analyzed:** 03/10/2016

Lab Batch ID: 990116 **Sample:** 706268-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00150	0.100	0.0837	84	0.100	0.0834	83	0	70-130	35	
Toluene	<0.00200	0.100	0.0854	85	0.100	0.0831	83	3	70-130	35	
Ethylbenzene	<0.00200	0.100	0.0903	90	0.100	0.0901	90	0	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.187	94	0.200	0.188	94	1	70-135	35	
o-Xylene	<0.00300	0.100	0.0862	86	0.100	0.0866	87	0	71-133	35	

Analyst: PJB **Date Prepared:** 03/10/2016 **Date Analyzed:** 03/11/2016

Lab Batch ID: 990191 **Sample:** 706321-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00150	0.100	0.0824	82	0.100	0.0808	81	2	70-130	35	
Toluene	<0.00200	0.100	0.0814	81	0.100	0.0812	81	0	70-130	35	
Ethylbenzene	<0.00200	0.100	0.0821	82	0.100	0.0853	85	4	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.171	86	0.200	0.178	89	4	70-135	35	
o-Xylene	<0.00300	0.100	0.0822	82	0.100	0.0855	86	4	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: Energy Transfer Boyd 4" Historical

Work Order #: 526570 **Project ID:**

Analyst: DEP **Date Prepared:** 03/11/2016 **Date Analyzed:** 03/11/2016

Lab Batch ID: 990124 **Sample:** 706272-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	100	103	103	100	103	103	0	90-110	20	

Analyst: ARM **Date Prepared:** 03/10/2016 **Date Analyzed:** 03/10/2016

Lab Batch ID: 990033 **Sample:** 706222-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	958	96	1000	907	91	5	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	992	99	1000	959	96	3	75-125	25	

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: Energy Transfer Boyd 4" Historical

Work Order # : 526570 **Project ID:**

Lab Batch ID: 990116 **QC- Sample ID:** 526061-009 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/10/2016 **Date Prepared:** 03/10/2016 **Analyst:** PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00150	0.100	0.0811	81	0.0998	0.0799	80	1	70-130	35	
Toluene	<0.00200	0.100	0.0803	80	0.0998	0.0801	80	0	70-130	35	
Ethylbenzene	<0.00200	0.100	0.0846	85	0.0998	0.0840	84	1	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.176	88	0.200	0.174	87	1	70-135	35	
o-Xylene	<0.00300	0.100	0.0821	82	0.0998	0.0816	82	1	71-133	35	

Lab Batch ID: 990191 **QC- Sample ID:** 526570-015 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/11/2016 **Date Prepared:** 03/10/2016 **Analyst:** PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00150	0.0998	0.0576	58	0.0992	0.0593	60	3	70-130	35	X
Toluene	<0.00200	0.0998	0.0586	59	0.0992	0.0597	60	2	70-130	35	X
Ethylbenzene	<0.00200	0.0998	0.0637	64	0.0992	0.0647	65	2	71-129	35	X
m_p-Xylenes	<0.00200	0.200	0.135	68	0.198	0.137	69	1	70-135	35	X
o-Xylene	<0.00299	0.0998	0.0680	68	0.0992	0.0672	68	1	71-133	35	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: Energy Transfer Boyd 4" Historical

Work Order # : 526570 **Project ID:**

Lab Batch ID: 990124 **QC- Sample ID:** 526570-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/11/2016 **Date Prepared:** 03/11/2016 **Analyst:** DEP

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<9.98	99.8	110	110	99.8	109	109	1	80-120	20	

Lab Batch ID: 990124 **QC- Sample ID:** 526570-011 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/11/2016 **Date Prepared:** 03/11/2016 **Analyst:** DEP

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	102	488	592	100	488	594	101	0	80-120	20	

Lab Batch ID: 990033 **QC- Sample ID:** 526570-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/10/2016 **Date Prepared:** 03/10/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	998	908	91	998	934	94	3	75-125	25	
C10-C28 Diesel Range Hydrocarbons	15.0	998	1010	100	998	1030	102	2	75-125	25	

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

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

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Nikki Green

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature:

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

Project Name: Energy Transfer Boyd 4" Historical

Project #:

Project Loc: Lea County, NM

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

Final 1.000

(lab use only)
ORDER #: 526570

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M	TOTAL: 8015B TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.0			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	Sample-1 BOE	2'		3/8/2016	1030		1	x								Soil	x								x			x				x
	Sample-1 BOE	8.5'		3/8/2016	1103		1	x								Soil	x								x			x				x
	Sample-1 BOE	10'		3/8/2016	1121		1	x								Soil	x								x			x				x
	Sample-2 BOE	2'		3/8/2016	1150		1	x								Soil	x								x			x				x
	Sample-2 BOE	4'		3/8/2016	1230		1	x								Soil	x								x			x				x
	Sample-2 BOE	4.6'		3/8/2016	1245		1	x								Soil	x								x			x				x
	Sample-3	2'		3/8/2016	1317		1	x								Soil	x								x			x				x
	Sample-3	6'		3/8/2016	1350		1	x								Soil	x								x			x				x
	Sample-3	10'		3/8/2016	1433		1	x								Soil	x								x			x				x
	Sample-4	2'		3/8/2016	1501		1	x								Soil	x								x			x				x

Special Instructions:

Bill to Rose Slade at Energy Transfer. TPH Extended 35

Relinquished by:	Date	Time	Received by:	Date	Time
	3/9/16	1630		3/9/16	1630
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

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

Temperature Upon Receipt: 8.7 °C

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Nikki Green

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

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

Project Name: Energy Transfer Boyd 4" Historical

Project #:

Project Loc: Lea County, NM

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #: 526570

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B 5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	Sample-4	6'		3/8/2016	1536		1	x								Soil	x								x			x				x
	Sample-4	10'		3/8/2016	1549		1	x								Soil	x								x			x				x
	Sample-5	2'		3/8/2016	1601		1	x								Soil	x								x			x				x
	Sample-5	6'		3/8/2016	1615		1	x								Soil	x								x			x				x
	Sample-5	10'		3/8/2016	1645		1	x								Soil	x								x			x				x
	Sample-6 Surface			3/8/2016	1650		1	x								Soil	x											x				x
	Sample-7 Surface			3/8/2016	1655		1	x								Soil	x											x				x
	Sample-8 Surface			3/8/2016	1700		1	x								Soil	x											x				x

TCLP:

TOTAL:

Special Instructions:

Bill to Rose Slade at Energy Transfer TPH Extended 35

Relinquished by:	Date	Time	Received by:	Date	Time
Nikki Green	3/9/16	1630		3/9/16	1630
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

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

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 8.7°C

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 03/09/2016 04:30:00 PM

Work Order #: 526570

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)?	8.7	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6 *Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Sample instructions complete on Chain of Custody?	**Yes**	
#9 Any missing/extra samples?	**No**	
#10 Chain of Custody signed when relinquished/ received?	**Yes**	
#11 Chain of Custody agrees with sample label(s)?	**Yes**	
#12 Container label(s) legible and intact?	**Yes**	
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#14 Samples in proper container/ bottle?	**Yes**	
#15 Samples properly preserved?	**Yes**	
#16 Sample container(s) intact?	**Yes**	
#17 Sufficient sample amount for indicated test(s)?	**Yes**	
#18 All samples received within hold time?	**Yes**	
#19 Subcontract of sample(s)?	**Yes**	subcontract to xenco houston
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**N/A**	
#21 <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**	
#22 >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: Carley Owens Date: 03/10/2016
Carley Owens

Checklist reviewed by: Kelsey Brooks Date: 03/10/2016
Kelsey Brooks

Analytical Report 528239

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical

14-APR-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), 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 (T104704534-15-1)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)

14-APR-16

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

Reference: XENCO Report No(s): **528239**
Energy Transfer Boyd 4" Historical
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) 528239. 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. 528239 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 528239

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample -1 @ 21'	S	04-05-16 10:45	- 21 ft	528239-001
T-SSW-1 @ 6'	S	04-05-16 11:09	- 6 ft	528239-002
T-NSW-1@7'	S	04-05-16 11:34	- 7 ft	528239-003
T-WSW-1 @11'	S	04-05-16 11:45	- 11 ft	528239-004
Sample-2 @ 20'	S	04-05-16 14:00	- 20 ft	528239-005
Sample-10 @ 2.5'	S	04-05-16 15:00	- 2.5 ft	528239-006
T-SSW-2 @7'	S	04-06-16 10:00	- 7 ft	528239-007
T-ESW-1 @ 5'	S	04-06-16 10:30	- 5 ft	528239-008
T-ESW-1 @ 10'	S	04-06-16 10:50	- 10 ft	528239-009
T-ESW-1 @16'	S	04-06-16 11:20	- 16 ft	528239-010
T-NSW-2 @ 16'	S	04-06-16 13:30	- 16 ft	528239-011
T-NSW-3 @4'	S	04-06-16 14:00	- 4 ft	528239-012
T-ESW-2 @ 4'	S	04-06-16 14:25	- 4 ft	528239-013
T-ESW-3 @4'	S	04-06-16 14:45	- 4 ft	528239-014
T-ESW-4 @ 4'	S	04-06-16 15:20	- 4 ft	528239-015

Certificate of Analytical Results
528239

TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **Sample -1 @ 21'** Matrix: Soil Sample Depth: 21 ft

Lab Sample Id: 528239-001 Date Collected: 04.05.16 10.45 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**9.07**	2.00	0.341	mg/kg	04.13.16 21:01		1

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.86	mg/kg	04.11.16 19:47	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.0	9.86	mg/kg	04.11.16 19:47	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.0	9.86	mg/kg	04.11.16 19:47	U	1
Total TPH	PHC635	ND		9.86	mg/kg	04.11.16 19:47	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	107	70 - 130	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992159 Date Prep: 04.11.16 15.00

Prep seq: 707546

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00149	0.000333	mg/kg	04.11.16 18:18	U	1
Toluene	108-88-3	ND	0.00199	0.000994	mg/kg	04.11.16 18:18	U	1
Ethylbenzene	100-41-4	ND	0.00199	0.000487	mg/kg	04.11.16 18:18	U	1
m_p-Xylenes	179601-23-1	ND	0.00199	0.00169	mg/kg	04.11.16 18:18	U	1
o-Xylene	95-47-6	ND	0.00298	0.000840	mg/kg	04.11.16 18:18	U	1
Total Xylenes	1330-20-7	ND		0.000840	mg/kg	04.11.16 18:18	U	
Total BTEX		ND		0.000333	mg/kg	04.11.16 18:18	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	108	80 - 120	%		
4-Bromofluorobenzene	92	80 - 120	%		

Certificate of Analytical Results
528239

TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **T-SSW-1 @ 6'** Matrix: Soil Sample Depth: 6 ft

Lab Sample Id: 528239-002 Date Collected: 04.05.16 11.09 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**20.0**	10.0	1.70	mg/kg	04.13.16 21:42		5

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.85	mg/kg	04.11.16 21:11	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.0	9.85	mg/kg	04.11.16 21:11	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.0	9.85	mg/kg	04.11.16 21:11	U	1
Total TPH	PHC635	ND		9.85	mg/kg	04.11.16 21:11	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 130	%		
o-Terphenyl	104	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992159 Date Prep: 04.11.16 15.00

Prep seq: 707546

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00149	0.000333	mg/kg	04.11.16 19:07	U	1
Toluene	108-88-3	ND	0.00198	0.000992	mg/kg	04.11.16 19:07	U	1
Ethylbenzene	100-41-4	ND	0.00198	0.000486	mg/kg	04.11.16 19:07	U	1
m_p-Xylenes	179601-23-1	ND	0.00198	0.00169	mg/kg	04.11.16 19:07	U	1
o-Xylene	95-47-6	ND	0.00298	0.000839	mg/kg	04.11.16 19:07	U	1
Total Xylenes	1330-20-7	ND		0.000839	mg/kg	04.11.16 19:07	U	
Total BTEX		ND		0.000333	mg/kg	04.11.16 19:07	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	112	80 - 120	%		
4-Bromofluorobenzene	113	80 - 120	%		

Certificate of Analytical Results
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TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **T-NSW-1@7'** Matrix: Soil Sample Depth: 7 ft

Lab Sample Id: 528239-003 Date Collected: 04.05.16 11.34 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**3.65**	2.00	0.341	mg/kg	04.13.16 22:02		1

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.87	mg/kg	04.11.16 21:38	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.0	9.87	mg/kg	04.11.16 21:38	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.0	9.87	mg/kg	04.11.16 21:38	U	1
Total TPH	PHC635	ND		9.87	mg/kg	04.11.16 21:38	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 130	%		
o-Terphenyl	103	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992159 Date Prep: 04.11.16 15.00

Prep seq: 707546

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00150	0.000335	mg/kg	04.11.16 19:23	U	1
Toluene	108-88-3	ND	0.00200	0.000998	mg/kg	04.11.16 19:23	U	1
Ethylbenzene	100-41-4	ND	0.00200	0.000489	mg/kg	04.11.16 19:23	U	1
m_p-Xylenes	179601-23-1	ND	0.00200	0.00170	mg/kg	04.11.16 19:23	U	1
o-Xylene	95-47-6	ND	0.00299	0.000844	mg/kg	04.11.16 19:23	U	1
Total Xylenes	1330-20-7	ND		0.000844	mg/kg	04.11.16 19:23	U	
Total BTEX		ND		0.000335	mg/kg	04.11.16 19:23	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	108	80 - 120	%		
4-Bromofluorobenzene	94	80 - 120	%		

Certificate of Analytical Results
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TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **T-WSW-1 @11'** Matrix: Soil Sample Depth: 11 ft

Lab Sample Id: 528239-004 Date Collected: 04.05.16 11.45 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**35.6**	10.0	1.70	mg/kg	04.13.16 22:22		5

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.87	mg/kg	04.11.16 22:06	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	**51.7**	15.0	9.87	mg/kg	04.11.16 22:06		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.0	9.87	mg/kg	04.11.16 22:06	U	1
Total TPH	PHC635	**51.7**		9.87	mg/kg	04.11.16 22:06		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	116	70 - 130	%		
o-Terphenyl	118	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992159 Date Prep: 04.11.16 15.00

Prep seq: 707546

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00149	0.000333	mg/kg	04.11.16 19:40	U	1
Toluene	108-88-3	ND	0.00198	0.000992	mg/kg	04.11.16 19:40	U	1
Ethylbenzene	100-41-4	ND	0.00198	0.000486	mg/kg	04.11.16 19:40	U	1
m_p-Xylenes	179601-23-1	ND	0.00198	0.00169	mg/kg	04.11.16 19:40	U	1
o-Xylene	95-47-6	ND	0.00298	0.000839	mg/kg	04.11.16 19:40	U	1
Total Xylenes	1330-20-7	ND		0.000839	mg/kg	04.11.16 19:40	U	
Total BTEX		ND		0.000333	mg/kg	04.11.16 19:40	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	110	80 - 120	%		
4-Bromofluorobenzene	96	80 - 120	%		

Certificate of Analytical Results
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TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **Sample-2 @ 20'** Matrix: Soil Sample Depth: 20 ft

