REMEDIATION SUMMARY, RISK-BASED SOIL STRATEGY PROPOSAL, AND SITE CLOSURE REQUEST

ETC FIELD SERVICES, LLC
Boyd 4-Inch Historical East
Lea County, New Mexico
UNIT LTR "P", Section 23, Township 22 South, Range 37 East
Latitude 32.372074° North, Longitude 103.127151° West
NMOCD Reference # 1RP-4278

Prepared For:

ETC Field Services, LLC
800 E. Sonterra Suite #2
San Antonio, Texas 78258

Prepared By:

TRC Environmental Corporation
2057 Commerce
Midland, Texas 79703

February 2017

Nikki Green
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Senior Project Manager

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1.0 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 Proposed Risk-Based Soil Strategy for the Release Site known as Boyd 4-Inch Historical East. 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 32.372074º North and 103.127151º West. Please reference Figure 1 for the Site Location Map and Figure 3 for the Site Details and Confirmation Soil Sample Locations. The Release Notification and Corrective Action (Form C-141) is provided as Appendix E.

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). However, on May 12, 2016, ETC filed a C-141 NMOCD Form documenting the release. At this time, information as to the volume and date of the release is not available. General photographs of the site are provided as Appendix C.

2.0 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 indicated hydrocarbon impact existed at approximately twenty (20) feet bgs. Based on the NMOCD site classification system, twenty (20) points was assigned to the Boyd 4-Inch Historical East 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 was 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 was assigned to the subject area ranking as a result of this criterion.

The NMOCD guidelines indicate the Boyd 4-Inch Historical East 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)

3.0 SUMMARY OF RECENT FIELD ACTIVITIES

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

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 west excavation to determine the current levels of impact at the Release Site. The soil samples were submitted to Xenco Laboratories in Midland, Texas for determination of concentrations of BTEX using Method SW 846-8021B, TPH using Method SW 846-8015M, and chloride using Method E-300.1. The analytical results indicated benzene and BTEX concentrations were less than the applicable laboratory Method Detection Limit (MDL) and NMOCD regulatory guidelines. All TPH concentrations were less than the laboratory MDL, with the exception of soil samples SSW-2 @ 3' and NSW-2 @ 2.5', which exhibited TPH concentrations of 469 mg/Kg and 151 mg/Kg, respectively. Chloride concentrations ranged from less than 2.00 mg/Kg for soil sample Floor-2 @ 4' to 24.4 mg/Kg for soil sample Floor-1 @ 10'. Please reference Figure 2 for site details and Appendix B for laboratory analytical reports.

Based on field observations, it was determined the analytical results from soil samples collected on January 29, 2016 were likely not an accurate representation of the remaining soil impact at the Release Site.

On March 8, 2016, TRC, on behalf of ETC, utilized a steel hand auger to collect additional soil samples for laboratory analysis. In the vicinity of the previously collected soil sample Floor-1 @ 10', a steel hand auger was used to collect soil samples Sample-1 BOE 2', Sample-1 BOE 8.5', and Sample-1 BOE 10', which were collected at approximately twelve (12) feet bgs, approximately eighteen and one-half (18.5) feet bgs, and approximately twenty (20) feet bgs, respectively.

In the vicinity of previously collected soil sample Floor-2 @ 4', a hand auger was used to collect soil samples Sample-2 BOE 2', Sample-2 BOE 4', and Sample-2 BOE 4.6', which were collected at approximately six (6) feet bgs, approximately eight (8) feet bgs, and approximately eight (8) feet, seven (7) inches (8.6') bgs, respectively.

On the south side of the existing west excavation, a hand auger was utilized in three (3) locations (Sample-3 through Sample-5) to collect soil samples from two (2) feet bgs, six (6) feet bgs, and ten (10) feet bgs. Please see Figure 2 for soil sample locations.

In addition to the soil sample locations described above, three (3) surface soil samples (Sample-6 Surface, Sample-7 Surface, and Sample 8 Surface) were collected from near or on the caliche well pad located immediately south of the Boyd 4-Inch Historical West Release Site.

The analytical results indicated soil samples (Sample-1 BOE 2', Sample-1 BOE 8.5', and Sample-1 BOE 10') exhibited benzene concentrations less than the applicable laboratory MDL and NMOCD regulatory guidelines. BTEX concentrations ranged from less than the laboratory MDL of 0.00299 mg/Kg for soil sample Sample-1 BOE 2' to 9.267 mg/Kg for soil sample

Sample-1 BOE 8.5'. TPH concentrations ranged from 15 mg/Kg for soil sample Sample-1 BOE 2' to 3,458 mg/Kg for soil sample Sample-1 BOE 8.5'. Chloride concentrations were less than the applicable laboratory MDL and NMOCD regulatory guidelines.

The analytical results indicated soil samples (Sample-2 BOE 2', Sample-2 BOE 4', and Sample-2 BOE 4.6') exhibited benzene concentrations less than the applicable laboratory MDL. BTEX concentrations ranged from 1.831 mg/Kg for soil sample Sample-2 BOE 2' to 8.532 mg/Kg for soil sample Sample-2 BOE 4'. TPH concentrations ranged from 1,710.5 mg/Kg for soil sample Sample-2 BOE 2' to 6,735 mg/Kg for soil sample Sample-2 BOE 4'. Chloride concentrations were less than the applicable laboratory MDL and NMOCD regulatory guidelines.

The analytical results indicated soil samples (Sample-3 2', Sample-3 6', and Sample 3-10') exhibited benzene and BTEX concentration less than the applicable laboratory MDL and NMOCD regulatory guidelines. TPH concentrations ranged from less than the laboratory MDL of 15 mg/Kg for soil sample Sample-3 2' to 27.3 mg/Kg for soil sample Sample-3 6'. Chloride concentration ranged from 616 mg/Kg for soil sample Sample-3 10' to 1,590 mg/Kg for soil sample Sample-3 2'.

The analytical results indicated soil samples (Sample-4 2', Sample-4 6', and Sample 4-10') exhibited benzene, BTEX, and TPH concentrations less than the applicable laboratory MDL, with the exception of soil sample Sample-4 10', which exhibited a TPH concentration of 28.1 mg/Kg. Chloride concentrations ranged from 22.7 mg/Kg for soil sample Sample-4 10' to 506 mg/Kg for soil sample Sample-4 2'.

The analytical results indicated soil samples (Sample-5 2', Sample-5 6', and Sample-5 10') exhibited benzene, BTEX, and TPH concentrations less than the applicable laboratory MDL. Chloride concentrations ranged from 157 mg/Kg for soil sample Sample-5 10' to 627 mg/Kg for soil sample Sample-5 2'.