Lab Sample Id: 528239-005 Date Collected: 04.05.16 14.00 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**32.3**	2.00	0.341	mg/kg	04.13.16 22:42		1

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	**444**	15.0	9.86	mg/kg	04.11.16 22:34		1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	**1920**	15.0	9.86	mg/kg	04.11.16 22:34		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	**26.1**	15.0	9.86	mg/kg	04.11.16 22:34		1
Total TPH	PHC635	**2390**		9.86	mg/kg	04.11.16 22:34		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	109	70 - 130	%		
o-Terphenyl	103	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992159 Date Prep: 04.11.16 15.00

Prep seq: 707546

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.0264**	0.00149	0.000333	mg/kg	04.11.16 21:33		1
Toluene	108-88-3	**0.0132**	0.00199	0.000994	mg/kg	04.11.16 21:33		1
Ethylbenzene	100-41-4	**0.160**	0.00199	0.000487	mg/kg	04.11.16 21:33		1
m_p-Xylenes	179601-23-1	**0.315**	0.00199	0.00169	mg/kg	04.11.16 21:33		1
o-Xylene	95-47-6	**0.0590**	0.00298	0.000840	mg/kg	04.11.16 21:33		1
Total Xylenes	1330-20-7	**0.374**		0.000840	mg/kg	04.11.16 21:33		
Total BTEX		**0.574**		0.000333	mg/kg	04.11.16 21:33		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	115	80 - 120	%		

Certificate of Analytical Results
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TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **Sample-10 @ 2.5'** Matrix: Soil Sample Depth: 2.5 ft

Lab Sample Id: 528239-006 Date Collected: 04.05.16 15.00 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**40.9**	10.0	1.70	mg/kg	04.13.16 23:03		5

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.88	mg/kg	04.11.16 23:02	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.0	9.88	mg/kg	04.11.16 23:02	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.0	9.88	mg/kg	04.11.16 23:02	U	1
Total TPH	PHC635	ND		9.88	mg/kg	04.11.16 23:02	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	111	70 - 130	%		
o-Terphenyl	113	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992159 Date Prep: 04.11.16 15.00

Prep seq: 707546

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00149	0.000333	mg/kg	04.11.16 19:56	U	1
Toluene	108-88-3	ND	0.00199	0.000994	mg/kg	04.11.16 19:56	U	1
Ethylbenzene	100-41-4	ND	0.00199	0.000487	mg/kg	04.11.16 19:56	U	1
m_p-Xylenes	179601-23-1	ND	0.00199	0.00169	mg/kg	04.11.16 19:56	U	1
o-Xylene	95-47-6	ND	0.00298	0.000840	mg/kg	04.11.16 19:56	U	1
Total Xylenes	1330-20-7	ND		0.000840	mg/kg	04.11.16 19:56	U	
Total BTEX		ND		0.000333	mg/kg	04.11.16 19:56	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	110	80 - 120	%		
4-Bromofluorobenzene	98	80 - 120	%		

Certificate of Analytical Results
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TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **T-SSW-2 @7'** Matrix: Soil Sample Depth: 7 ft

Lab Sample Id: 528239-007 Date Collected: 04.06.16 10.00 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**99.0**	20.0	3.41	mg/kg	04.14.16 00:03		10

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.86	mg/kg	04.11.16 23:30	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.0	9.86	mg/kg	04.11.16 23:30	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.0	9.86	mg/kg	04.11.16 23:30	U	1
Total TPH	PHC635	ND		9.86	mg/kg	04.11.16 23:30	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 130	%		
o-Terphenyl	108	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992159 Date Prep: 04.11.16 15.00

Prep seq: 707546

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00150	0.000335	mg/kg	04.11.16 20:12	U	1
Toluene	108-88-3	ND	0.00200	0.000998	mg/kg	04.11.16 20:12	U	1
Ethylbenzene	100-41-4	ND	0.00200	0.000489	mg/kg	04.11.16 20:12	U	1
m_p-Xylenes	179601-23-1	ND	0.00200	0.00170	mg/kg	04.11.16 20:12	U	1
o-Xylene	95-47-6	ND	0.00299	0.000844	mg/kg	04.11.16 20:12	U	1
Total Xylenes	1330-20-7	ND		0.000844	mg/kg	04.11.16 20:12	U	
Total BTEX		ND		0.000335	mg/kg	04.11.16 20:12	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	92	80 - 120	%		

Certificate of Analytical Results
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TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **T-ESW-1 @ 5'** Matrix: Soil Sample Depth: 5 ft

Lab Sample Id: 528239-008 Date Collected: 04.06.16 10.30 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**875**	100	17.0	mg/kg	04.14.16 00:24		50

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.85	mg/kg	04.11.16 23:59	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.0	9.85	mg/kg	04.11.16 23:59	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.0	9.85	mg/kg	04.11.16 23:59	U	1
Total TPH	PHC635	ND		9.85	mg/kg	04.11.16 23:59	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	88	70 - 130	%		
o-Terphenyl	89	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992159 Date Prep: 04.11.16 15.00

Prep seq: 707546

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00149	0.000333	mg/kg	04.11.16 20:28	U	1
Toluene	108-88-3	ND	0.00198	0.000992	mg/kg	04.11.16 20:28	U	1
Ethylbenzene	100-41-4	ND	0.00198	0.000486	mg/kg	04.11.16 20:28	U	1
m_p-Xylenes	179601-23-1	ND	0.00198	0.00169	mg/kg	04.11.16 20:28	U	1
o-Xylene	95-47-6	ND	0.00298	0.000839	mg/kg	04.11.16 20:28	U	1
Total Xylenes	1330-20-7	ND		0.000839	mg/kg	04.11.16 20:28	U	
Total BTEX		ND		0.000333	mg/kg	04.11.16 20:28	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	109	80 - 120	%		
4-Bromofluorobenzene	98	80 - 120	%		

Sample Id: **T-ESW-1 @ 10'** Matrix: Soil Sample Depth: 10 ft

Lab Sample Id: 528239-009 Date Collected: 04.06.16 10.50 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**168**	40.0	6.82	mg/kg	04.14.16 00:44		20

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.85	mg/kg	04.12.16 00:27	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	**58.8**	15.0	9.85	mg/kg	04.12.16 00:27		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.0	9.85	mg/kg	04.12.16 00:27	U	1
Total TPH	PHC635	**58.8**		9.85	mg/kg	04.12.16 00:27		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	120	70 - 130	%		
o-Terphenyl	122	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992159 Date Prep: 04.11.16 15.00

Prep seq: 707546

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00150	0.000335	mg/kg	04.11.16 20:45	U	1
Toluene	108-88-3	ND	0.00200	0.000998	mg/kg	04.11.16 20:45	U	1
Ethylbenzene	100-41-4	ND	0.00200	0.000489	mg/kg	04.11.16 20:45	U	1
m_p-Xylenes	179601-23-1	ND	0.00200	0.00170	mg/kg	04.11.16 20:45	U	1
o-Xylene	95-47-6	ND	0.00299	0.000844	mg/kg	04.11.16 20:45	U	1
Total Xylenes	1330-20-7	ND		0.000844	mg/kg	04.11.16 20:45	U	
Total BTEX		ND		0.000335	mg/kg	04.11.16 20:45	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	104	80 - 120	%		
4-Bromofluorobenzene	90	80 - 120	%		

Certificate of Analytical Results
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TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **T-ESW-1 @16'** Matrix: Soil Sample Depth: 16 ft

Lab Sample Id: 528239-010 Date Collected: 04.06.16 11.20 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**14.1**	10.0	1.70	mg/kg	04.14.16 01:04		5

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.85	mg/kg	04.12.16 00:56	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.0	9.85	mg/kg	04.12.16 00:56	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.0	9.85	mg/kg	04.12.16 00:56	U	1
Total TPH	PHC635	ND		9.85	mg/kg	04.12.16 00:56	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	110	70 - 130	%		
o-Terphenyl	113	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992159 Date Prep: 04.11.16 15.00

Prep seq: 707546

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00150	0.000335	mg/kg	04.11.16 21:00	U	1
Toluene	108-88-3	ND	0.00200	0.000998	mg/kg	04.11.16 21:00	U	1
Ethylbenzene	100-41-4	ND	0.00200	0.000489	mg/kg	04.11.16 21:00	U	1
m_p-Xylenes	179601-23-1	ND	0.00200	0.00170	mg/kg	04.11.16 21:00	U	1
o-Xylene	95-47-6	ND	0.00299	0.000844	mg/kg	04.11.16 21:00	U	1
Total Xylenes	1330-20-7	ND		0.000844	mg/kg	04.11.16 21:00	U	
Total BTEX		ND		0.000335	mg/kg	04.11.16 21:00	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	107	80 - 120	%		
4-Bromofluorobenzene	98	80 - 120	%		

Certificate of Analytical Results
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TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **T-NSW-2 @ 16'** Matrix: Soil Sample Depth: 16 ft

Lab Sample Id: 528239-011 Date Collected: 04.06.16 13.30 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1440**	100	17.0	mg/kg	04.14.16 01:25		50

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.87	mg/kg	04.12.16 01:52	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.0	9.87	mg/kg	04.12.16 01:52	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.0	9.87	mg/kg	04.12.16 01:52	U	1
Total TPH	PHC635	ND		9.87	mg/kg	04.12.16 01:52	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	95	70 - 130	%		
o-Terphenyl	96	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992159 Date Prep: 04.11.16 15.00

Prep seq: 707546

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00150	0.000335	mg/kg	04.12.16 12:44	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/kg	04.12.16 12:44	U	1
Ethylbenzene	100-41-4	ND	0.00200	0.000490	mg/kg	04.12.16 12:44	U	1
m_p-Xylenes	179601-23-1	ND	0.00200	0.00170	mg/kg	04.12.16 12:44	U	1
o-Xylene	95-47-6	ND	0.00300	0.000845	mg/kg	04.12.16 12:44	U	1
Total Xylenes	1330-20-7	ND		0.000845	mg/kg	04.12.16 12:44	U	
Total BTEX		ND		0.000335	mg/kg	04.12.16 12:44	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	105	80 - 120	%		
4-Bromofluorobenzene	103	80 - 120	%		

Certificate of Analytical Results
528239

TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **T-NSW-3 @4'** Matrix: Soil Sample Depth: 4 ft

Lab Sample Id: 528239-012 Date Collected: 04.06.16 14.00 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**246**	20.0	3.41	mg/kg	04.14.16 02:05		10

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.86	mg/kg	04.12.16 02:21	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.0	9.86	mg/kg	04.12.16 02:21	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.0	9.86	mg/kg	04.12.16 02:21	U	1
Total TPH	PHC635	ND		9.86	mg/kg	04.12.16 02:21	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	99	70 - 130	%		
o-Terphenyl	102	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992302 Date Prep: 04.11.16 20.00

Prep seq: 707618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00149	0.000333	mg/kg	04.11.16 23:42	U	1
Toluene	108-88-3	ND	0.00199	0.000994	mg/kg	04.11.16 23:42	U	1
Ethylbenzene	100-41-4	ND	0.00199	0.000487	mg/kg	04.11.16 23:42	U	1
m_p-Xylenes	179601-23-1	ND	0.00199	0.00169	mg/kg	04.11.16 23:42	U	1
o-Xylene	95-47-6	ND	0.00298	0.000840	mg/kg	04.11.16 23:42	U	1
Total Xylenes	1330-20-7	ND		0.000840	mg/kg	04.11.16 23:42	U	
Total BTEX		ND		0.000333	mg/kg	04.11.16 23:42	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	107	80 - 120	%		
4-Bromofluorobenzene	98	80 - 120	%		

Certificate of Analytical Results
528239

TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **T-ESW-2 @ 4'** Matrix: Soil Sample Depth: 4 ft

Lab Sample Id: 528239-013 Date Collected: 04.06.16 14.25 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**304**	20.0	3.41	mg/kg	04.14.16 02:25		10

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.87	mg/kg	04.12.16 02:49	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.0	9.87	mg/kg	04.12.16 02:49	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.0	9.87	mg/kg	04.12.16 02:49	U	1
Total TPH	PHC635	ND		9.87	mg/kg	04.12.16 02:49	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	102	70 - 130	%		
o-Terphenyl	103	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992302 Date Prep: 04.11.16 20.00

Prep seq: 707618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00150	0.000335	mg/kg	04.11.16 23:58	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/kg	04.11.16 23:58	U	1
Ethylbenzene	100-41-4	ND	0.00200	0.000490	mg/kg	04.11.16 23:58	U	1
m_p-Xylenes	179601-23-1	ND	0.00200	0.00170	mg/kg	04.11.16 23:58	U	1
o-Xylene	95-47-6	ND	0.00300	0.000845	mg/kg	04.11.16 23:58	U	1
Total Xylenes	1330-20-7	ND		0.000845	mg/kg	04.11.16 23:58	U	
Total BTEX		ND		0.000335	mg/kg	04.11.16 23:58	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	104	80 - 120	%		
4-Bromofluorobenzene	92	80 - 120	%		

Certificate of Analytical Results
528239

TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **T-ESW-3 @4'** Matrix: Soil Sample Depth: 4 ft

Lab Sample Id: 528239-014 Date Collected: 04.06.16 14.45 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**321**	40.0	6.82	mg/kg	04.14.16 02:46		20

Sample Id: **T-ESW-4 @ 4'** Matrix: Soil Sample Depth: 4 ft

Lab Sample Id: 528239-015 Date Collected: 04.06.16 15.20 Date Received: 04.08.16 15.23

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**361**	20.0	3.41	mg/kg	04.14.16 03:06		10

Certificate of Analytical Results
528239
TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **707546-1-BLK** Matrix: Solid Sample Depth:

Lab Sample Id: 707546-1-BLK Date Collected: Date Received:

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992159 Date Prep: 04.11.16 11.00

Prep seq: 707546

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00150	0.000335	mg/kg	04.11.16 12:26	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/kg	04.11.16 12:26	U	1
Ethylbenzene	100-41-4	ND	0.00200	0.000490	mg/kg	04.11.16 12:26	U	1
m_p-Xylenes	179601-23-1	ND	0.00200	0.00170	mg/kg	04.11.16 12:26	U	1
o-Xylene	95-47-6	ND	0.00300	0.000845	mg/kg	04.11.16 12:26	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	101	80 - 120	%		
4-Bromofluorobenzene	90	80 - 120	%		

Sample Id: **707587-1-BLK** Matrix: Solid Sample Depth:

Lab Sample Id: 707587-1-BLK Date Collected: Date Received:

Analytical Method: TPH By SW8015B Mod Prep Method: 1005

Analyst: ARM % Moist: Tech: ARM

Seq Number: 992219 Date Prep: 04.11.16 15.00

Prep seq: 707587

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C10 Gasoline Range Hydrocarbons	C6C10GRO	ND	15.0	9.88	mg/kg	04.11.16 18:20	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	ND	15.0	9.88	mg/kg	04.11.16 18:20	U	1
Total TPH	PHC635	ND		9.88	mg/kg	04.11.16 18:20	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	117	70 - 130	%		
o-Terphenyl	121	70 - 135	%		