The analytical results indicated soil samples (Sample-6 Surface, Sample-7 Surface, and Sample-8 Surface) exhibited TPH concentrations ranging from 1,340 mg/Kg for soil sample Sample-6 Surface to 11,017 mg/Kg for soil sample Sample-8 Surface. Chloride concentrations ranged from 22.7 mg/Kg for soil sample Sample-7 Surface to 1,400 mg/Kg for soil sample Sample-8 Surface.

On April 5, 2016, delineation of the impacted soil began at the site utilizing an excavator. Soil samples were periodically collected, field screened for concentrations of chloride, and select soil samples were submitted to the laboratory for analysis. Please reference Figure 2 for site details.

On April 5, 2016, multiple trenches were advanced adjacent to and within the existing excavation to investigate the vertical depth of impact at the Boyd 4-Inch Historical West Release Site. Four (4) preliminary soil status samples (Sample-1 @ 21', T-SSW-1 @ 6', T-NSW-1 @ 7', and T-WSW-1 @ 11') were collected at approximately twenty-one (21) feet bgs, approximately six (6) feet bgs, approximately seven (7) feet bgs, and approximately eleven (11) feet bgs, respectively. The soil samples were submitted to Xenco Laboratories in Midland, Texas for determination of concentrations of BTEX using Method SW 846-8021B, TPH using Method SW 846-8015M, and chloride using Method E-300.1. The analytical results indicated all benzene and BTEX concentrations were less than the applicable laboratory MDL and NMOCD regulatory guidelines. All TPH concentrations were less than the laboratory MDL, with the exception of soil

sample T-WSW-1 @ 11', which exhibited a TPH concentration of 51.7 mg/Kg. Chloride concentrations ranged from 3.65 mg/Kg for soil sample T-NSW-1 @ 7' to 35.6 mg/Kg for soil sample T-WSW-1 @ 11'.

In addition, two (2) preliminary soil status samples (Sample-2 @ 20' and Sample-10 @ 2.5') were collected from multiple trenches within the existing excavation, to investigate the vertical depth of impact at the Boyd 4-Inch Historical East Release Site. Soil samples Sample-2 @ 20' and Sample-10 @ 2.5' were collected at approximately twenty (20) feet bgs and two and one half (2.5) feet bgs, respectively. The analytical results indicated benzene and BTEX concentrations were less than the applicable laboratory MDL, with the exception of soil sample Sample-2 @ 20', which exhibited a benzene concentration of 0.0264 mg/kg and a BTEX concentration of 0.5736 mg/Kg. All TPH concentrations were less than the laboratory MDL, with the exception of soil sample Sample-2 @ 20', which exhibited a TPH concentration of 2,390.1 mg/Kg. Chloride concentrations for soil samples Sample-2 @ 20' and Sample-10 @ 2.5' were 32.3 mg/Kg and 40.9 mg/Kg, respectively.

Based on the analytical results of the investigation trench advanced on April 5, 2016, vertical delineation of the Release Site could not be achieved using an excavator.

On April 6, 2016, delineation of the Boyd 4-Inch Historical East Release Site continued. Soil sample T-SSW-2 @ 7' represented delineation activities conducted in the vicinity of the southwest sidewall of the existing west excavation. The soil sample was collected approximately seven (7) feet bgs.

Vertical delineation activities conducted in the vicinity of the southeast sidewall of the existing west excavation were represented by soil samples T-ESW-1 @ 5', T-ESW-1 @ 10', and T-ESW-1 @ 16' and horizontal delineation activities were represented by soil samples T-ESW-2 @ 4', T-ESW-3 @ 4', and T-ESW-4 @ 4'. Soil samples collected during vertical delineation activities were collected at approximately five (5) feet bgs, ten (10) feet bgs, and sixteen (16) feet bgs, respectively. Soil samples collected during horizontal delineation activities were collected at approximately four (4) feet bgs.

Vertical and horizontal delineation activities conducted in the vicinity of the northeast sidewall of the existing excavation were represented by soil samples T-NSW-2 @ 16', T-NSW-3 @ 4'. Soil samples were collected at approximately sixteen (16) feet bgs and four (4) feet bgs, respectively.

The analytical results indicated soil samples T-SSW-2 @ 7', T-ESW-1 @ 5', T-ESW-1 @ 10', T-ESW-1 @ 16', T-NSW-2 @ 16', T-NSW-3 @ 4', and T-ESW-2 @ 4' exhibited benzene, BTEX, and TPH concentrations less than the applicable laboratory MDL and NMOCD regulatory guidelines, with the exception of T-ESW-1 @ 10', which exhibited a TPH concentration of 58.8 mg/Kg. Chloride concentrations for soil samples T-ESW-1 @ 16', T-ESW-1 @ 10', and T-NSW-3 @ 4' were 14.1 mg/Kg, 168 mg/Kg, and 246 mg/Kg, respectively, and below NMOCD regulatory guidelines. Chloride concentrations for soil samples T-ESW-1 @ 5', T-NSW-2 @ 16', T-ESW-2 @ 4', T-ESW-3 @ 4', and T-ESW-4 @ 4' ranged from 304 mg/Kg for soil samples T-ESW-2 @ 4' to 1,440 mg/Kg for soil sample T-NSW-2 @ 16'.

Around May 12, 2016, ETC opted to remediate the 4-Inch Boyd Historical Release Site as two (2) distinct releases. On May 12, 2016, ETC Field Services filed a NMOCD form C-141 for the Boyd 4-Inch Historical West Release (1RP-4277) and the Boyd 4-Inch Historical East Release (1RP-4278). Please reference the "Boyd 4-Inch Historical West Remediation Summary and Site Closure Request" for additional remediation details.

On June 27, 2016, during excavation activities at the Boyd 4-Inch Historical West Release Site, fifteen (15) preliminary soil status samples were collected. The southeast sidewall of the Boyd 4-Inch Historical West Release Site correlated with the northwest sidewall of the Boyd 4-Inch Historical East Release Site and was represented by soil samples West Excavation ESW-1 @ 19' and West Excavation ESW-4 @ 19'. The laboratory analytical results for soil samples West Excavation ESW-1 @ 19' and West Excavation ESW-4 @ 19' indicated TPH concentrations were less than applicable laboratory MDL and NMOCD regulatory guidelines. Chloride concentrations for soil sample West Excavation ESW-1 @ 19' and West Excavation ESW-4 @ 19' were 1,600 mg/Kg and 156 mg/Kg, respectively.

On September 8, 2016, one (1) soil boring (SB-1) was advanced at the Boyd 4-Inch Historical East Release Site. Please reference Figure 3 for the location of the soil boring and Figure SB-1 for the soil boring log. The soil boring was advanced to approximately thirty three (33) feet bgs. Soil samples were collected at five (5) foot drilling intervals and field screened using a Photo-Ionization Detector (PID) and chloride field test kit. Selected soils samples were submitted to the laboratory for determination of TPH and/or chloride concentrations. Soil samples collected at ten (10) feet bgs, fifteen (15) feet bgs, and twenty (20) feet bgs were submitted to the laboratory for analysis. The analytical results indicated TPH concentrations for soil samples SB-1 @ 10' and SB-1 @ 15' were 37.9 mg/Kg and less than the applicable laboratory MDL, respectively, and below NMOCD regulatory guidelines. Chloride concentrations for soil samples SB-1 @ 15' and SB-1 @ 20' were 293 mg/Kg and 129 mg/Kg, respectively. Based on the analytical results, vertical delineation of chloride in soil boring SB-1 was achieved at approximately twenty (20) feet bgs.

On October 5, 2015, representatives of TRC and an environmental contractor retained by the landowner, collected and split confirmation soil samples from the Boyd 4-Inch Historical West Release Site. Twenty five (25) confirmation soil samples were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The southeast wall of the Boyd 4-Inch Historical West Release Site correlates with the northwest wall of the Boyd 4-Inch Historical East Release Site and were represented by soil samples Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', and Confirmation EW-3 @ 19'. The laboratory results indicated benzene, BTEX, and TPH concentrations were less than the applicable laboratory MDL and NMOCD regulatory guidelines. Chloride concentrations for soil samples Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', and Confirmation EW-3 @ 19' ranged from 383 mg/Kg for soil samples Confirmation EW-2 @ 19' to 808 mg/Kg for soil samples Confirmation EW-1 @ 19'.

On October 20, 2016, representatives of ETC (formerly SUGS and Regency) and TRC met with a NMOCD representative and submitted the "Boyd 4-Inch Historical East Release Site Proposed Remediation Workplan" (Workplan) for NMOCD consideration and approval. The Workplan summarized remedial activities to date and detailed a closure strategy designed to progress the Release Site toward an NMOCD approved closure status. On October 24, 2016, ETC received written (email) NMOCD approval to proceed with the activities outlined in the Workplan.

On October 21, 2016, representatives of ETC and TRC met with a NMOCD representative at the Boyd 4-Inch Historical West Release Site and discussed the "Boyd 4-Inch Historical West Release Site Remediation Summary and Site Closure Request" (Site Closure Request). The Site Closure Request summarized remedial activities to date and requested NMOCD approval to backfill the excavated area and closure status. On October 24, 2016, ETC received written (email) NMOCD approval to backfill the excavation to receive NMOCD closure status. Please reference the email correspondence approving backfill activities in Appendix A.

On November 1, 2016, TRC commenced excavation activities from the east wall of the Boyd 4-Inch Historical Release Site to the east and south. Chloride field screening was utilized to guide excavation activities. Excavated soil was stockpiled to the south of the excavation, pending final disposition of the soil.

On November 2, 2016, one (1) soil sample (Baseline-1 @ 20') was collected to confirm chloride field screens results. The laboratory analytical results indicated the chloride concentrations was 915 mg/Kg.

On November 16, 2016, TRC began transporting the excavated material to Sundance Services, Inc. (Sundance) concurrent with excavation activities. To date, approximately 13,300 cubic yards of excavated soil has been transported to Sundance. The Sundance Disposal Manifest are provided as Appendix D (included on the provided disc).

On November 29, 2016, five (5) soil samples (Floor-1 @ 20', Floor-2 @ 20', Eastwall-1 @ 20', Eastwall-2 @ 20', Northwall-1 @ 19') were collected from the floor and sidewalls of the excavated area. The soil samples were submitted to the laboratory and analyzed for concentrations of chloride using EPA Method E 300.0. The analytical results indicated chloride concentrations ranged from 218 mg/Kg for soil sample Floor-2 @ 20' to 444 mg/Kg for soil sample Eastwall-2 @ 20'. A review of laboratory analytical results indicated additional excavation activities were necessary toward the east. Table 1 summarizes the Concentrations of Benzene, BTEX, TPH, and Chlorides in Soil. Please reference Figure 3 for soil samples locations. Analytical reports are provided as Appendix B.

On December 6, 2016, following additional excavation activities to the south, two (2) soil samples (South Wall-1 @ 19' and Floor-3 @ 20') were collected from the floor and side wall of the excavated area and submitted to the laboratory. The analytical results indicated TPH concentrations for soil samples South Wall-1 @ 19' and Floor-3 @ 20' were less than laboratory MDL of 15.0 mg/Kg and 7,620 mg/Kg, respectively. In addition, analytical results indicated chloride concentrations were 519 mg/Kg and 218 mg/Kg, respectively.

On December 13, 2016, following additional excavation activities in the area represented by soil samples Floor-3 @ 20', one (1) soil sample (Floor-3a @ 30') was collected and submitted to the laboratory. The laboratory analytical results indicated TPH and chloride concentrations for soil sample Floor-3a @ 30' were 1,406.1 mg/Kg and 157 mg/Kg, respectively.

On December 30, 2016, an additional soil sample (Floor-3b @ 30') was collected from the area represented by soil sample Floor-3a @ 30' and submitted to the laboratory for TPH analysis. Laboratory analytical results indicated the TPH concentration was 2,080 mg/Kg.

On December 28, 2016, following the four (4) foot advancement of a trench in the area represented by soil sample Floor-3b @ 30', one (1) soil sample (Floor-3c @ 34') was collected and submitted to the laboratory for TPH and BTEX analysis. A review of laboratory analytical results indicated benzene, ethylbenzene and xylene concentrations were below the laboratory MDL, with the exception of the toluene concentration of 0.00324 mg/Kg. TPH concentration for soil sample Floor-3c @ 34' was 2,283 mg/Kg.

On January 10, 2017, representatives of ETC and TRC met with the landowner at the Boyd 4-Inch Historical East Release Site to discuss site remediation activities. During the discussion, ETC requested and received landowner approval to submit a "Remediation Summary and Risk-Based Strategy Proposal" to the NMOCD for consideration.

On January 24, 2017, eleven (11) soil samples (Floor-1 @ 20', Northwall-1 @ 19', Eastwall-1a @ 19', Floor-2 @ 20', Eastwall-2a @ 20', Floor-4 @ 20', Floor-3c @ 34', Northwall-2 @ 29', Eastwall-3 @ 29', Southwall-1b @ 29', and Westwall-1 @ 29') were collected from the floor and sidewalls of the excavated area. The collected soil samples were submitted to the laboratory for TPH, BTEX, and/or chloride analysis. A review of laboratory analytical results indicated TPH and BTEX concentrations were below the laboratory MDL for all soil samples submitted for TPH and BTEX analysis. A review of laboratory analytical results indicated chloride concentrations ranged from 13.2 mg/Kg for soil sample Floor-4 @ 20' to 645 mg/Kg for soil sample Eastwall-3 @ 29'.

The excavated area measured approximately one hundred and sixty-seven (167) feet in width and approximately two hundred (200) feet in length, and ranged from approximately nineteen (19) to thirty (30) feet in depth.