Certificate of Analytical Results
528239
TRC Solutions, Inc, Midland, TX
Energy Transfer Boyd 4" Historical

Sample Id: **707618-1-BLK** Matrix: Solid Sample Depth:

Lab Sample Id: 707618-1-BLK Date Collected: Date Received:

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: PJB % Moist: Tech: PJB

Seq Number: 992302 Date Prep: 04.11.16 20.00

Prep seq: 707618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00150	0.000335	mg/kg	04.11.16 23:25	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/kg	04.11.16 23:25	U	1
Ethylbenzene	100-41-4	ND	0.00200	0.000490	mg/kg	04.11.16 23:25	U	1
m_p-Xylenes	179601-23-1	ND	0.00200	0.00170	mg/kg	04.11.16 23:25	U	1
o-Xylene	95-47-6	ND	0.00300	0.000845	mg/kg	04.11.16 23:25	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	80 - 120	%		
4-Bromofluorobenzene	90	80 - 120	%		

Sample Id: **707674-1-BLK** Matrix: Solid Sample Depth:

Lab Sample Id: 707674-1-BLK Date Collected: Date Received:

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: MNR % Moist: Tech: MNR

Seq Number: 992431 Date Prep: 04.13.16 16.00

Prep seq: 707674

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	ND	2.00	0.341	mg/kg	04.13.16 20:00	U	1

XENCO Laboratories
CHRONOLOGY OF HOLDING TIMES

Analytical Method : Inorganic Anions by EPA 300/300.1 Client : TRC Solutions, Inc

Work Order #: **528239** Project ID:

Field Sample ID	Date Collected	Date Received	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed **(Days)**	Q
Sample -1 @ 21'	Apr. 5, 2016	Apr. 8, 2016				Apr.13, 2016	28	8	P
T-SSW-1 @ 6'	Apr. 5, 2016	Apr. 8, 2016				Apr.13, 2016	28	8	P
T-NSW-1@7'	Apr. 5, 2016	Apr. 8, 2016				Apr.13, 2016	28	8	P
T-WSW-1 @11'	Apr. 5, 2016	Apr. 8, 2016				Apr.13, 2016	28	8	P
Sample-2 @ 20'	Apr. 5, 2016	Apr. 8, 2016				Apr.13, 2016	28	8	P
Sample-10 @ 2.5'	Apr. 5, 2016	Apr. 8, 2016				Apr.13, 2016	28	8	P
T-SSW-2 @7'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	P
T-ESW-1 @ 5'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	P
T-ESW-1 @ 10'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	P
T-ESW-1 @16'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	P
T-NSW-2 @ 16'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	P
T-NSW-3 @4'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	P
T-ESW-2 @ 4'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	P
T-ESW-3 @4'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	P
T-ESW-4 @ 4'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	P

XENCO Laboratories
CHRONOLOGY OF HOLDING TIMES

Analytical Method : TPH By SW8015B Mod
Client : TRC Solutions, Inc

Work Order #: **528239**
Project ID:

Field Sample ID	Date Collected	Date Received	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed **(Days)**	Q
Sample -1 @ 21'	Apr. 5, 2016	Apr. 8, 2016	Apr. 11, 2016	14	6	Apr.11, 2016	14	0	P
T-SSW-1 @ 6'	Apr. 5, 2016	Apr. 8, 2016	Apr. 11, 2016	14	6	Apr.11, 2016	14	0	P
T-NSW-1@7'	Apr. 5, 2016	Apr. 8, 2016	Apr. 11, 2016	14	6	Apr.11, 2016	14	0	P
T-WSW-1 @11'	Apr. 5, 2016	Apr. 8, 2016	Apr. 11, 2016	14	6	Apr.11, 2016	14	0	P
Sample-2 @ 20'	Apr. 5, 2016	Apr. 8, 2016	Apr. 11, 2016	14	6	Apr.11, 2016	14	0	P
Sample-10 @ 2.5'	Apr. 5, 2016	Apr. 8, 2016	Apr. 11, 2016	14	6	Apr.11, 2016	14	0	P
T-SSW-2 @7'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.11, 2016	14	0	P
T-ESW-1 @ 5'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.11, 2016	14	0	P
T-ESW-1 @ 10'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.12, 2016	14	1	P
T-ESW-1 @16'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.12, 2016	14	1	P
T-NSW-2 @ 16'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.12, 2016	14	1	P
T-NSW-3 @4'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.12, 2016	14	1	P
T-ESW-2 @ 4'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.12, 2016	14	1	P

XENCO Laboratories
CHRONOLOGY OF HOLDING TIMES

Analytical Method : BTEX by EPA 8021B
Client : TRC Solutions, Inc

Work Order #: **528239**
Project ID:

Field Sample ID	Date Collected	Date Received	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed **(Days)**	Q
Sample -1 @ 21'	Apr. 5, 2016	Apr. 8, 2016				Apr.11, 2016	14	6	P
T-SSW-1 @ 6'	Apr. 5, 2016	Apr. 8, 2016				Apr.11, 2016	14	6	P
T-NSW-1@7'	Apr. 5, 2016	Apr. 8, 2016				Apr.11, 2016	14	6	P
T-WSW-1 @11'	Apr. 5, 2016	Apr. 8, 2016				Apr.11, 2016	14	6	P
Sample-2 @ 20'	Apr. 5, 2016	Apr. 8, 2016				Apr.11, 2016	14	6	P
Sample-10 @ 2.5'	Apr. 5, 2016	Apr. 8, 2016				Apr.11, 2016	14	6	P
T-SSW-2 @7'	Apr. 6, 2016	Apr. 8, 2016				Apr.11, 2016	14	5	P
T-ESW-1 @ 5'	Apr. 6, 2016	Apr. 8, 2016				Apr.11, 2016	14	5	P
T-ESW-1 @ 10'	Apr. 6, 2016	Apr. 8, 2016				Apr.11, 2016	14	5	P
T-ESW-1 @16'	Apr. 6, 2016	Apr. 8, 2016				Apr.11, 2016	14	5	P
T-NSW-2 @ 16'	Apr. 6, 2016	Apr. 8, 2016				Apr.12, 2016	14	6	P
T-NSW-3 @4'	Apr. 6, 2016	Apr. 8, 2016				Apr.11, 2016	14	5	P
T-ESW-2 @ 4'	Apr. 6, 2016	Apr. 8, 2016				Apr.11, 2016	14	5	P

F = These samples were analyzed outside the recommended holding time.
P = Samples analyzed within the recommended holding time.

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Analytical Log

Analytical Method:	BTEX by EPA 8021B	Batch #:	992159
Project Name:	Energy Transfer Boyd 4" Historical	Project ID:	
Client Name:	TRC Solutions, Inc	WO Number:	528239

Client Sample Id	Lab Sample Id	QC Types
Sample -1 @ 21'	528239-001	SMP
Sample-10 @ 2.5'	528239-006	SMP
Sample-2 @ 20'	528239-005	SMP
T-ESW-1 @ 10'	528239-009	SMP
T-ESW-1 @ 5'	528239-008	SMP
T-ESW-1 @16'	528239-010	SMP
T-NSW-1@7'	528239-003	SMP
T-NSW-2 @ 16'	528239-011	SMP
T-SSW-1 @ 6'	528239-002	SMP
T-SSW-2 @7'	528239-007	SMP
T-WSW-1 @11'	528239-004	SMP
	528243-002 S	MS
	528243-002 SD	MSD
	707546-1-BKS	BKS
	707546-1-BLK	BLK
	707546-1-BSD	BSD

Analytical Log

Analytical Method:	TPH By SW8015B Mod	Batch #:	992219
Project Name:	Energy Transfer Boyd 4" Historical	Project ID:	
Client Name:	TRC Solutions, Inc	WO Number:	528239

Client Sample Id	Lab Sample Id	QC Types
Sample -1 @ 21'	528239-001	SMP
Sample-10 @ 2.5'	528239-006	SMP
Sample-2 @ 20'	528239-005	SMP
T-ESW-1 @ 10'	528239-009	SMP
T-ESW-1 @ 5'	528239-008	SMP
T-ESW-1 @16'	528239-010	SMP
T-ESW-2 @ 4'	528239-013	SMP
T-NSW-1@7'	528239-003	SMP
T-NSW-2 @ 16'	528239-011	SMP
T-NSW-3 @4'	528239-012	SMP
T-SSW-1 @ 6'	528239-002	SMP
T-SSW-2 @7'	528239-007	SMP
T-WSW-1 @11'	528239-004	SMP
	528239-001 S	MS
	528239-001 SD	MSD
	707587-1-BKS	BKS
	707587-1-BLK	BLK
	707587-1-BSD	BSD

Analytical Log

Analytical Method:	BTEX by EPA 8021B	Batch #:	992302
Project Name:	Energy Transfer Boyd 4" Historical	Project ID:	
Client Name:	TRC Solutions, Inc	WO Number:	528239

Client Sample Id	Lab Sample Id	QC Types
T-ESW-2 @ 4'	528239-013	SMP
T-NSW-3 @4'	528239-012	SMP
	528239-013 S	MS
	528239-013 SD	MSD
	707618-1-BKS	BKS
	707618-1-BLK	BLK
	707618-1-BSD	BSD

Analytical Log

Analytical Method:	Inorganic Anions by EPA 300/300.1	Batch #:	992431
Project Name:	Energy Transfer Boyd 4" Historical	Project ID:	
Client Name:	TRC Solutions, Inc	WO Number:	528239

Client Sample Id	Lab Sample Id	QC Types
Sample -1 @ 21'	528239-001	SMP
Sample-10 @ 2.5'	528239-006	SMP
Sample-2 @ 20'	528239-005	SMP
T-ESW-1 @ 10'	528239-009	SMP
T-ESW-1 @ 5'	528239-008	SMP
T-ESW-1 @16'	528239-010	SMP
T-ESW-2 @ 4'	528239-013	SMP
T-ESW-3 @4'	528239-014	SMP
T-ESW-4 @ 4'	528239-015	SMP
T-NSW-1@7'	528239-003	SMP
T-NSW-2 @ 16'	528239-011	SMP
T-NSW-3 @4'	528239-012	SMP
T-SSW-1 @ 6'	528239-002	SMP
T-SSW-2 @7'	528239-007	SMP
T-WSW-1 @11'	528239-004	SMP
	528239-001 S	MS
	528239-011 S	MS
	707674-1-BKS	BKS
	707674-1-BLK	BLK
	707674-1-BSD	BSD

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Orders : 528239,

Project ID:

Lab Batch #: 992159 **Sample:** 707546-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/11/16 11:05

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

Lab Batch #: 992159 **Sample:** 707546-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/11/16 11:21

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 992159 **Sample:** 528243-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/11/16 11:37

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 992159 **Sample:** 528243-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/11/16 11:54

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY 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	0.0332	0.0300	111	80-120	

Lab Batch #: 992159 **Sample:** 707546-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/11/16 12:26

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Orders : 528239,

Project ID:

Lab Batch #: 992302 **Sample:** 707618-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/11/16 22:05

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 992302 **Sample:** 707618-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/11/16 22:20

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 992302 **Sample:** 528239-013 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/11/16 22:37

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY 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	0.0305	0.0300	102	80-120	

Lab Batch #: 992302 **Sample:** 528239-013 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/11/16 22:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY 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	0.0310	0.0300	103	80-120	

Lab Batch #: 992302 **Sample:** 707618-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/11/16 23:25

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Orders : 528239,

Project ID:

Lab Batch #: 992219 **Sample:** 707587-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/11/16 18:20

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	100	117	70-130	
o-Terphenyl	60.5	50.0	121	70-135	

Lab Batch #: 992219 **Sample:** 707587-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/11/16 18:50

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	100	128	70-130	
o-Terphenyl	61.6	50.0	123	70-135	

Lab Batch #: 992219 **Sample:** 707587-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/11/16 19:19

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	100	126	70-130	
o-Terphenyl	60.9	50.0	122	70-135	

Lab Batch #: 992219 **Sample:** 528239-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/11/16 20:15

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	100	116	70-130	
o-Terphenyl	53.9	50.0	108	70-135	

Lab Batch #: 992219 **Sample:** 528239-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/11/16 20:42

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	99.8	118	70-130	
o-Terphenyl	54.4	49.9	109	70-135	

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

BS / BSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Order #: 528239 **Project ID:**

Analyst: PJB **Date Prepared:** 04/11/2016 **Date Analyzed:** 04/11/2016

Lab Batch ID: 992159 **Sample:** 707546-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000335	0.100	0.0968	97	0.100	0.0922	92	5	70-130	35	
Toluene	<0.00100	0.100	0.0967	97	0.100	0.0935	94	3	70-130	35	
Ethylbenzene	<0.000490	0.100	0.105	105	0.100	0.101	101	4	71-129	35	
m_p-Xylenes	<0.00170	0.200	0.205	103	0.200	0.199	100	3	70-135	35	
o-Xylene	<0.000845	0.100	0.0975	98	0.100	0.0949	95	3	71-133	35	

Analyst: PJB **Date Prepared:** 04/11/2016 **Date Analyzed:** 04/11/2016

Lab Batch ID: 992302 **Sample:** 707618-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000335	0.100	0.0981	98	0.100	0.0854	85	14	70-130	35	
Toluene	<0.00100	0.100	0.0991	99	0.100	0.0855	86	15	70-130	35	
Ethylbenzene	<0.000490	0.100	0.107	107	0.100	0.0952	95	12	71-129	35	
m_p-Xylenes	<0.00170	0.200	0.213	107	0.200	0.189	95	12	70-135	35	
o-Xylene	<0.000845	0.100	0.103	103	0.100	0.0926	93	11	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: Energy Transfer Boyd 4" Historical

Work Order #: 528239 **Project ID:**

Analyst: MNR **Date Prepared:** 04/13/2016 **Date Analyzed:** 04/13/2016

Lab Batch ID: 992431 **Sample:** 707674-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.341	50.0	49.4	99	50.0	49.7	99	1	90-110	20	

Analyst: ARM **Date Prepared:** 04/11/2016 **Date Analyzed:** 04/11/2016

Lab Batch ID: 992219 **Sample:** 707587-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	<9.88	1000	931	93	1000	931	93	0	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<9.88	1000	1010	101	1000	994	99	2	75-125	25	

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

Form 3 - MS Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Order #: 528239

Lab Batch #: 992431 **Project ID:**

Date Analyzed: 04/13/2016 **Date Prepared:** 04/13/2016 **Analyst:** MNR

QC- Sample ID: 528239-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	9.07	50.0	56.7	95	80-120	

Lab Batch #: 992431

Date Analyzed: 04/14/2016 **Date Prepared:** 04/13/2016 **Analyst:** MNR

QC- Sample ID: 528239-011 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1440	2500	3900	98	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Order # : 528239 **Project ID:**

Lab Batch ID: 992159 **QC- Sample ID:** 528243-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/11/2016 **Date Prepared:** 04/11/2016 **Analyst:** PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000333	0.0992	0.103	104	0.100	0.0755	76	31	70-130	35	
Toluene	<0.000992	0.0992	0.106	107	0.100	0.0745	75	35	70-130	35	
Ethylbenzene	<0.000486	0.0992	0.116	117	0.100	0.0801	80	37	71-129	35	F
m_p-Xylenes	<0.00169	0.198	0.229	116	0.200	0.161	81	35	70-135	35	
o-Xylene	<0.000839	0.0992	0.110	111	0.100	0.0873	87	23	71-133	35	

Lab Batch ID: 992302 **QC- Sample ID:** 528239-013 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/11/2016 **Date Prepared:** 04/11/2016 **Analyst:** PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000335	0.0998	0.0739	74	0.0992	0.0726	73	2	70-130	35	
Toluene	<0.000998	0.0998	0.0748	75	0.0992	0.0719	72	4	70-130	35	
Ethylbenzene	<0.000489	0.0998	0.0817	82	0.0992	0.0803	81	2	71-129	35	
m_p-Xylenes	<0.00170	0.200	0.163	82	0.198	0.160	81	2	70-135	35	
o-Xylene	<0.000844	0.0998	0.0790	79	0.0992	0.0780	79	1	71-133	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.

Form 3 - MS / MSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Order # : 528239 **Project ID:**

Lab Batch ID: 992219 **QC- Sample ID:** 528239-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/11/2016 **Date Prepared:** 04/11/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	<9.88	1000	849	85	998	858	86	1	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<9.88	1000	904	90	998	898	90	1	75-125	25	

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

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

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

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

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

Attachment A Laboratory Data Package Cover Page

Project Name: **Energy Transfer Boyd 4" Histo** Laboratory Number: **528239**

This Data package consists of : Laboratory Batch No(s)

This signature page, the laboratory review checklist, and the following reportable data:

☐ R1 Field chain-of-custody documentation;

☐ R2 Sample identification cross-reference;

☐ R3 Test reports (analytical data sheets) for each environmental sample that includes:
- a) Items consistent with NELAC 5
- b) dilution factors,
- c) preparation methods,
- d) cleanup methods, and
- e) if required for the project, tentatively identified compounds (TICs).

☐ R4 Surrogate Recovery data including:
- a) Calculated recovery (%R), and
- b) The laboratory's surrogate QC limits.

☐ R5 Test reports/summary forms for blank samples;

☐ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
- a) LCS spiking amounts,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

☐ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %Rs and relative percent differences (RPDs) and
- e) The laboratory's MS/MSD QC limits

☐ R8 Laboratory anaytical duplicate (if applicable) recovery and precision:
- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

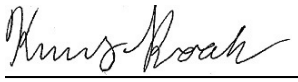
☐ R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;

☐ R10 Other problems or anomalies.

☐ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies, observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: [ ] This laboratory meets an exception under 30 TAC 25.6 and was last inspection by [ ] TCEQ or [ ] _____ on (enter date of last inspection). Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The offical signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Kelsey Brooks		**Project Manager**	**14-APR-16**
Name (Printed)	Signature	Official Title (printed)	Date

A1

1. Items identified by the letter "R" must be included in the laboratory data package submitted to the TCEQ-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report Identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Attachment A (cont'd): Laboratory Review Checklist: Exception Reports

Laboratory Name:	XENCO LABORATORIES	LRC Date:	14-APR-16
Project Name:	Energy Transfer Boyd 4" Historical	Laboratory Job Number:	528239
Reviewer Name:	KEB	Batch Number(s) :	

ER# [1]	DESCRIPTION

1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No is checked on the LRC).

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST 528239

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Nikki Green

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

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

Project Name: Energy Transfer Boyd 4" Historical

Project #:

Project Loc: Lea County, NM

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	Sample-1 @ 21'			4/5/2016	1045		1	x								Soil	x								x			x				x
	T-SSW-1 @ 6'			4/5/2016	1109		1	x								Soil	x								x			x				x
	T-NSW-1 @ 7'			4/5/2016	1134		1	x								Soil	x								x			x				x
	T-WSW-1 @11'			4/5/2016	1145		1	x								Soil	x								x			x				x
	Sample-2 @ 20'			4/5/2016	1400		1	x								Soil	x								x			x				x
	Sample-10 @ 2.5'			4/5/2016	1500		1	x								Soil	x								x			x				x
	T-SSW-2 @ 7'			4/6/2016	1000		1	x								Soil	x								x			x				x
	T-ESW-1 @ 5'			4/6/2016	1030		1	x								Soil	x								x			x				x
	T-ESW-1 @ 10'			4/6/2016	1050		1	x								Soil	x								x			x				x
	T-ESW-1 @16'			4/6/2016	1120		1	x								Soil	x								x			x				x

Special Instructions:

Bill to Rose Slade at Energy Transfer. TPH Extended 35

Relinquished by: Nikki Green	Date 4/8/16	Time 3:23 PM	Received by:	Date 4-8-16	Time 3:23
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

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

by Courier? UPS DHL FedEx Lone Star

Temperature Upon FC/F:0 Temp: 13C IR ID:R-8

Corrected Temp: 13°C

Final 1.000

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Nikki Green

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature: Nikki Green

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

Project Name: Energy Transfer Boyd 4" Historical

Project #:

Project Loc: Lea County, NM

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	T-NSW-2 @ 16'			4/6/2016	1330		1	x								SOIL	X								X			X		X
	T-NSW-3 @ 4'			4/6/2016	1400		1	x								Soil	x								x			x		x
	T-ESW-2 @ 4'			4/6/2016	1425		1	x								Soil	x								x			x		x
	T-ESW-3 @ 4'			4/6/2016	1445		1	x								Soil											x		x
	T-ESW-4 @ 4'			4/6/2016	1520		1	x								Soil											x		x

Special Instructions:

Bill to Rose Slade at Energy Transfer. TPH Extended 35

Relinquished by:	Date	Time	Received by:	Date	Time
Nikki Green	4/8/16	3:23 PM	Nikki Negron	4/8/16	3:23
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

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

Temperature Upon Receipt: Temp: 13°C IR ID:R-8
C/F:0
Corrected Temp: 13°C

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 04/08/2016 03:23:00 PM

Work Order #: 528239

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Mary Alexis Negron
Mary Negron
Date: 04/11/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 04/11/2016

Analytical Report 532437

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (West)

07-JUL-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

07-JUL-16

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

Reference: XENCO Report No(s): **532437**
Energy Transfer Boyd 4" Historical (West)
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) 532437. 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. 532437 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 532437

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (West)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
West Excavation Floor-1 @ 20'	S	06-27-16 13:00	- 20 ft	532437-001
West Excavation SSW-1 @ 19'	S	06-27-16 13:05	- 19 ft	532437-002
West Excavation NSW-1 @ 19'	S	06-27-16 13:10	- 19 ft	532437-003
West Excavation ESW-1 @ 19'	S	06-27-16 13:15	- 19 ft	532437-004
West Excavation Floor-2 @ 20'	S	06-27-16 13:20	- 20 ft	532437-005
West Excavation SSW-2 @ 19'	S	06-27-16 13:25	- 19 ft	532437-006
West Excavation NSW-2 @ 19'	S	06-27-16 13:30	- 19 ft	532437-007
West Excavation Floor-3 @ 20'	S	06-27-16 13:35	- 20 ft	532437-008
West Excavation SSW-3 @ 19'	S	06-27-16 13:40	- 19 ft	532437-009
West Excavation NSW-3 @ 19'	S	06-27-16 13:45	- 19 ft	532437-010
West Excavation WSW-3 @ 19'	S	06-27-16 13:50	- 19 ft	532437-011
West Excavation Floor-4 @ 20'	S	06-27-16 13:55	- 20 ft	532437-012
West Excavation ESW-4 @ 19'	S	06-27-16 14:00	- 19 ft	532437-013
West Excavation WSW-4 @ 19'	S	06-27-16 14:05	- 19 ft	532437-014
West Excavation NSW-4 @ 19'	S	06-27-16 14:10	- 19 ft	532437-015
West Excavation Floor-5 @ 15'	S	06-27-16 14:15	- 15 ft	532437-016

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 532437

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical (West)

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Tue Jun-28-16 01:45 pm
Report Date: 07-JUL-16
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	532437-001		532437-002		532437-003		532437-004		532437-005		532437-006	
	Field Id:	West Excavation Floor-1 @ 1		West Excavation SSW-1 @		West Excavation NSW-1 @		West Excavation ESW-1 @		West Excavation Floor-2 @		West Excavation SSW-2 @ 1	
	Depth:	20 ft		19 ft		19 ft		19 ft		20 ft		19 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-27-16 13:00		Jun-27-16 13:05		Jun-27-16 13:10		Jun-27-16 13:15		Jun-27-16 13:20		Jun-27-16 13:25	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Jul-01-16 18:00		Jul-01-16 18:00		Jul-01-16 18:00		Jul-01-16 18:00		Jul-01-16 18:00		Jul-01-16 18:00	
	Analyzed:	Jul-02-16 00:48		Jul-02-16 00:56		Jul-02-16 01:19		Jul-02-16 01:27		Jul-02-16 01:35		Jul-02-16 01:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		212	10.0	179	50.0	229	50.0	1600	100	221	50.0	ND	10.0
TPH By SW8015B Mod	***Extracted:***	Jun-28-16 16:00		Jun-28-16 16:00		Jun-28-16 16:00		Jun-28-16 16:00		Jun-28-16 16:00		Jun-28-16 16:00	
	Analyzed:	Jun-29-16 01:17		Jun-29-16 01:41		Jun-29-16 02:05		Jun-29-16 02:54		Jun-29-16 03:18		Jun-29-16 03:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	25.7	15.0
C10-C28 Diesel Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	583	15.0
C28-C35 Oil Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0
Total TPH		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	609	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 532437

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical (West)

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Tue Jun-28-16 01:45 pm
Report Date: 07-JUL-16
Project Manager: Kelsey Brooks

Analysis Requested	*Lab Id:*	532437-007		532437-008		532437-009		532437-010		532437-011		532437-012	
	Field Id:	West Excavation NSW-2 @		West Excavation Floor-3 @		West Excavation SSW-3 @		West Excavation NSW-3 @		West Excavation WSW-3 @		West Excavation Floor-4 @	
	Depth:	19 ft		20 ft		19 ft		19 ft		19 ft		20 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-27-16 13:30		Jun-27-16 13:35		Jun-27-16 13:40		Jun-27-16 13:45		Jun-27-16 13:50		Jun-27-16 13:55	
Inorganic Anions by EPA 300/300.1	*Extracted:*	Jul-01-16 18:00		Jul-01-16 18:00		Jul-01-16 18:00		Jul-06-16 10:00		Jul-06-16 10:00		Jul-06-16 10:00	
	Analyzed:	Jul-02-16 01:50		Jul-02-16 01:58		Jul-02-16 02:06		Jul-06-16 15:36		Jul-06-16 15:44		Jul-06-16 15:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		160	10.0	153	50.0	314	50.0	141	10.0	806	100	204	50.0
TPH By SW8015B Mod	*Extracted:*	Jun-28-16 16:00		Jun-28-16 16:00		Jun-28-16 16:00		Jun-28-16 16:00		Jun-28-16 16:00		Jun-28-16 16:00	
	Analyzed:	Jun-29-16 04:05		Jun-29-16 04:28		Jun-29-16 04:52		Jun-29-16 05:17		Jun-29-16 05:42		Jun-29-16 06:06	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0
C10-C28 Diesel Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0
C28-C35 Oil Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0
Total TPH		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 532437

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical (West)

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Tue Jun-28-16 01:45 pm
Report Date: 07-JUL-16
Project Manager: Kelsey Brooks

Analysis Requested											
	Lab Id:	532437-013		532437-014		532437-015		532437-016			
	Field Id:	West Excavation ESW-4 @		West Excavation WSW-4 @		West Excavation NSW-4 @		West Excavation Floor-5 @			
	Depth:	19 ft		19 ft		19 ft		15 ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	Jun-27-16 14:00		Jun-27-16 14:05		Jun-27-16 14:10		Jun-27-16 14:15			
Inorganic Anions by EPA 300/300.1	***Extracted:***	Jul-06-16 10:00		Jul-06-16 12:00		Jul-06-16 12:00		Jul-06-16 12:00			
	Analyzed:	Jul-06-16 16:00		Jul-06-16 19:07		Jul-06-16 18:43		Jul-06-16 19:14			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		156	50.0	278	100	529	50.0	264	50.0		
TPH By SW8015B Mod	***Extracted:***	Jun-29-16 14:00		Jun-29-16 14:00		Jun-29-16 14:00		Jun-29-16 14:00			
	Analyzed:	Jun-29-16 18:19		Jun-29-16 18:46		Jun-29-16 19:12		Jun-29-16 19:38			
	Units/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		
C10-C28 Diesel Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0		
C28-C35 Oil Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0		
Total TPH		ND	15.0	ND	15.0	ND	15.0	ND	15.0		

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Orders : 532437, 532437 **Project ID:**

Lab Batch #: 997172 **Sample:** 532437-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 01:17

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.2	99.9	96	70-130	
o-Terphenyl	44.1	50.0	88	70-135	

Lab Batch #: 997172 **Sample:** 532437-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 01:41

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.9	99.7	98	70-130	
o-Terphenyl	45.5	49.9	91	70-135	

Lab Batch #: 997172 **Sample:** 532437-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 02:05

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.0	99.7	95	70-130	
o-Terphenyl	41.1	49.9	82	70-135	

Lab Batch #: 997172 **Sample:** 532437-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 02:54

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.2	99.9	94	70-130	
o-Terphenyl	43.4	50.0	87	70-135	

Lab Batch #: 997172 **Sample:** 532437-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 03:18

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.3	99.8	98	70-130	
o-Terphenyl	45.6	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: Energy Transfer Boyd 4" Historical (West)

Work Orders : 532437, 532437 **Project ID:**

Lab Batch #: 997172 **Sample:** 532437-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 03:41

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.8	101	70-130	
o-Terphenyl	48.1	49.9	96	70-135	

Lab Batch #: 997172 **Sample:** 532437-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 04:05

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.0	99.9	99	70-130	
o-Terphenyl	45.3	50.0	91	70-135	

Lab Batch #: 997172 **Sample:** 532437-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 04:28

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.9	102	70-130	
o-Terphenyl	47.0	50.0	94	70-135	

Lab Batch #: 997172 **Sample:** 532437-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 04:52

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.5	100	100	70-130	
o-Terphenyl	45.9	50.0	92	70-135	

Lab Batch #: 997172 **Sample:** 532437-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 05:17

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.4	100	99	70-130	
o-Terphenyl	45.9	50.0	92	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Orders : 532437, 532437 **Project ID:**

Lab Batch #: 997172 **Sample:** 532437-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 05:42

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.8	99.8	98	70-130	
o-Terphenyl	45.8	49.9	92	70-135	

Lab Batch #: 997172 **Sample:** 532437-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 06:06

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.4	99.9	97	70-130	
o-Terphenyl	45.1	50.0	90	70-135	

Lab Batch #: 997250 **Sample:** 532437-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 18:19

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.5	99.9	94	70-130	
o-Terphenyl	46.8	50.0	94	70-135	

Lab Batch #: 997250 **Sample:** 532437-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 18:46