4.0 PROPOSED SOIL CLOSURE STRATEGY AND SITE CLOSURE REQUEST

Based on verbal communications with the landowner, ETC proposes to leave in place a limited volume of hydrocarbon impacted soil at a depth of approximately thirty (30) feet bgs. On NMOCD concurrence with the landowner approval, the excavation will be backfilled with locally purchased, like material. On completion of backfilling activities, the excavated area will be contoured to fit the surrounding area and, at a time of the landowner's choosing, the disturbed area will be reseeded with vegetation approved by the landowner. On completion of the above referenced activities, ETC request the NMOCD grant site closure status to the Boyd 4-Inch Historical East Release Site

5.0 LIMITATIONS

TRC Environmental Corporation has prepared this Report on behalf of, and for the sole and exclusive use of ETC Field Services, LLC. This report was prepared by TRC Environmental Corporation for the benefit of ETC Field Services, LLC. The information contained in this Report may be released to third parties, who may use and rely upon the information at their discretion. However, any use of or reliance upon the information by a party other than specifically named above shall create no rights, obligations, or liabilities on the part of TRC Environmental Corporation with respect to any such party. The information shall not be used or relied upon by a party that does not agree to be bound by the above statement.

In preparing this Report, TRC Environmental Corporation may have obtained and relied upon information from multiple sources including the ETC Field Services, LLC, and other consultants working for the ETC Field Services, LLC, or other parties. Unless specifically stated, TRC Environmental Corporation has made no attempt to verify the accuracy or completeness of such information.

6.0 DISTRIBUTION:

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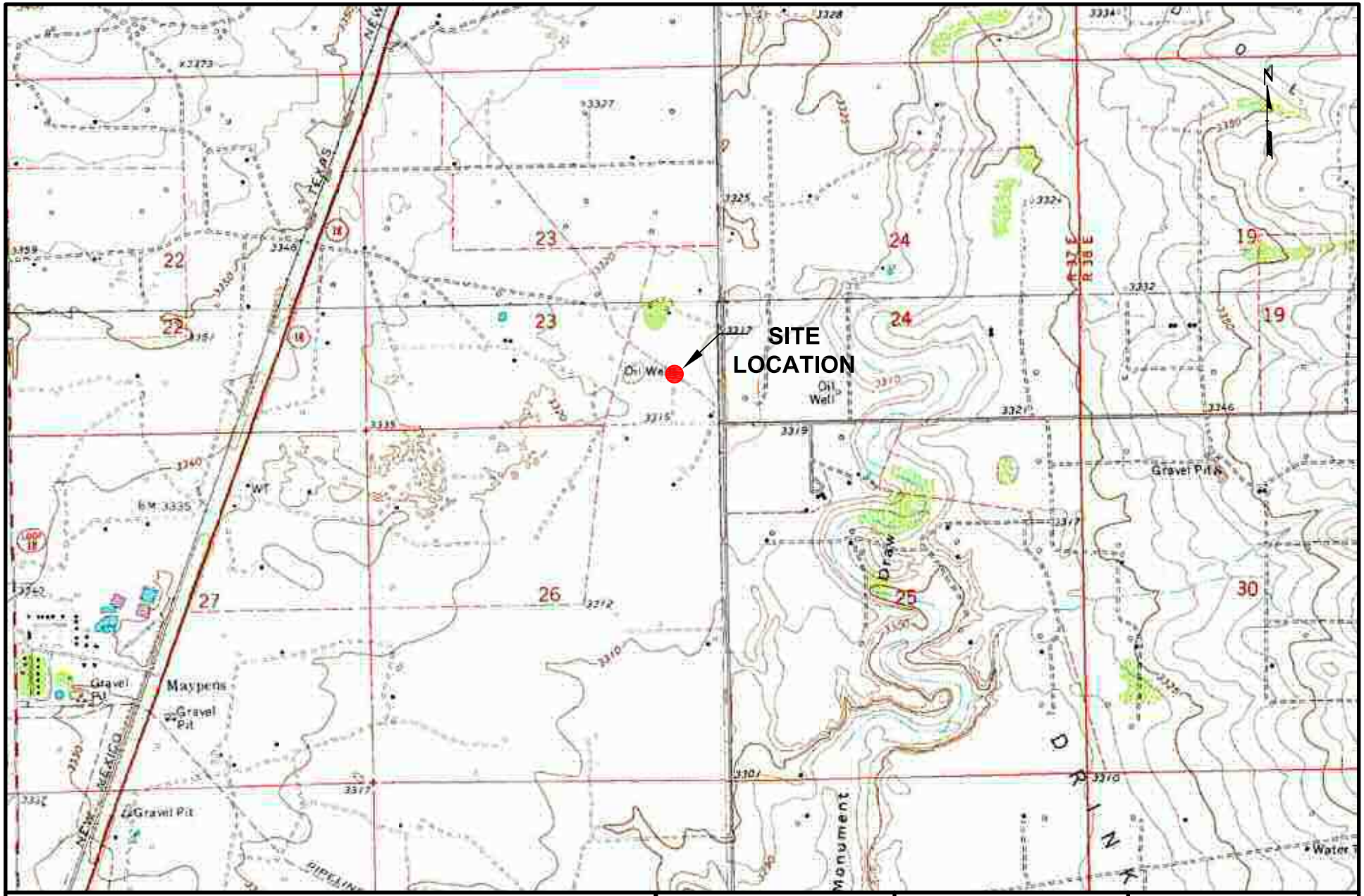
San Antonio, Texas 78258

Copy 3: TRC Environmental Corporation
2057 Commerce Street
Midland, Texas 79703

DRAWING NAME: H:\Nova\Project Files\ETC Field Services\Boyd 4 Inch Historical\CAD\ Site Location East.dwg --- PLOT DATE: February 06, 2017 - 12:11PM --- LAYOUT: Layout1



LEGEND:

2000 1000 0 1000 2000

Distance in Feet

Figure 1

Site Location Map
ETC Field Services, LLC
Boyd 4" Historical East
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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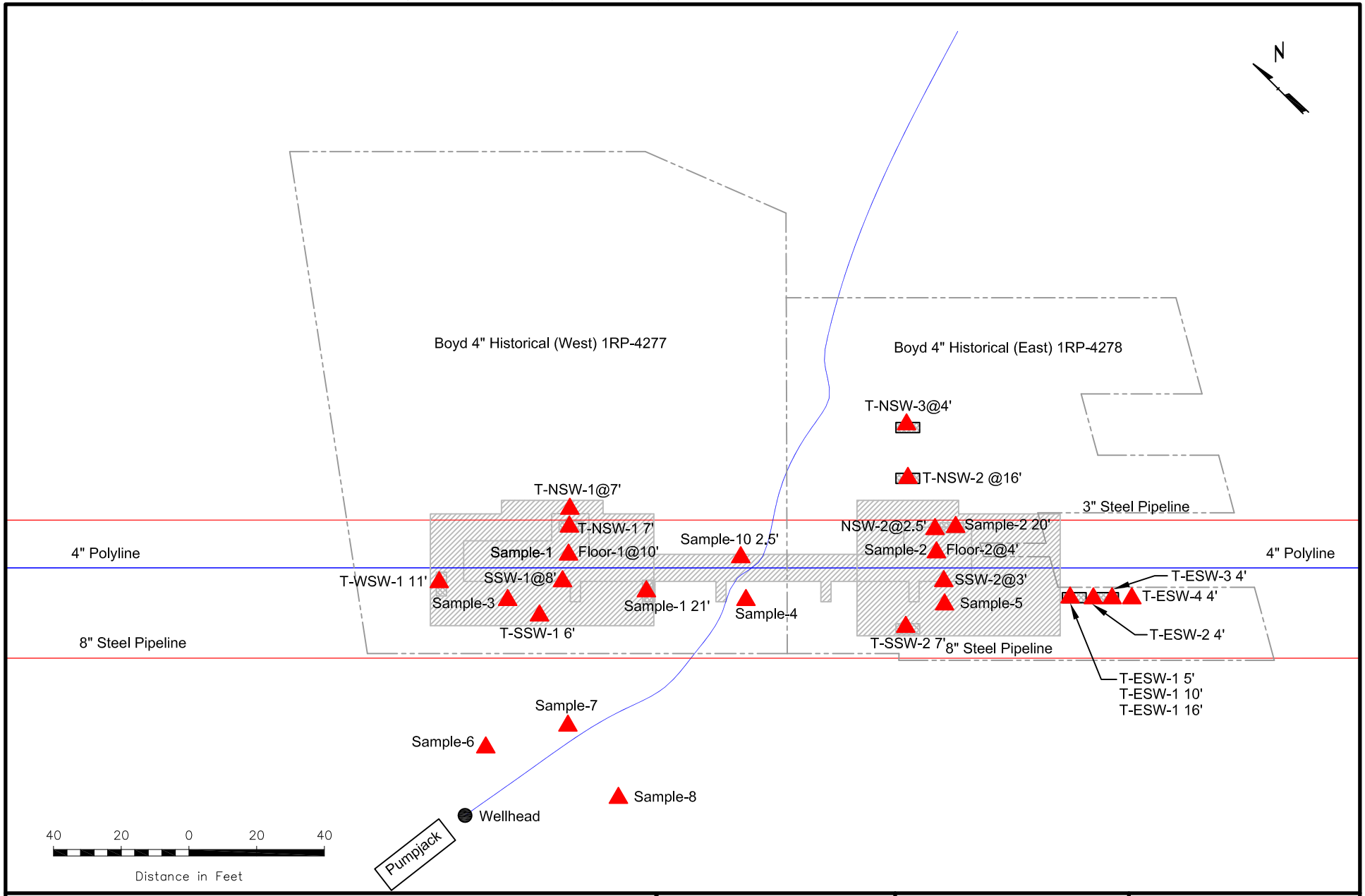
DRAWING NAME: H:\Nova\Project Files\ETC Field Services\Boyd 4 Inch Historical\CAD\ Pumpjack MapInitial with irp numbers.dwg --- PLOT DATE: February 06, 2017 - 12:20PM --- LAYOUT: Layout1



LEGEND:

- Steel Pipeline
- Polyline
- Soil Sample Location

Figure 2
Site Details and Initial
Soil Sample Locations
ETC Field Services, LLC
Boyd 4" Historical
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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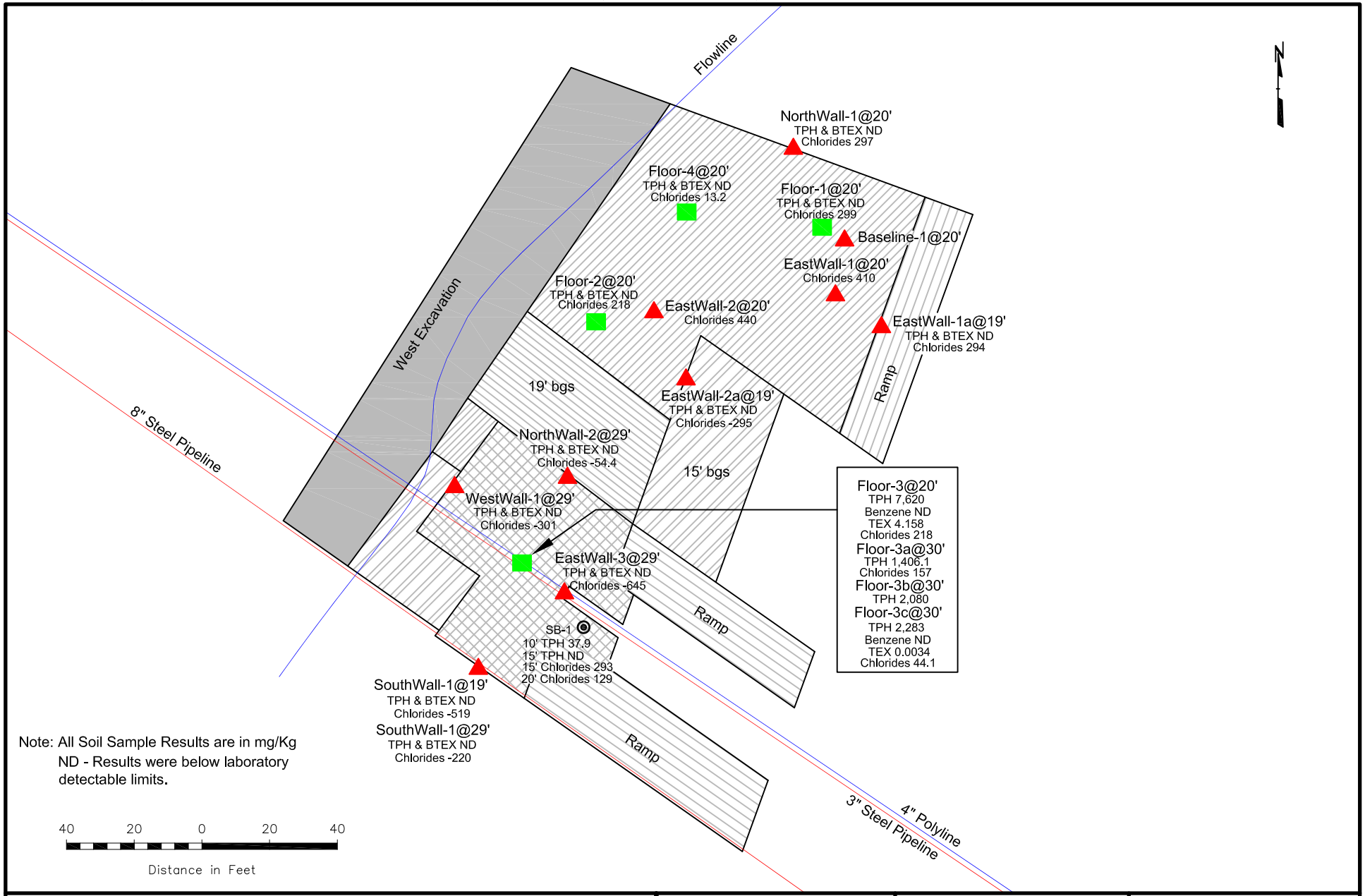
DRAWING NAME: H:\Nova\Project Files\ETC Field Services\Boyd 4 Inch Historical\CAD\ ETC Boyd East January.dwg --- PLOT DATE: February 06, 2017 - 12:18PM --- LAYOUT: Layout1