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.8	100	97	70-130	
o-Terphenyl	48.3	50.0	97	70-135	

Lab Batch #: 997250 **Sample:** 532437-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 19:12

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.3	99.8	97	70-130	
o-Terphenyl	48.2	49.9	97	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: Energy Transfer Boyd 4" Historical (West)

Work Orders : 532437, 532437 **Project ID:**

Lab Batch #: 997250 **Sample:** 532437-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 19:38

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.8	102	70-130	
o-Terphenyl	51.1	49.9	102	70-135	

Lab Batch #: 997172 **Sample:** 710459-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/28/16 13:32

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-130	
o-Terphenyl	51.8	50.0	104	70-135	

Lab Batch #: 997250 **Sample:** 710500-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/29/16 14:19

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-130	
o-Terphenyl	52.2	50.0	104	70-135	

Lab Batch #: 997172 **Sample:** 710459-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/28/16 13:56

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-130	
o-Terphenyl	61.9	50.0	124	70-135	

Lab Batch #: 997250 **Sample:** 710500-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/29/16 14:45

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	100	124	70-130	
o-Terphenyl	58.7	50.0	117	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: Energy Transfer Boyd 4" Historical (West)

Work Orders : 532437, 532437 **Project ID:**

Lab Batch #: 997172 **Sample:** 710459-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/28/16 14:20

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	100	117	70-130	
o-Terphenyl	59.6	50.0	119	70-135	

Lab Batch #: 997250 **Sample:** 710500-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/29/16 15:12

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	100	130	70-130	
o-Terphenyl	59.2	50.0	118	70-135	

Lab Batch #: 997172 **Sample:** 532336-006 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/28/16 15:06

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	99.9	127	70-130	
o-Terphenyl	57.7	50.0	115	70-135	

Lab Batch #: 997250 **Sample:** 532368-021 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 16:05

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.9	110	70-130	
o-Terphenyl	45.1	50.0	90	70-135	

Lab Batch #: 997172 **Sample:** 532336-006 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/28/16 15:30

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-130	
o-Terphenyl	55.1	50.0	110	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: Energy Transfer Boyd 4" Historical (West)

Work Orders : 532437, 532437 **Project ID:**

Lab Batch #: 997250 **Sample:** 532368-021 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 16:32

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.7	109	70-130	
o-Terphenyl	46.1	49.9	92	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order #: 532437, 532437 **Project ID:**

Analyst: MNR **Date Prepared:** 07/01/2016 **Date Analyzed:** 07/01/2016

Lab Batch ID: 997472 **Sample:** 710609-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	250	235	94	250	232	93	1	90-110	20	

Analyst: MNR **Date Prepared:** 07/06/2016 **Date Analyzed:** 07/06/2016

Lab Batch ID: 997589 **Sample:** 710653-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	250	236	94	250	232	93	2	90-110	20	

Analyst: MNR **Date Prepared:** 07/06/2016 **Date Analyzed:** 07/06/2016

Lab Batch ID: 997612 **Sample:** 710654-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	250	236	94	250	228	91	3	90-110	20	

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

BS / BSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order #: 532437, 532437 **Project ID:**

Analyst: ARM **Date Prepared:** 06/28/2016 **Date Analyzed:** 06/28/2016

Lab Batch ID: 997172 **Sample:** 710459-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	966	97	1000	903	90	7	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	997	100	1000	962	96	4	75-125	25	

Analyst: ARM **Date Prepared:** 06/29/2016 **Date Analyzed:** 06/29/2016

Lab Batch ID: 997250 **Sample:** 710500-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	991	99	1000	1040	104	5	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1100	110	1000	1080	108	2	75-125	25	

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

Form 3 - MS Recoveries

Project Name: Energy Transfer Boyd 4" Historical (We

Work Order #: 532437

Lab Batch #: 997472 **Project ID:**

Date Analyzed: 07/02/2016 **Date Prepared:** 07/01/2016 **Analyst:** MNR

QC- Sample ID: 532595-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	177	1250	1300	90	80-120	

Lab Batch #: 997472

Date Analyzed: 07/01/2016 **Date Prepared:** 07/01/2016 **Analyst:** MNR

QC- Sample ID: 532690-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	879	2500	3290	96	80-120	

Lab Batch #: 997589

Date Analyzed: 07/06/2016 **Date Prepared:** 07/06/2016 **Analyst:** MNR

QC- Sample ID: 532769-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	945	2500	3210	91	80-120	

Lab Batch #: 997589

Date Analyzed: 07/06/2016 **Date Prepared:** 07/06/2016 **Analyst:** MNR

QC- Sample ID: 532769-011 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1190	2500	3550	94	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS Recoveries

Project Name: Energy Transfer Boyd 4" Historical (We

Work Order #: 532437

Lab Batch #: 997612 **Project ID:**

Date Analyzed: 07/07/2016 **Date Prepared:** 07/06/2016 **Analyst:** MNR

QC- Sample ID: 532368-009 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	441	261	635	74	80-120	X

Lab Batch #: 997612

Date Analyzed: 07/06/2016 **Date Prepared:** 07/06/2016 **Analyst:** MNR

QC- Sample ID: 532437-015 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	529	1250	1620	87	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order # : 532437 **Project ID:**

Lab Batch ID: 997172 **QC- Sample ID:** 532336-006 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/28/2016 **Date Prepared:** 06/28/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	213	999	1040	83	1000	1060	85	2	75-125	25	
C10-C28 Diesel Range Hydrocarbons	22.0	999	972	95	1000	966	94	1	75-125	25	

Lab Batch ID: 997250 **QC- Sample ID:** 532368-021 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/29/2016 **Date Prepared:** 06/29/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	<15.6	1040	887	85	1040	880	85	1	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.6	1040	1010	97	1040	1010	97	0	75-125	25	

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.

Sample Duplicate Recovery

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order #: 532437

Lab Batch #: 997472 **Project ID:**
Date Analyzed: 07/02/2016 00:32 **Date Prepared:** 07/01/2016 **Analyst:** MNR
QC- Sample ID: 532595-002 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300/300.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	177	1450	156	20	F

Lab Batch #: 997472
Date Analyzed: 07/01/2016 22:43 **Date Prepared:** 07/01/2016 **Analyst:** MNR
QC- Sample ID: 532690-002 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300/300.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	879	896	2	20	

Lab Batch #: 997589
Date Analyzed: 07/06/2016 11:20 **Date Prepared:** 07/06/2016 **Analyst:** MNR
QC- Sample ID: 532769-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300/300.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	945	943	0	20	

Lab Batch #: 997589
Date Analyzed: 07/06/2016 14:03 **Date Prepared:** 07/06/2016 **Analyst:** MNR
QC- Sample ID: 532769-011 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300/300.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	1190	1240	4	20	

Spike Relative Difference RPD 200 * (B-A)/(B+A)
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order #: 532437

Lab Batch #: 997612 **Project ID:**

Date Analyzed: 07/07/2016 07:37 **Date Prepared:** 07/06/2016 **Analyst:** MNR

QC- Sample ID: 532368-009 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300/300.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	441	440	0	20	

Lab Batch #: 997612

Date Analyzed: 07/06/2016 18:51 **Date Prepared:** 07/06/2016 **Analyst:** MNR

QC- Sample ID: 532437-015 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300/300.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	529	502	5	20	

Spike Relative Difference RPD 200 * (B-A)/(B+A)
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST 1 of 2

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Nikki Green

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

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

Project Name: Energy Transfer Boyd 4" Historical (west)

Project #:

Project Loc: Lea County, NM

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only) ORDER #: 532437

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TOTAL: TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	West Excavation Floor-1 @ 20'			6/27/2016	1300		1	x								Soil	x											X				X
	West Excavation SSW-1 @ 19'			6/27/2016	1305		1	x								Soil	x											x				x
	West Excavation NSW-1 @ 19'			6/27/2016	1310		1	x								Soil	x											X				x
	West Excavation ESW-1 @ 19'			6/27/2016	1315		1	x								Soil	x											x				X
	West Excavation Floor-2 @ 20'			6/27/2016	1320		1	x								Soil	x											X				x
	West Excavation SSW-2 @ 19'			6/27/2016	1325		1	x								Soil	x											x				x
	West Excavation NSW-2 @ 19'			6/27/2016	1330		1	x								Soil	x											X				X
	West Excavation Floor-3 @ 20'			6/27/2016	1335		1	x								Soil	x											x				x
	West Excavation SSW-3 @ 19'			6/27/2016	1340		1	x								Soil	x											X				x
	West Excavation NSW-3 @ 19'			6/27/2016	1345		1	x								Soil	x											x				X
	West Excavation WSW-3 @ 19'			6/27/2016	1350		1	x								Soil	x											X				x

Special Instructions:

Bill to Rose Slade at Energy Transfer. TPH Extended 35

Relinquished by:	Date	Time	Received by:	Date	Time
Nikki Green	6/28	1:45pm	Xenco	6/28/16	1:45pm
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Temp: IR ID:R-8
C/F:0 -3.0°C
Corrected Temp: -3.0C

Laboratory Comments:

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

Temperature Upon Receipt: -.3 °C

Final 1.000

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Nikki Green

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature:

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

Project Name: Energy Transfer Boyd 4" Historical (west)

Project #:

Project Loc: Lea County, NM

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

Final 1.000

(lab use only)

ORDER #: 532437

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 / 8015M / 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	West Excavation Floor-4 @ 20'			4/6/2016	1355		1	x								Soil	x											X		X
	West Excavation ESW-4 @ 19'			4/6/2016	1400		1	x								Soil	x											x		x
	West Excavation WSW-4 @ 19'			4/6/2016	1405		1	x								Soil	x											x		x
	West Excavation NSW-4 @ 19'			4/6/2016	1410		1	x								Soil	x											x		x
	West Excavation Floor-5 @ 15'			4/6/2016	1415		1	x								Soil	x											x		x

Special Instructions:

Bill to Rose Slade at Energy Transfer. TPH Extended 35

Relinquished by:	Date	Time	Received by:	Date	Time
	6/20	1:45pm	Xenco	6/20	1:45
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:		

Temp: -.3°C IR ID:R-8
C/F:0
Corrected Temp: -.3°C

Laboratory Comments:

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

Temperature Upon Receipt: -.3 °C

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 06/28/2016 01:45:00 PM

Work Order #: 532437

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

Temperature Measuring device used : R8

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Mary Alexis Negron
Mary Negron
Date: 06/28/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 06/29/2016

Analytical Report 532595

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (West)

06-JUL-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

06-JUL-16

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

Reference: XENCO Report No(s): **532595**
Energy Transfer Boyd 4" Historical (West)
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) 532595. 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. 532595 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 532595

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (West)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
West Excavation Floor-6 @25'	S	06-28-16 13:00	- 25 ft	532595-001
West Excavation Stockpile-1	S	06-28-16 13:30		532595-002

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Batch: LBA-997472 Inorganic Anions by EPA 300/300.1
Lab Sample ID 532690-002 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. WO in the analytical batch are: 532398,532595,532437
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 532595

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical (West)

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Wed Jun-29-16 12:10 pm
Report Date: 06-JUL-16
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	532595-001		532595-002					
	Field Id:	West Excavation Floor-6 @2		West Excavation Stockpile-1					
	Depth:	25 ft							
	Matrix:	SOIL		SOIL					
	Sampled:	Jun-28-16 13:00		Jun-28-16 13:30					
Inorganic Anions by EPA 300/300.1	***Extracted:***	Jul-01-16 18:00		Jul-01-16 18:00					
	Analyzed:	Jul-02-16 00:17		Jul-02-16 00:25					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		ND	10.0	177	50.0				
TPH By SW8015B Mod	***Extracted:***	Jun-30-16 13:30		Jun-30-16 13:30					
	Analyzed:	Jun-30-16 18:00		Jun-30-16 18:23					
	Units/RL:	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		174	15.0	ND	14.9				
C10-C28 Diesel Range Hydrocarbons		1980	15.0	ND	14.9				
C28-C35 Oil Range Hydrocarbons		ND	15.0	ND	14.9				
Total TPH		2150	15.0	ND	14.9				

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Orders : 532595,

Project ID:

Lab Batch #: 997250 **Sample:** 532595-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/30/16 18:00

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.9	105	70-130	
o-Terphenyl	59.4	50.0	119	70-135	

Lab Batch #: 997250 **Sample:** 532595-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/30/16 18:23

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.7	99.6	93	70-130	
o-Terphenyl	41.1	49.8	83	70-135	

Lab Batch #: 997250 **Sample:** 710500-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/29/16 14:19

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-130	
o-Terphenyl	52.2	50.0	104	70-135	

Lab Batch #: 997250 **Sample:** 710500-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/29/16 14:45

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	100	124	70-130	
o-Terphenyl	58.7	50.0	117	70-135	

Lab Batch #: 997250 **Sample:** 710500-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/29/16 15:12

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	100	130	70-130	
o-Terphenyl	59.2	50.0	118	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: Energy Transfer Boyd 4" Historical (West)

Work Orders : 532595,

Project ID:

Lab Batch #: 997250 **Sample:** 532368-021 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 16:05

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.9	110	70-130	
o-Terphenyl	45.1	50.0	90	70-135	

Lab Batch #: 997250 **Sample:** 532368-021 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/29/16 16:32

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.7	109	70-130	
o-Terphenyl	46.1	49.9	92	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order #: 532595 **Project ID:**

Analyst: MNR **Date Prepared:** 07/01/2016 **Date Analyzed:** 07/01/2016

Lab Batch ID: 997472 **Sample:** 710609-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	250	235	94	250	232	93	1	90-110	20	

Analyst: ARM **Date Prepared:** 06/29/2016 **Date Analyzed:** 06/29/2016

Lab Batch ID: 997250 **Sample:** 710500-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	991	99	1000	1040	104	5	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1100	110	1000	1080	108	2	75-125	25	

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

Form 3 - MS Recoveries

Project Name: Energy Transfer Boyd 4" Historical (We

Work Order #: 532595

Lab Batch #: 997472 **Project ID:**

Date Analyzed: 07/02/2016 **Date Prepared:** 07/01/2016 **Analyst:** MNR

QC- Sample ID: 532595-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	177	1250	1300	90	80-120	

Lab Batch #: 997472

Date Analyzed: 07/01/2016 **Date Prepared:** 07/01/2016 **Analyst:** MNR

QC- Sample ID: 532690-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	879	2500	3290	96	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order # : 532595 **Project ID:**

Lab Batch ID: 997250 **QC- Sample ID:** 532368-021 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/29/2016 **Date Prepared:** 06/29/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	<15.6	1040	887	85	1040	880	85	1	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.6	1040	1010	97	1040	1010	97	0	75-125	25	

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

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

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

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

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

Sample Duplicate Recovery

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order #: 532595

Lab Batch #: 997472 **Project ID:**

Date Analyzed: 07/02/2016 00:32 **Date Prepared:** 07/01/2016 **Analyst:** MNR

QC- Sample ID: 532595-002 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300/300.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	177	1450	156	20	F

Lab Batch #: 997472

Date Analyzed: 07/01/2016 22:43 **Date Prepared:** 07/01/2016 **Analyst:** MNR

QC- Sample ID: 532690-002 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300/300.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	879	896	2	20	

Spike Relative Difference RPD 200 * (B-A)/(B+A)
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Nikki Green

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

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

Project Name: Energy Transfer Boyd 4" Historical (west)

Project #:

Project Loc: Lea County, NM

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only) ORDER #: 532595

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	West Excavation Floor-6 @ 25'			6/28/2016	1300		1	x								Soil			x											X		X
	West Excavation Stockpile-1			6/28/2016	1330		1	x								Soil			x											x		x

TCLP: / TOTAL:

Special Instructions:

Bill to Rose Slade at Energy Transfer. TPH Extended 35

Relinquished by:	Date	Time	Received by:	Date	Time
Nikki Green	6/29/16	12:10	[signature]	6/29/16	12:10
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

Sample Containers Intact? Y N

VOCs Free of Headspace? Y N

Labels on container(s) Y N

Custody Seals Y N

Custody Temp: 5.3°C IR ID:R-8 Y N

Sample C/F:0 Corrected Temp: 5.3°C Y N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 5.3 °C

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 06/29/2016 12:10:00 PM

Work Order #: 532595

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)?	5.3
#2 *Shipping container in good condition?	**N/A**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seal present on shipping container/ cooler?	**N/A**
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**
#6 Custody Seals intact on sample bottles?	**N/A**
#7 *Custody Seals Signed and dated?	**N/A**
#8 *Chain of Custody present?	**Yes**
#9 Sample instructions complete on Chain of Custody?	**Yes**
#10 Any missing/extra samples?	**No**
#11 Chain of Custody signed when relinquished/ received?	**Yes**
#12 Chain of Custody agrees with sample label(s)?	**Yes**
#13 Container label(s) legible and intact?	**Yes**
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#15 Samples in proper container/ bottle?	**Yes**
#16 Samples properly preserved?	**Yes**
#17 Sample container(s) intact?	**Yes**
#18 Sufficient sample amount for indicated test(s)?	**Yes**
#19 All samples received within hold time?	**Yes**
#20 Subcontract of sample(s)?	**No**
#21 VOC samples have zero headspace (less than 1/4 inch bubble)?	**N/A**
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**N/A**
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Mary Alexis Negron
Mary Negron
Date: 06/30/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 06/30/2016

Analytical Report 533510

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (West)

20-JUL-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

20-JUL-16

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

Reference: XENCO Report No(s): **533510**
Energy Transfer Boyd 4" Historical (West)
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) 533510. 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. 533510 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 533510

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (West)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
West Excavation Floor-6 @32'	S	07-15-16 15:00	- 32 ft	533510-001
ESW-6 @28'	S	07-15-16 15:15	- 28 ft	533510-002

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 533510

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical (West)

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Mon Jul-18-16 12:07 pm
Report Date: 20-JUL-16
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	533510-001		533510-002					
	Field Id:	West Excavation Floor-6 @3		ESW-6 @28'					
	Depth:	32 ft		28 ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Jul-15-16 15:00		Jul-15-16 15:15					
Inorganic Anions by EPA 300/300.1	***Extracted:***	Jul-19-16 17:00		Jul-19-16 17:00					
	Analyzed:	Jul-19-16 19:54		Jul-19-16 20:01					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		46.0	10.0	39.8	10.0				
TPH By SW8015B Mod	***Extracted:***	Jul-18-16 13:00		Jul-18-16 13:00					
	Analyzed:	Jul-18-16 17:47		Jul-18-16 19:14					
	Units/RL:	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0				
C10-C28 Diesel Range Hydrocarbons		ND	15.0	ND	15.0				
C28-C35 Oil Range Hydrocarbons		ND	15.0	ND	15.0				
Total TPH		ND	15.0	ND	15.0				

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Orders : 533510,

Project ID:

Lab Batch #: 998275 **Sample:** 533510-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/18/16 17:47

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.8	99.9	91	70-130	
o-Terphenyl	46.8	50.0	94	70-135	

Lab Batch #: 998275 **Sample:** 533510-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/18/16 19:14

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.5	99.7	89	70-130	
o-Terphenyl	45.2	49.9	91	70-135	

Lab Batch #: 998275 **Sample:** 711071-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/18/16 16:21

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.3	100	87	70-130	
o-Terphenyl	45.0	50.0	90	70-135	

Lab Batch #: 998275 **Sample:** 711071-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/18/16 16:49

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-130	
o-Terphenyl	47.6	50.0	95	70-135	

Lab Batch #: 998275 **Sample:** 711071-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/18/16 17:19

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-130	
o-Terphenyl	47.7	50.0	95	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: Energy Transfer Boyd 4" Historical (West)

Work Orders : 533510,

Project ID:

Lab Batch #: 998275 **Sample:** 533510-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/18/16 18:17

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-130	
o-Terphenyl	50.3	50.0	101	70-135	

Lab Batch #: 998275 **Sample:** 533510-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/18/16 18:46

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	99.9	118	70-130	
o-Terphenyl	53.2	50.0	106	70-135	

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

BS / BSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order #: 533510 **Project ID:**

Analyst: MNR **Date Prepared:** 07/19/2016 **Date Analyzed:** 07/19/2016

Lab Batch ID: 998344 **Sample:** 711135-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	250	266	106	250	270	108	1	90-110	20	

Analyst: ARM **Date Prepared:** 07/18/2016 **Date Analyzed:** 07/18/2016

Lab Batch ID: 998275 **Sample:** 711071-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	865	87	1000	852	85	2	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	980	98	1000	970	97	1	75-125	25	

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: Energy Transfer Boyd 4" Historical (West)

Work Order # : 533510 **Project ID:**

Lab Batch ID: 998344 **QC- Sample ID:** 533504-009 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/19/2016 **Date Prepared:** 07/19/2016 **Analyst:** MNR

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	<10.0	250	263	105	250	253	101	4	80-120	20	

Lab Batch ID: 998275 **QC- Sample ID:** 533510-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/18/2016 **Date Prepared:** 07/18/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	1000	818	82	999	834	83	2	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	926	93	999	929	93	0	75-125	25	

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

533510

Project Manager: Nikki Green

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature: Nikki Green

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

Project Name: Energy Transfer Boyd 4" Historical (west)

Project #:

Project Loc: Lea County, NM

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TCLP: / TOTAL: TPH: 418.1	8015M	8015B	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	West Excavation Floor-6A @ 32'			7/15/2016	1500		1	x								Soil	x																			
	ESW-6 @28'			7/15/2016	1515		1	x								Soil	x																X			X
																																x			x

Special Instructions:

Bill to Rose Slade at Energy Transfer. TPH Extended 35

Relinquished by: Nikki Green	Date 7/18/16	Time 12:00pm	Received by:	Date 7/18/16	Time 12:00
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Temp: 6.0°C IR ID:R-8
C/F:0
Corrected Temp: 6.0°C

Laboratory Comments:

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

Temperature Upon Receipt: 6 °C

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 07/18/2016 12:07:41 PM

Work Order #: 533510

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Mary Alexis Negron
Mary Negron
Date: 07/18/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 07/18/2016

Analytical Report 533724

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (West)

26-JUL-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

26-JUL-16

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

Reference: XENCO Report No(s): **533724**
Energy Transfer Boyd 4" Historical (West)
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) 533724. 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. 533724 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 533724

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (West)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NW AH-1 @5'	S	07-20-16 09:00	- 5 ft	533724-001
NW AH-1 @10'	S	07-20-16 09:30	- 10 ft	533724-002
NW AH-1 @15'	S	07-20-16 09:45	- 15 ft	533724-003
NC AH-1 @5'	S	07-20-16 10:00	- 5 ft	533724-004
NC AH-1 @10'	S	07-20-16 10:30	- 10 ft	533724-005
NC AH-1 @15'	S	07-20-16 10:45	- 15 ft	533724-006
NE AH-1 @5'	S	07-20-16 11:00	- 5 ft	533724-007
NE AH-1 @10'	S	07-20-16 11:45	- 10 ft	533724-008
NE AH-1 @15'	S	07-20-16 13:30	- 15 ft	533724-009

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Batch: LBA-998660 Inorganic Anions by EPA 300/300.1
Lab Sample ID 533724-009 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 533724-001, -002, -003, -004, -005, -006, -007, -008, -009.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 533724

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical (West)

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Thu Jul-21-16 10:50 am
Report Date: 26-JUL-16
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	533724-001		533724-002		533724-003		533724-004		533724-005		533724-006	
	Field Id:	NW AH-1 @5'		NW AH-1 @10'		NW AH-1 @15'		NC AH-1 @5'		NC AH-1 @10'		NC AH-1 @15'	
	Depth:	5 ft		10 ft		15 ft		5 ft		10 ft		15 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-20-16 09:00		Jul-20-16 09:30		Jul-20-16 09:45		Jul-20-16 10:00		Jul-20-16 10:30		Jul-20-16 10:45	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Jul-25-16 12:00		Jul-25-16 12:00		Jul-25-16 12:00		Jul-25-16 12:00		Jul-25-16 12:00		Jul-25-16 12:00	
	Analyzed:	Jul-25-16 17:16		Jul-25-16 17:24		Jul-26-16 11:47		Jul-25-16 17:55		Jul-25-16 18:03		Jul-25-16 18:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		712	10.0	284	10.0	271	10.0	881	10.0	355	10.0	155	10.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 533724

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical (West)

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Thu Jul-21-16 10:50 am
Report Date: 26-JUL-16
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	533724-007		533724-008		533724-009							
	Field Id:	NE AH-1 @5'		NE AH-1 @10'		NE AH-1 @15'							
	Depth:	5 ft		10 ft		15 ft							
	Matrix:	SOIL		SOIL		SOIL							
	Sampled:	Jul-20-16 11:00		Jul-20-16 11:45		Jul-20-16 13:30							
Inorganic Anions by EPA 300/300.1	***Extracted:***	Jul-25-16 12:00		Jul-25-16 12:00		Jul-25-16 12:00							
	Analyzed:	Jul-25-16 18:18		Jul-25-16 18:26		Jul-25-16 18:34							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Chloride		764	10.0	352	10.0	308	10.0						

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Form 3 - MS / MSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order # : 533724 **Project ID:**

Lab Batch ID: 998660 **QC- Sample ID:** 533522-081 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/25/2016 **Date Prepared:** 07/25/2016 **Analyst:** MNR

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	4820	12500	18600	110	12500	17700	103	5	80-120	20	

Lab Batch ID: 998660 **QC- Sample ID:** 533724-009 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/25/2016 **Date Prepared:** 07/25/2016 **Analyst:** MNR

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	308	250	526	87	250	516	83	2	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.

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

533724

Project Manager: Nikki Green

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature: Nikki Green

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

Project Name: Energy Transfer Boyd 4" Historical (west)

Project #:

Project Loc: Lea County, NM

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: / TOTAL: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	NW AH-1 @ 5'			7/20/2016	900		1	x								Soil											X				X
	NW AH-1 @ 10'			7/20/2016	930		1	x								Soil											X				x
	NW AH-1 @ 15'			7/20/2016	945		1	x								Soil											X				X
	NC AH-1 @ 5'			7/20/2016	1000		1	x								Soil											X				x
	NC AH-1 @ 10'			7/20/2016	1030		1	x								Soil											X				X
	NC AH-1 @ 15'			7/20/2016	1045		1	x								Soil											X				x
	NE AH-1 @ 5'			7/20/2016	1100		1	x								Soil											X				X
	NE AH-1 @ 10'			7/20/2016	1145		1	x								Soil											X				x
	NE AH-1 @ 15'			7/20/2016	1330		1	x								Soil											X				X

Special Instructions:

Bill to Rose Slade at Energy Transfer.

Relinquished by: Nikki Green	Date 7/21/16	Time 1050	Received by:	Date 7/21/16	Time 10:50
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Temp: 6.0° IR ID:R-8
C/F:0
Corrected Temp: 6.0 °C

Laboratory Comments:

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

Temperature Upon Receipt: 6.0 °C

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 07/21/2016 10:50:00 AM

Work Order #: 533724

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Mary Alexis Negron
Mary Negron
Date: 07/21/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 07/22/2016

Analytical Report 536493

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (West)

15-SEP-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

Table of Contents

15-SEP-16

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

Reference: XENCO Report No(s): **536493**
Energy Transfer Boyd 4" Historical (West)
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) 536493. 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. 536493 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 536493

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (West)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NE Wall @ 4'	S	09-08-16 12:05	- 4 ft	536493-001

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 536493

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical (West)

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Fri Sep-09-16 11:45 am
Report Date: 15-SEP-16
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	536493-001					
	Field Id:	NE Wall @ 4'					
	Depth:	4 ft					
	Matrix:	SOIL					
	Sampled:	Sep-08-16 12:05					
Inorganic Anions by EPA 300/300.1	***Extracted:***	Sep-14-16 12:30					
	Analyzed:	Sep-14-16 17:09					
	Units/RL:	mg/kg	RL				
Chloride		423	10.0				

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

BS / BSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order #: 536493 **Project ID:**

Analyst: MNR **Date Prepared:** 09/14/2016 **Date Analyzed:** 09/14/2016

Lab Batch ID: 1001739 **Sample:** 713714-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	250	258	103	250	260	104	1	90-110	20	

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

Form 3 - MS / MSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order # : 536493 **Project ID:**

Lab Batch ID: 1001739 **QC- Sample ID:** 536557-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/14/2016 **Date Prepared:** 09/14/2016 **Analyst:** MNR

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	822	250	1090	107	250	1070	99	2	90-110	20	

Lab Batch ID: 1001739 **QC- Sample ID:** 536744-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/15/2016 **Date Prepared:** 09/14/2016 **Analyst:** MNR

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	11400	5000	16200	96	5000	16500	102	2	90-110	20	

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

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

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

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

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Nikki Green

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

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

Project Name: Energy Transfer Boyd 4" Historical (west)

Project #:

Project Loc: Lea County, NM

PO #:

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

(lab use only)
ORDER #: 536493

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge; GW=Groundwater S=Soil/Solid; NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TOTAL: TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	NE Wall @ 4'			9/8/2016	1205		1	x								Soil												x				x

Special Instructions:
Bill to Rose Slade at Energy Transfer.