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

LEGEND:

- Steel Pipeline
- Polyline
- Sidewall Soil Sample Location
- Floor Soil Sample Location
- Soil Boring

Figure 3
Site Details and Confirmation Soil Sample Locations
ETC Field Services, LLC
Boyd 4" Historical (East)
Lea County, NM

Scale: 1" = 40'	
CAD By: TA	Checked By: NG
Draft: January 24, 2017	
Lat. N 32.372074° , Long. W 103.127151°	
SW1/4 SW1/4 Sec 23 T22S R37E	
TRC Proj. No.: 262420	

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Soil Boring Log SB-1

Depth (feet)	Soil Columns	PID Reading	Odor	Chloride Field Screen
0'				
5'			None	
			None	
10'		2.5	None	300
15'		2.0	None	336
20'		1.0	None	144
25'		1.5	None	120
30'		1.6	None	232
		1.6	None	172
	TD	1.7	None	232
35'				

Soil Description

0-4' 8" - Previously Excavated.

4' 8"-6' - White-Tan Silty Dry Sand.

6'-9' 6" - White Hard Dry Caliche.

9' 6"-14' - Dark Brown Silty Dry Sand.

14'-18' - Light Tanish White Sandy Dry Clay.

18'-25' - Light Tan Silty Dry Sand.

25'-28' - Light Tan Silty Dry Sand with Pebble. Sized Nodules.

28'-30' - Red Dry Coarse Sand with Fine Pebble Rocks.

30'-32' - White Slightly Damp Silty Sand/Caliche with Fine Pebble Sized Grains.

32'-32' 6" - White Hard Dry Caliche with Rounded Gravel.

32' 6"-33' - Light Tan very Moist Poorly Sorted Sand with Cobble Rocks.

Soil Boring Details

Date Drilled: 1-14-2016

Depth of Exploratory Well: 33 ft

Depth to Water: N/A

Completion Notes

1. Soil boring was plugged same day. Using Air Rotary drilling Technique.
2. 10 Cubic Feet of Bentonite.
3. (0.0) Indicates Samples submitted to Laboratory for analysis.

LEGEND:

Figure SB-1
Soil Boring Log Detail
ETC Field Services
Boyd 4" Historical (East)
Lea County, NM

Scale: None
CAD By: TA
Checked By: NG
Draft: September 21, 2016
Lat. N 32.371914° , Long. W 103.126890°
TRC Proj. No.: 242316

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TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

ETC FIELD SERVICES, LLC
BOYD 4 INCH HISTORICAL EAST 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-2 BOE 2'	03/08/16	In-Situ	<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	In-Situ	<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	In-Situ	<0.0150	0.307	0.881	2.85	1.40	5.438	376	2,420	46.8	**2,842.8**	<10.0
Sample-5 2'	03/08/16	In-Situ	<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	In-Situ	<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	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00300	<0.00300	<15.0	<15.0	<15.0	<15.0	157
*Sample-1 BOE 2'	03/08/16	1RP-4277	<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	1RP-4277	<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	1RP-4277	<0.0149	0.100	0.681	2.81	0.934	4.525	338	1,800	31.6	**2,169.6**	<9.88
*Sample-3 2'	03/08/16	1RP-4277	<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	1RP-4277	<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	1RP-4277	<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	1RP-4277	<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	1RP-4277	<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	1RP-4277	<0.00150	<0.00200	<0.00200	<0.000200	<0.00299	<0.00299	<15.0	28.1	<15.0	28.1	22.7
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-2 @ 20'	04/05/16	In-Situ	0.0264	0.0132	0.160	0.315	0.0590	0.5736	444	1,920	26.1	**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
*Sample-1 @ 21'	04/05/16	1RP-4277	<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	1RP-4277	<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	1RP-4277	<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	1RP-4277	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	<15.0	51.7	<15.0	51.7	35.6
T-SSW-2 @ 7'	04/06/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	99.0
T-ESW-1 @ 5'	04/06/16	In-Situ	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	**875**
T-ESW-1 @ 10'	04/06/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	58.8	<15.0	58.8	168
T-ESW-1 @ 16'	04/06/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	14.1
T-NSW-2 @ 16'	04/06/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00300	<0.00300	<15.0	<15.0	<15.0	<15.0	**1,440**