Relinquished by:	Date	Time	Received by:	Date	Time
Matt Green	9-8-16	1145	Julian Martinez	9-9-16	11:45
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

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

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: **Temp:** **IR ID:R-8**
C/F: 0 1.9 °C
Corrected Temp: 1.9°C

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 09/09/2016 11:45:00 AM

Work Order #: 536493

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)?	1.9
#2 *Shipping container in good condition?	**N/A**
#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 (less than 1/4 inch bubble)?	**N/A**
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**N/A**
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

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

Analyst:

PH Device/Lot#:

Checklist completed by: Jessica Kramer
Jessica Kramer
Date: 09/09/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 09/09/2016

Analytical Report 538137

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (West)

11-OCT-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

11-OCT-16

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

Reference: XENCO Report No(s): **538137**
Energy Transfer Boyd 4" Historical (West)
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) 538137. 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. 538137 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 538137

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (West)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Confirmation Floor-1 @ 32'	S	10-05-16 08:35	- 32 ft	538137-001
Confirmation Floor-2 @ 28'	S	10-05-16 08:36	- 28 ft	538137-002
Confirmation Floor-3 @ 20'	S	10-05-16 08:52	- 20 ft	538137-003
Confirmation SW-1 @ 19'	S	10-05-16 08:58	- 19 ft	538137-004
Confirmation SW-2 @ 19'	S	10-05-16 09:01	- 19 ft	538137-005
Confirmation Floor-4 @ 20'	S	10-05-16 09:04	- 20 ft	538137-006
Confirmation Floor-5 @ 20'	S	10-05-16 09:06	- 20 ft	538137-007
Confirmation EW-1 @ 19'	S	10-05-16 09:08	- 19 ft	538137-008
Confirmation EW-2 @ 19'	S	10-05-16 09:11	- 19 ft	538137-009
Confirmation EW-3 @ 19'	S	10-05-16 09:14	- 19 ft	538137-010
Confirmation NW-1 @ 19'	S	10-05-16 09:18	- 19 ft	538137-011
Confirmation Floor-7 @ 20'	S	10-05-16 09:19	- 20 ft	538137-012
Confirmation Floor-6 @ 20'	S	10-05-16 09:21	- 20 ft	538137-013
Confirmation NW-2 @ 19'	S	10-05-16 09:24	- 19 ft	538137-014
Confirmation WW-1 @ 19'	S	10-05-16 09:27	- 19 ft	538137-015
Confirmation WW-2 @ 19'	S	10-05-16 09:34	- 19 ft	538137-016
Confirmation NW-3 @ 7.5'	S	10-05-16 09:45	- 7.5 ft	538137-017
Confirmation NW-4 @ 10'	S	10-05-16 09:46	- 10 ft	538137-018
Confirmation NW-5 @ 12'	S	10-05-16 09:48	- 12 ft	538137-019
Confirmation WW-3 @ 19'	S	10-05-16 09:55	- 19 ft	538137-020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-3001510 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 538137

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical (West)

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Wed Oct-05-16 01:56 pm
Report Date: 11-OCT-16
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	538137-001		538137-002		538137-003		538137-004		538137-005		538137-006	
	Field Id:	Confirmation Floor-1 @ 32'		Confirmation Floor-2 @ 28'		Confirmation Floor-3 @ 20'		Confirmation SW-1 @ 19'		Confirmation SW-2 @ 19'		Confirmation Floor-4 @ 20'	
	Depth:	32 ft		28 ft		20 ft		19 ft		19 ft		20 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-05-16 08:35		Oct-05-16 08:36		Oct-05-16 08:52		Oct-05-16 08:58		Oct-05-16 09:01		Oct-05-16 09:04	
BTEX by EPA 8021B	***Extracted:***	Oct-05-16 18:30		Oct-05-16 18:30		Oct-05-16 18:30		Oct-05-16 18:30		Oct-05-16 18:30		Oct-05-16 18:30	
	Analyzed:	Oct-06-16 16:03		Oct-06-16 16:03		Oct-06-16 16:03		Oct-06-16 16:03		Oct-06-16 16:03		Oct-06-16 16:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00150	ND	0.00149	ND	0.00149	ND	0.00149	ND	0.00150	ND	0.00150
Toluene		ND	0.00200	ND	0.00198	ND	0.00198	ND	0.00199	ND	0.00200	ND	0.00200
Ethylbenzene		ND	0.00200	ND	0.00198	ND	0.00198	ND	0.00199	ND	0.00200	ND	0.00200
m_p-Xylenes		ND	0.00200	ND	0.00198	ND	0.00198	ND	0.00199	ND	0.00200	ND	0.00200
o-Xylene		ND	0.00299	ND	0.00298	ND	0.00298	ND	0.00299	ND	0.00300	ND	0.00299
Total Xylenes		ND	0.00200	ND	0.00198	ND	0.00198	ND	0.00199	ND	0.00200	ND	0.00200
Total BTEX		ND	0.00150	ND	0.00149	ND	0.00149	ND	0.00149	ND	0.00150	ND	0.00150
Inorganic Anions by EPA 300/300.1	***Extracted:***	Oct-07-16 14:00		Oct-07-16 14:00		Oct-07-16 14:00		Oct-07-16 14:00		Oct-07-16 14:00		Oct-07-16 14:00	
	Analyzed:	Oct-07-16 18:16		Oct-07-16 18:23		Oct-07-16 18:30		Oct-07-16 18:52		Oct-07-16 19:13		Oct-07-16 19:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		13.3	5.00	ND	5.00	ND	5.00	679	5.00	10.6	5.00	21.8	5.00
TPH By SW8015B Mod	***Extracted:***	Oct-05-16 15:00		Oct-05-16 15:00		Oct-05-16 15:00		Oct-05-16 15:00		Oct-05-16 15:00		Oct-05-16 15:00	
	Analyzed:	Oct-05-16 17:58		Oct-05-16 19:31		Oct-05-16 19:56		Oct-05-16 20:20		Oct-05-16 20:45		Oct-05-16 21:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	14.9	ND	15.0	ND	15.0	ND	15.0	ND	15.0
C10-C28 Diesel Range Hydrocarbons		ND	15.0	ND	14.9	ND	15.0	ND	15.0	ND	15.0	ND	15.0
Total TPH		ND	15.0	ND	14.9	ND	15.0	ND	15.0	ND	15.0	ND	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 538137

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical (West)

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Wed Oct-05-16 01:56 pm
Report Date: 11-OCT-16
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	538137-007		538137-008		538137-009		538137-010		538137-011		538137-012	
	Field Id:	Confirmation Floor-5 @ 20'		Confirmation EW-1 @ 19'		Confirmation EW-2 @ 19'		Confirmation EW-3 @ 19'		Confirmation NW-1 @ 19'		Confirmation Floor-7 @ 20'	
	Depth:	20 ft		19 ft		19 ft		19 ft		19 ft		20 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-05-16 09:06		Oct-05-16 09:08		Oct-05-16 09:11		Oct-05-16 09:14		Oct-05-16 09:18		Oct-05-16 09:19	
BTEX by EPA 8021B	***Extracted:***	Oct-05-16 18:30		Oct-05-16 18:30		Oct-05-16 18:30		Oct-05-16 18:30		Oct-05-16 18:30		Oct-05-16 18:30	
	Analyzed:	Oct-06-16 16:03		Oct-06-16 16:03		Oct-06-16 16:03		Oct-06-16 16:03		Oct-06-16 16:03		Oct-06-16 16:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00149	ND	0.00149	ND	0.00150	ND	0.00150	ND	0.00149	ND	0.00150
Toluene		ND	0.00198	ND	0.00199	ND	0.00200	ND	0.00200	ND	0.00199	ND	0.00200
Ethylbenzene		ND	0.00198	ND	0.00199	ND	0.00200	ND	0.00200	ND	0.00199	ND	0.00200
m_p-Xylenes		ND	0.00198	ND	0.00199	ND	0.00200	ND	0.00200	ND	0.00199	ND	0.00200
o-Xylene		ND	0.00298	ND	0.00298	ND	0.00299	ND	0.00300	ND	0.00299	ND	0.00299
Total Xylenes		ND	0.00198	ND	0.00199	ND	0.00200	ND	0.00200	ND	0.00199	ND	0.00200
Total BTEX		ND	0.00149	ND	0.00149	ND	0.00150	ND	0.00150	ND	0.00149	ND	0.00150
Inorganic Anions by EPA 300/300.1	***Extracted:***	Oct-07-16 14:00		Oct-07-16 14:00		Oct-07-16 14:00		Oct-07-16 14:00		Oct-07-16 16:00		Oct-07-16 16:00	
	Analyzed:	Oct-07-16 19:27		Oct-07-16 19:34		Oct-07-16 19:41		Oct-07-16 19:48		Oct-07-16 20:30		Oct-07-16 20:51	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		134	5.00	808	5.00	383	5.00	671	5.00	124	5.00	ND	5.00
TPH By SW8015B Mod	***Extracted:***	Oct-05-16 15:00		Oct-05-16 15:00		Oct-05-16 15:00		Oct-05-16 15:00		Oct-05-16 15:00		Oct-05-16 15:00	
	Analyzed:	Oct-05-16 21:35		Oct-05-16 22:01		Oct-05-16 22:26		Oct-05-16 22:51		Oct-05-16 23:44		Oct-06-16 00:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0
C10-C28 Diesel Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0
Total TPH		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 538137

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical (West)

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Wed Oct-05-16 01:56 pm
Report Date: 11-OCT-16
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	538137-013		538137-014		538137-015		538137-016		538137-017		538137-018	
	Field Id:	Confirmation Floor-6 @ 20'		Confirmation NW-2 @ 19'		Confirmation WW-1 @ 19'		Confirmation WW-2 @ 19'		Confirmation NW-3 @ 7.5'		Confirmation NW-4 @ 10'	
	Depth:	20 ft		19 ft		19 ft		19 ft		7.5 ft		10 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-05-16 09:21		Oct-05-16 09:24		Oct-05-16 09:27		Oct-05-16 09:34		Oct-05-16 09:45		Oct-05-16 09:46	
BTEX by EPA 8021B	***Extracted:***	Oct-05-16 18:30		Oct-05-16 18:30		Oct-05-16 18:30		Oct-05-16 18:30		Oct-05-16 18:30		Oct-05-16 18:30	
	Analyzed:	Oct-06-16 16:03		Oct-06-16 16:03		Oct-06-16 16:03		Oct-06-16 16:03		Oct-06-16 16:03		Oct-06-16 16:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00149	ND	0.00149	ND	0.00149	ND	0.00150	ND	0.00150	ND	0.00149
Toluene		ND	0.00199	ND	0.00199	ND	0.00198	ND	0.00200	ND	0.00200	ND	0.00199
Ethylbenzene		ND	0.00199	ND	0.00199	ND	0.00198	ND	0.00200	ND	0.00200	ND	0.00199
m_p-Xylenes		ND	0.00199	ND	0.00199	ND	0.00198	ND	0.00200	ND	0.00200	ND	0.00199
o-Xylene		ND	0.00298	ND	0.00299	ND	0.00298	ND	0.00300	ND	0.00299	ND	0.00298
Total Xylenes		ND	0.00199	ND	0.00199	ND	0.00198	ND	0.00200	ND	0.00200	ND	0.00199
Total BTEX		ND	0.00149	ND	0.00149	ND	0.00149	ND	0.00150	ND	0.00150	ND	0.00149
Inorganic Anions by EPA 300/300.1	***Extracted:***	Oct-07-16 16:00		Oct-07-16 16:00		Oct-07-16 16:00		Oct-07-16 16:00		Oct-07-16 16:00		Oct-07-16 16:00	
	Analyzed:	Oct-07-16 20:58		Oct-07-16 21:06		Oct-07-16 21:13		Oct-07-16 21:34		Oct-07-16 21:41		Oct-07-16 21:48	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		11.3	5.00	263	5.00	86.0	5.00	272	5.00	16.8	5.00	21.1	5.00
TPH By SW8015B Mod	***Extracted:***	Oct-05-16 15:00		Oct-05-16 15:00		Oct-05-16 15:00		Oct-05-16 15:00		Oct-05-16 15:00		Oct-05-16 15:00	
	Analyzed:	Oct-06-16 00:35		Oct-06-16 01:00		Oct-06-16 01:26		Oct-06-16 01:53		Oct-06-16 02:18		Oct-06-16 02:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0
C10-C28 Diesel Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0
Total TPH		ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 538137

TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical (West)

Project Id:
Contact: Nikki Green
Project Location: Lea County, NM

Date Received in Lab: Wed Oct-05-16 01:56 pm
Report Date: 11-OCT-16
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	538137-019		538137-020					
	Field Id:	Confirmation NW-5 @ 12'		Confirmation WW-3 @ 19'					
	Depth:	12 ft		19 ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Oct-05-16 09:48		Oct-05-16 09:55					
BTEX by EPA 8021B	***Extracted:***	Oct-05-16 18:30		Oct-05-16 18:30					
	Analyzed:	Oct-06-16 16:03		Oct-06-16 16:03					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.00149	ND	0.00150				
Toluene		ND	0.00198	ND	0.00200				
Ethylbenzene		ND	0.00198	ND	0.00200				
m_p-Xylenes		ND	0.00198	ND	0.00200				
o-Xylene		ND	0.00298	ND	0.00299				
Total Xylenes		ND	0.00198	ND	0.00200				
Total BTEX		ND	0.00149	ND	0.00150				
Inorganic Anions by EPA 300/300.1	***Extracted:***	Oct-07-16 16:00		Oct-07-16 16:00					
	Analyzed:	Oct-07-16 21:55		Oct-07-16 22:02					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		116	5.00	2670	25.0				
TPH By SW8015B Mod	***Extracted:***	Oct-05-16 15:00		Oct-05-16 15:00					
	Analyzed:	Oct-06-16 03:09		Oct-06-16 03:35					
	Units/RL:	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	14.9				
C10-C28 Diesel Range Hydrocarbons		ND	15.0	ND	14.9				
Total TPH		ND	15.0	ND	14.9				

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Orders : 538137, 538137 **Project ID:**

Lab Batch #: 3001470 **Sample:** 538137-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 17:58

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.9	108	70-130	
o-Terphenyl	59.5	50.0	119	70-135	

Lab Batch #: 3001470 **Sample:** 538137-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 19:31

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.6	102	70-130	
o-Terphenyl	56.4	49.8	113	70-135	

Lab Batch #: 3001470 **Sample:** 538137-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 19:56

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.7	108	70-130	
o-Terphenyl	59.7	49.9	120	70-135	

Lab Batch #: 3001470 **Sample:** 538137-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 20:20

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.7	109	70-130	
o-Terphenyl	59.7	49.9	120	70-135	

Lab Batch #: 3001470 **Sample:** 538137-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 20:45

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.8	108	70-130	
o-Terphenyl	58.7	49.9	118	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: Energy Transfer Boyd 4" Historical (West)

Work Orders : 538137, 538137 **Project ID:**

Lab Batch #: 3001470 **Sample:** 538137-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 21:11

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.9	109	70-130	
o-Terphenyl	59.1	50.0	118	70-135	

Lab Batch #: 3001470 **Sample:** 538137-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 21:35

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.9	108	70-130	
o-Terphenyl	58.5	50.0	117	70-135	

Lab Batch #: 3001470 **Sample:** 538137-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 22:01

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-130	
o-Terphenyl	56.5	50.0	113	70-135	

Lab Batch #: 3001470 **Sample:** 538137-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 22:26

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-130	
o-Terphenyl	56.2	50.0	112	70-135	

Lab Batch #: 3001470 **Sample:** 538137-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 22:51

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.7	108	70-130	
o-Terphenyl	59.3	49.9	119	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: Energy Transfer Boyd 4" Historical (West)

Work Orders : 538137, 538137 **Project ID:**

Lab Batch #: 3001470 **Sample:** 538137-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 23:44

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.8	103	70-130	
o-Terphenyl	56.5	49.9	113	70-135	