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

ETC FIELD SERVICES, LLC
BOYD 4 INCH HISTORICAL EAST 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
T-NSW-3 @ 4'	04/06/16	In-Situ	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	246
T-ESW-2 @ 4'	04/06/16	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00300	<0.00300	<15.0	<15.0	<15.0	<15.0	**304**
T-ESW-3 @ 4'	04/06/16	In-Situ	-	-	-	-	-	-	-	-	-	-	**321**
T-ESW-4 @ 4'	04/06/16	In-Situ	-	-	-	-	-	-	-	-	-	-	**361**
West Excavation ESW-4 @ 19'	06/27/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	156
*West Excavation Floor-1 @ 20'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	212
*West Excavation SSW-1 @ 19'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	179
*West Excavation NSW-1 @ 19'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	229
West Excavation ESW-1 @ 19'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**1,600**
*West Excavation Floor-2 @ 20'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	221
*West Excavation SSW-2 @ 19'	06/27/16	1RP-4277	-	-	-	-	-	-	25.7	583	<15.0	**608.7**	<10.0
*West Excavation NSW-2 @ 19'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	160
*West Excavation Floor-3 @ 20'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	153
*West Excavation SSW-3 @ 19'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**314**
*West Excavation NSW-3 @ 19'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	141
*West Excavation WSW-3 @ 19'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**806**
*West Excavation Floor-4 @ 20'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	204
*West Excavation WSW-4 @ 19'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**278**
*West Excavation NSW-4 @ 19'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**529**
*West Excavation Floor-5 @ 15'	06/27/16	1RP-4277	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**264**
SB-1 @ 10'	09/08/16	In-Situ	-	-	-	-	-	-	<15.0	37.9	<15.0	37.9	-
SB-1 @ 15'	09/08/16	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	**293**
SB-1 @ 20'	09/08/16	In-Situ	-	-	-	-	-	-	-	-	-	-	129
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 Floor-1 @ 32'	10/05/16	1RP-4277	<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	1RP-4277	<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	1RP-4277	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	<5.00
*Confirmation SW-1 @ 19'	10/05/16	1RP-4277	<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	1RP-4277	<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	1RP-4277	<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	1RP-4277	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	134
*Confirmation NW-1 @ 19'	10/05/16	1RP-4277	<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	1RP-4277	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<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 EAST 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 Floor-6 @ 20'	10/05/16	1RP-4277	<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	1RP-4277	<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	1RP-4277	<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	1RP-4277	<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	1RP-4277	<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	1RP-4277	<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	1RP-4277	<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	1RP-4277	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<14.9	<14.9	<14.9	<14.9	**2,670**
Baseline-1 @ 20'	11/02/16	Excavated	-	-	-	-	-	-	-	-	-	-	915
Floor-1 @ 20'	11/29/16	In-Situ	-	-	-	-	-	-	-	-	-	-	**299**
Floor-2 @ 20'	11/29/16	In-Situ	-	-	-	-	-	-	-	-	-	-	218
Eastwall-1 @ 20'	11/29/16	Excavated	-	-	-	-	-	-	-	-	-	-	**410**
Eastwall-2 @ 20'	11/29/16	Excavated	-	-	-	-	-	-	-	-	-	-	**444**
Northwall-1 @ 19'	11/29/16	In-Situ	-	-	-	-	-	-	-	-	-	-	**297**
South Wall-1 @ 19'	12/06/16	Excavated	<0.00150	<0.00200	<0.00200	<0.00200	<0.00300	<0.00300	<15.0	<15.0	<15.0	<15.0	**519**
Floor-3 @ 20'	12/06/16	Excavated	<0.00149	<0.00199	0.171	3.90	0.0867	4.158	1,580	6,040	-	**7,620.0**	22.0
Floor-3a @ 30'	12/13/16	Excavated	-	-	-	-	-	-	30.2	1,350	25.9	**1,406.1**	157
Floor-3b @ 30'	12/27/16	Excavated	-	-	-	-	-	-	<15.0	2,080	<15.0	**2,080**	-
Floor-3c @ 34'	12/28/16	In-Situ	<0.00150	0.00324	<0.00200	<0.00200	<0.00299	0.00324	33.0	2,250	<15.0	**2,283**	-
Floor-1 @ 20'	01/24/17	In-Situ	<0.00149	<0.00199	<0.00199	<0.00199	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	**-**
Northwall-1 @ 19'	01/24/17	In-Situ	<0.00152	<0.00202	<0.00202	<0.00202	<0.00304	<0.00304	<15.0	<15.0	<15.0	<15.0	**-**
Eastwall-1a @ 19'	01/24/17	In-Situ	<0.00152	<0.00203	<0.00203	<0.00203	<0.00304	<0.00304	<15.0	<15.0	<15.0	<15.0	**294**
Floor-2 @ 20'	01/24/17	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	**-**
Eastwall-2a @ 20'	01/24/17	In-Situ	<0.00148	<0.00198	<0.00198	<0.00198	<0.00296	<0.00296	<15.0	<15.0	<15.0	<15.0	**295**
Floor-4 @ 20'	01/24/17	In-Situ	<0.00152	<0.00202	<0.00202	<0.00202	<0.00303	<0.00303	<15.0	<15.0	<15.0	<15.0	13.2
Floor-3c @ 34'	01/24/17	In-Situ	-	-	-	-	-	-	-	-	-	-	44.1
Northwall-2 @ 29'	01/24/17	In-Situ	<0.00150	<0.00200	<0.00200	<0.00200	<0.00299	<0.00299	<15.0	<15.0	<15.0	<15.0	54.4
Eastwall-3 @ 29'	01/24/17	In-Situ	<0.00147	<0.00196	<0.00196	<0.00196	<0.00294	<0.00294	<15.0	<15.0	<15.0	<15.0	**645**
Southwall-1b @ 29'	01/24/17	In-Situ	<0.00149	<0.00198	<0.00198	<0.00198	<0.00298	<0.00298	<15.0	<15.0	<15.0	<15.0	220
Westwall-1 @ 29'	01/24/17	In-Situ	<0.00149	<0.00198	<0.00198	<0.00198	<0.00297	<0.00297	<15.0	<15.0	<15.0	<15.0	**301**

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

* = Soil samples are associated with the Boyd 4-Inch Historical West Release Site (1RP-4277), which were submitted under separate cover.

Stanley, Curtis D.

From: Green, Nikki
Sent: Tuesday, February 07, 2017 2:33 PM
To: Stanley, Curtis D.
Subject: FW: Boyd 4 Inch (Historical) West RP 4277

From: Slade, Rose [mailto:Rose.Slade@energytransfer.com]
Sent: Tuesday, February 07, 2017 2:23 PM
To: Green, Nikki <NGreen@trcsolutions.com>
Subject: RE: Boyd 4 Inch (Historical) West RP 4277

From: "Lynch, Kristen, EMNRD" <Kristen.Lynch@state.nm.us>
Date: October 24, 2016 at 9:38:59 AM CDT
To: "Slade, Rose" <Rose.Slade@energytransfer.com>
Subject: Boyd 4 Inch (Historical) West RP 4277

Good Morning Rose,

Based on documents provided, NMOCD gives permission to backfill the above mentioned site. The documents provided will be scanned into the NMOCD website. I will send you an email confirmation as soon as I know they have been uploaded.

Thank You,

Kristen D. Lynch
Environmental Specialist, District 1
Oil Conservation Division, EMNRD
(575) 393-6161 ext. 111
575-370-3180 (emergency-cell)

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: 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

TCLP: TOTAL: 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	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 300.0			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 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	TPH: 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 or 8260	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 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
528239

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
528239

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
528239

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
528239

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
528239

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
528239

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
528239

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
528239

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.

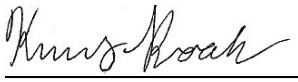
☐ R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;

☐ 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	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
	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: Nikki Green	Date 4/8/16	Time 3:23 PM	Received by: Nikki Negron	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 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 @ 1		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.