Lab Batch #: 3001470 **Sample:** 538137-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 00:10

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.8	104	70-130	
o-Terphenyl	57.1	49.9	114	70-135	

Lab Batch #: 3001470 **Sample:** 538137-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 00:35

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.8	105	70-130	
o-Terphenyl	57.3	49.9	115	70-135	

Lab Batch #: 3001470 **Sample:** 538137-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 01:00

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.9	105	70-130	
o-Terphenyl	57.0	50.0	114	70-135	

Lab Batch #: 3001470 **Sample:** 538137-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 01:26

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.7	107	70-130	
o-Terphenyl	58.9	49.9	118	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: Energy Transfer Boyd 4" Historical (West)

Work Orders : 538137, 538137 **Project ID:**

Lab Batch #: 3001470 **Sample:** 538137-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 01:53

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-130	
o-Terphenyl	56.9	50.0	114	70-135	

Lab Batch #: 3001470 **Sample:** 538137-017 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 02:18

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.8	105	70-130	
o-Terphenyl	57.3	49.9	115	70-135	

Lab Batch #: 3001470 **Sample:** 538137-018 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 02:43

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.9	104	70-130	
o-Terphenyl	56.2	50.0	112	70-135	

Lab Batch #: 3001470 **Sample:** 538137-019 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 03:09

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.8	104	70-130	
o-Terphenyl	56.4	49.9	113	70-135	

Lab Batch #: 3001470 **Sample:** 538137-020 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 03:35

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.6	106	70-130	
o-Terphenyl	57.6	49.8	116	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Orders : 538137, 538137 **Project ID:**

Lab Batch #: 3001510 **Sample:** 538137-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 3001510 **Sample:** 538137-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0358	0.0300	119	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	80-120	

Lab Batch #: 3001510 **Sample:** 538137-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 3001510 **Sample:** 538137-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 3001510 **Sample:** 538137-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0339	0.0300	113	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Orders : 538137, 538137 **Project ID:**

Lab Batch #: 3001510 **Sample:** 538137-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 3001510 **Sample:** 538137-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0319	0.0300	106	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 3001510 **Sample:** 538137-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0254	0.0300	85	80-120	

Lab Batch #: 3001510 **Sample:** 538137-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 3001510 **Sample:** 538137-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0340	0.0300	113	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Orders : 538137, 538137 **Project ID:**

Lab Batch #: 3001510 **Sample:** 538137-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0334	0.0300	111	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 3001510 **Sample:** 538137-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 3001510 **Sample:** 538137-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0346	0.0300	115	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 3001510 **Sample:** 538137-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

Lab Batch #: 3001510 **Sample:** 538137-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Orders : 538137, 538137 **Project ID:**

Lab Batch #: 3001510 **Sample:** 538137-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 3001510 **Sample:** 538137-017 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 3001510 **Sample:** 538137-018 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 3001510 **Sample:** 538137-019 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 3001510 **Sample:** 538137-020 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0327	0.0300	109	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	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: Energy Transfer Boyd 4" Historical (West)

Work Orders : 538137, 538137 **Project ID:**

Lab Batch #: 3001470 **Sample:** 714620-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/05/16 16:23

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-130	
o-Terphenyl	61.7	50.0	123	70-135	

Lab Batch #: 3001510 **Sample:** 714644-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0253	0.0300	84	80-120	

Lab Batch #: 3001470 **Sample:** 714620-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/05/16 16:55

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	100	125	70-130	
o-Terphenyl	63.6	50.0	127	70-135	

Lab Batch #: 3001510 **Sample:** 714644-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY 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	0.0289	0.0300	96	80-120	

Lab Batch #: 3001470 **Sample:** 714620-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/05/16 17:26

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	100	129	70-130	
o-Terphenyl	63.2	50.0	126	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: Energy Transfer Boyd 4" Historical (West)

Work Orders : 538137, 538137 **Project ID:**

Lab Batch #: 3001510 **Sample:** 714644-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 3001470 **Sample:** 538137-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 18:29

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	99.9	125	70-130	
o-Terphenyl	61.6	50.0	123	70-135	

Lab Batch #: 3001510 **Sample:** 538137-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0334	0.0300	111	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 3001470 **Sample:** 538137-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/16 18:59

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	99.8	128	70-130	
o-Terphenyl	63.1	49.9	126	70-135	

Lab Batch #: 3001510 **Sample:** 538137-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/06/16 16:03

SURROGATE RECOVERY STUDY

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

BS / BSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order #: 538137, 538137 **Project ID:**

Analyst: PJB **Date Prepared:** 10/05/2016 **Date Analyzed:** 10/06/2016

Lab Batch ID: 3001510 **Sample:** 714644-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00150	0.100	0.0807	81	0.100	0.0830	83	3	70-130	35	
Toluene	<0.00200	0.100	0.0844	84	0.100	0.0843	84	0	70-130	35	
Ethylbenzene	<0.00200	0.100	0.0870	87	0.100	0.0860	86	1	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.184	92	0.200	0.183	92	1	70-135	35	
o-Xylene	<0.00300	0.100	0.0848	85	0.100	0.0847	85	0	71-133	35	

Analyst: MNR **Date Prepared:** 10/07/2016 **Date Analyzed:** 10/07/2016

Lab Batch ID: 3001661 **Sample:** 714720-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	270	108	250	258	103	5	90-110	20	

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

BS / BSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order #: 538137, 538137 **Project ID:**

Analyst: MNR **Date Prepared:** 10/07/2016 **Date Analyzed:** 10/07/2016

Lab Batch ID: 3001666 **Sample:** 714722-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	274	110	250	274	110	0	90-110	20	

Analyst: ARM **Date Prepared:** 10/05/2016 **Date Analyzed:** 10/05/2016

Lab Batch ID: 3001470 **Sample:** 714620-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	971	97	1000	980	98	1	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1030	103	1000	1010	101	2	75-125	25	

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: Energy Transfer Boyd 4" Historical (West)

Work Order # : 538137 **Project ID:**

Lab Batch ID: 3001510 **QC- Sample ID:** 538137-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/06/2016 **Date Prepared:** 10/05/2016 **Analyst:** PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00149	0.0994	0.0776	78	0.0998	0.0785	79	1	70-130	35	
Toluene	<0.00199	0.0994	0.0774	78	0.0998	0.0783	78	1	70-130	35	
Ethylbenzene	<0.00199	0.0994	0.0797	80	0.0998	0.0798	80	0	71-129	35	
m_p-Xylenes	<0.00199	0.199	0.168	84	0.200	0.168	84	0	70-135	35	
o-Xylene	<0.00298	0.0994	0.0777	78	0.0998	0.0780	78	0	71-133	35	

Lab Batch ID: 3001661 **QC- Sample ID:** 538137-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/07/2016 **Date Prepared:** 10/07/2016 **Analyst:** MNR

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	<5.00	250	273	109	250	273	109	0	90-110	20	

Lab Batch ID: 3001661 **QC- Sample ID:** 538139-009 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/07/2016 **Date Prepared:** 10/07/2016 **Analyst:** MNR

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	97.3	250	344	99	250	346	99	1	90-110	20	

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

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

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

Form 3 - MS / MSD Recoveries

Project Name: Energy Transfer Boyd 4" Historical (West)

Work Order # : 538137 **Project ID:**

Lab Batch ID: 3001666 **QC- Sample ID:** 538137-011 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/07/2016 **Date Prepared:** 10/07/2016 **Analyst:** MNR

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	124	250	381	103	250	389	106	2	90-110	20	

Lab Batch ID: 3001470 **QC- Sample ID:** 538137-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/05/2016 **Date Prepared:** 10/05/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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	954	95	998	1040	104	9	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	999	1020	102	998	1010	101	1	75-125	25	

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

#1/2

Project Manager: Nikki Green

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature: Matthew Green

e-mail: ngreen@trcsolutions.com; rose.slade@energytransfer.com; rozanne11@windstream.net

Project Name: Energy Transfer Boyd 4" Historical (west)

Project #:

Project Loc: Lea County, NM

PO #:

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

3DAY

(lab use only)
ORDER #: 538137

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW=Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 / 8015M	TOTAL: TPH: 418.1 / 8015M	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	Confirmation Floor-1 @ 32'			10/5/2016	835		1	x								Soil	X									X			x				x
	Confirmation Floor-2 @ 28'			10/5/2016	846		1	x								Soil	X									X			x				
	Confirmation Floor-3 @ 20'			10/5/2016	852		1	x								Soil	X									X			x				
	Confirmation SW-1 @ 19'			10/5/2016	858		1	x								Soil	X									X			x				
	Confirmation SW-2 @ 19'			10/5/2016	901		1	x								Soil	X									X			x				
	Confirmation Floor-4 @ 20'			10/5/2016	904		1	x								Soil	X									X			x				
	Confirmation Floor-5 @ 20'			10/5/2016	906		1	x								Soil	X									X			x				
	Confirmation EW-1 @ 19'			10/5/2016	908		1	x								Soil	X									X			x				
	Confirmation EW-2 @ 19'			10/5/2016	911		1	x								Soil	X									X			x				
	Confirmation EW-3 @ 19'			10/5/2016	914		1	x								Soil	X									X			x				
	Confirmation NW-1 @ 19'			10/5/2016	918		1	x								Soil	X									X			x				x

Special Instructions:

Bill to Rose Slade at Energy Transfer.

	Date	Time		Date	Time
Relinquished by: Matthew Green	10-5-16	1400	Received by: KRAMER	10.5.16	1356
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

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

Temperature Upon: Temp: 11.4 C IR ID:R-8 C/F: 0 Corrected Temp: 0

Final 1.000

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Nikki Green

Company Name: TRC Solutions, Inc

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature: Matthew Green

e-mail: ngreen@trcsolutions.com; rose.slade@energytransfer.com; rozanne11@windstream.net

Project Name: Energy Transfer Boyd 4" Historical (west)

Project #:

Project Loc: Lea County, NM

PO #:

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

3 DAY

(lab use only)
ORDER #: 530137

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B 8030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	Confirmation Floor-7 @ 20'			10/5/2016	919		1	x								Soil	X								X			x				x
	Confirmation Floor-6 @ 20'			10/5/2016	921		1	x								Soil	X								X			x				x
	Confirmation NW-2 @ 19'			10/5/2016	924		1	x								Soil	X								X			x				x
	Confirmation WW-1 @ 19'			10/5/2016	927		1	x								Soil	X								X			x				x
	Confirmation WW-2 @ 19'			10/5/2016	934		1	x								Soil	X								X			x				x
	Confirmation NW-3 @ 7.5'			10/5/2016	945		1	x								Soil	X								X			x				x
	Confirmation NW-4 @ 10'			10/5/2016	946		1	x								Soil	X								X			x				x
	Confirmation NW-5 @ 12'			10/5/2016	948		1	x								Soil	X								X			x				x
	Confirmation WW-3 @ 19'			10/5/2016	955		1	x								Soil	X								X			x				x

Special Instructions:

Bill to Rose Slade at Energy Transfer.

Relinquished by:	Date	Time	Received by:	Date	Time
Matthew Green	10-5-16	1400	J Kramer	10.5.16	1556
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

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

Temperature Upon: Temp: IR ID:R-8 C/F: 0 1.4°C Corrected Temp: 0

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 10/05/2016 01:56:00 PM

Work Order #: 538137

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)?	11.4
#2 *Shipping container in good condition?	**N/A**
#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 (less than 1/4 inch bubble)?	**N/A**
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**N/A**
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

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

Analyst:

PH Device/Lot#:

Checklist completed by: Jessica Kramer
Jessica Kramer
Date: 10/05/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 10/05/2016

Photographic Documentation

Client: ETC Field Services, LLC
Project Name: Boyd 4 Inch Historical West

Prepared by: TRC Environmental Corp.
Location: Lea County, NM

Photograph No. 1 **Date:** **March 17, 2016** **Description:** **Looking southeast View of excavation following previous contractor field activities.**	
Photograph No. 2 **Date:** **April 6, 2016** **Description:** **Looking northwest View of initial delineation activities.**	

Photographic Documentation

Client: ETC Field Services, LLC **Prepared by:** TRC Environmental Corp.
Project Name: Boyd 4 Inch Historical West **Location:** Lea County, NM

Photograph No. 3 **Date:** **September 2, 2016** **Description:** **Looking north** **View of excavated area.**	
Photograph No. 4 **Date:** **September 2, 2016** **Description:** **Looking northwest** **View of excavated area.**	

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

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED
By JKeyes at 12:18 pm, May 12, 2016

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: E.T.C. Field Services	Contact: Rose Slade
Address: P.O. Box 1226 Jal, NM 88252	Telephone No.: 210-403-6525 or 432.940.5147
Facility Name: Boyd 4 Inch (Historical) West	Facility Type: Natural Gas Gathering

Surface Owner: Irwin Boyd	Mineral Owner: Federal	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
"P"	23	22 S	37 E					Lea

Latitude: N32.372074° **Longitude:** W103.127151°

NATURE OF RELEASE

Type of Release: Crude oil, Produced water, & Natural Gas	Volume of Release: Unknown	Volume Recovered: Unknown
Source of Release: 4 inch steel pipeline	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery Unknown
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* A release occurred on the 4" inch lateral pipeline and the release is historical.

Describe Area Affected and Cleanup Action Taken.* From September 18, 2012 through December 11, 2013, a previous contractor excavated approximately 587 cubic yards (cy) of impacted soil from the area of impact. Impacted soil was transported to Sundance Services, Inc., in Eunice, NM. The area excavated by the previous contractor was left exposed and is referred to as, the existing remediation project. On January 29, 2016, six (6) preliminary soil status samples were collected from the existing excavation to determine the current levels of impact at the Release Site. Based on the field observations, it was determined the analytical results from soil samples collected on January 219, 2016 were likely not an accurate representation of the remaining soil impact at the Release Site.

On March 8, 2016, a hand auger was utilized to collect additional soil samples for laboratory analysis. In addition, three (3) surface soil samples were collected from near or on the caliche well pad located immediately south of the Release Site. Based on the analytical results of soil samples collected on March 8, 2016, ETC conducted a soil investigation activities designed to vertically and horizontally delineate the Release Site.:

After completion of the soil investigation, a meeting was scheduled with the NMOCD Hobbs District Office and the property landowner. It was agreed the Release Site will be excavated to 20' bgs and the impacted soil will be transported offsite to a NMOCD approved disposal site. An appropriate number of soil samples will be collected and analyzed for concentrations of BTEX, TPH and Chloride. On completion of the remediation activities, ETC will request NMOCD permission to backfill the excavation and a Remediation Summary and Site Closure Request will be submitted to the NMOCD. The site will be restored to its proper vegetative state when completed.

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 NMOCD:	
Title: Senior Environmental Specialist	Approval Date: 05/12/2016	Expiration Date: 07/12/2016
E-mail Address: rose.slade@energytransfer.com	Conditions of Approval: Discrete samples only ~~Delineate and remediate~~ per NMOCD guidelines	Attached ☐ 1RP 4277 ~~nJXK1613344072~~ pJXK1613344207

Date:5/11/2016 Phone: 210.403.6525		