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 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	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 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	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: 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-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	TPH: TX 1005 TX 1006 8015B	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 536452

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (East)

13-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

13-SEP-16

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

Reference: XENCO Report No(s): **536452**
Energy Transfer Boyd 4" Historical (East)
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) 536452. 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. 536452 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 536452

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (East)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-1 @ 10'	S	09-08-16 09:35	- 10 ft	536452-001
SB-1 @15'	S	09-08-16 09:45	- 15 ft	536452-002
SB-1 @20'	S	09-08-16 10:15	- 20 ft	536452-003

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 536452

TRC Solutions, Inc, Midland, TX

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

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

Date Received in Lab: Thu Sep-08-16 04:00 pm
Report Date: 13-SEP-16
Project Manager: Kelsey Brooks

Analysis Requested											
	Lab Id:	536452-001		536452-002		536452-003					
	Field Id:	SB-1 @ 10'		SB-1 @15'		SB-1 @20'					
	Depth:	10 ft		15 ft		20 ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Sep-08-16 09:35		Sep-08-16 09:45		Sep-08-16 10:15					
Inorganic Anions by EPA 300/300.1	***Extracted:***			Sep-12-16 08:45		Sep-12-16 08:45					
	Analyzed:			Sep-12-16 14:32		Sep-12-16 12:40					
	Units/RL:			mg/kg	RL	mg/kg	RL				
Chloride				293	10.0	129	10.0				
TPH By SW8015B Mod	***Extracted:***	Sep-09-16 15:00		Sep-09-16 15:00							
	Analyzed:	Sep-09-16 21:46		Sep-09-16 22:11							
	Units/RL:	mg/kg	RL	mg/kg	RL						
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0						
C10-C28 Diesel Range Hydrocarbons		37.9	15.0	ND	15.0						
C28-C35 Oil Range Hydrocarbons		ND	15.0	ND	15.0						
Total TPH		37.9	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 (East)

Work Orders : 536452,

Project ID:

Lab Batch #: 1001528 **Sample:** 536452-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/09/16 21:46

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.9	99.8	96	70-130	
o-Terphenyl	52.6	49.9	105	70-135	

Lab Batch #: 1001528 **Sample:** 536452-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/09/16 22:11

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.6	99.7	99	70-130	
o-Terphenyl	53.3	49.9	107	70-135	

Lab Batch #: 1001528 **Sample:** 713615-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/09/16 18:27

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	55.6	50.0	111	70-135	

Lab Batch #: 1001528 **Sample:** 713615-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/09/16 17:37

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	61.6	50.0	123	70-135	

Lab Batch #: 1001528 **Sample:** 713615-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

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

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	100	121	70-130	
o-Terphenyl	60.1	50.0	120	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 (East)

Work Orders : 536452,

Project ID:

Lab Batch #: 1001528 **Sample:** 536364-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/09/16 19:16

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	57.0	49.9	114	70-135	

Lab Batch #: 1001528 **Sample:** 536364-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/09/16 19:42

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	57.6	50.0	115	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 (East)

Work Order #: 536452 **Project ID:**

Analyst: MNR **Date Prepared:** 09/12/2016 **Date Analyzed:** 09/12/2016

Lab Batch ID: 1001577 **Sample:** 713629-1-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	233	93	250	234	94	0	90-110	20	

Analyst: ARM **Date Prepared:** 09/09/2016 **Date Analyzed:** 09/09/2016

Lab Batch ID: 1001528 **Sample:** 713615-1-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	952	95	1000	895	90	6	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	978	98	1000	950	95	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 (East)

Work Order # : 536452 **Project ID:**

Lab Batch ID: 1001577 **QC- Sample ID:** 536452-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/12/2016 **Date Prepared:** 09/12/2016 **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	293	250	533	96	250	532	96	0	90-110	20	

Lab Batch ID: 1001528 **QC- Sample ID:** 536364-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/09/2016 **Date Prepared:** 09/09/2016 **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	993	99	1000	999	100	1	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	998	943	94	1000	973	97	3	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: Nikki Green e-mail: ngreen@trcsolutions.com; rose.slade@energytransfer.com

Project Name: Energy Transfer Boyd 4" Historical (east) (west)

Project #:

Project Loc: Lea County, NM

PO #:

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

(lab use only)
ORDER #: 536452

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	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
	SB-1 @ 10'			9/8/2016	935		1	x								Soil	X	X	X											X
	SB-1 @ 15'			9/8/2016	945		1	x								Soil	X	X	X									X		x
	SB-1 @ 20'			9/8/2016	1015		1	x								Soil												X		X

Special Instructions:

Bill to Rose Slade at Energy Transfer.

Relinquished by:	Date	Time	Received by:	Date	Time
Nikki Green	9/8/16	1600	[illegible] 1600		
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: 13.0 °C

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 09/08/2016 04:00:00 PM

Work Order #: 536452

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)?	**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

Analytical Report 539750

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (Eastt)

07-NOV-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

07-NOV-16

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

Reference: XENCO Report No(s): **539750**
Energy Transfer Boyd 4" Historical (Eastt)
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) 539750. 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. 539750 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 539750

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (Eastt)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Baseline-1 @20'	S	11-02-16 14:00	- 20 ft	539750-001

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 539750

TRC Solutions, Inc, Midland, TX

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

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

Date Received in Lab: Thu Nov-03-16 03:46 pm
Report Date: 07-NOV-16
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	539750-001					
	Field Id:	Baseline-1 @20'					
	Depth:	20 ft					
	Matrix:	SOIL					
	Sampled:	Nov-02-16 14:00					
Inorganic Anions by EPA 300/300.1	***Extracted:***	Nov-04-16 14:50					
	Analyzed:	Nov-04-16 15:16					
	Units/RL:	mg/kg RL					
Chloride		915 5.00					

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 (Eastt)

Work Order #: 539750 **Project ID:**

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

Lab Batch ID: 3003339 **Sample:** 715756-1-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	236	94	250	237	95	0	90-110	20	

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

Form 3 - MS Recoveries

Project Name: Energy Transfer Boyd 4" Historical (Ea

Work Order #: 539750

Lab Batch #: 3003339 **Project ID:**

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

QC- Sample ID: 539750-001 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	915	250	1170	102	90-110	

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

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 (East)

Project #:

Project Loc: Lea County, NM

PO #:

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

(lab use only) ORDER #: 539750

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	TCLP:	TOTAL:	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	Baseline-1 @20'			11/2/2016	1400		1	x								Soil												x				x

Special Instructions:

Bill to Rose Slade at Energy Transfer.

Relinquished by:	Date	Time	Received by:	Date	Time
Matt Green	11-3-16	1525		11/3/16	1525
Relinquished by:	Date	Time	Received by:	Date	Time
				11/3/16	1546
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		

Temp: IR ID:R-8
Temperature Up CF:+ 0.1 2.4
Corrected Temp: 2.5

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 11/03/2016 03:46:00 PM

Work Order #: 539750

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.5
#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: 11/03/2016

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

Analytical Report 541160

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (East)

08-DEC-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)

08-DEC-16

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

Reference: XENCO Report No(s): **541160**
Energy Transfer Boyd 4" Historical (East)
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) 541160. 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. 541160 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 541160

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (East)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Floor-1 @20'	S	11-29-16 14:00	- 20 ft	541160-001
Floor-2 @20'	S	11-29-16 14:05	- 20 ft	541160-002
Eastwall-1 @20'	S	11-29-16 14:10	- 20 ft	541160-003
Eastwall-2 @20'	S	11-29-16 14:15	- 20 ft	541160-004
Northwall-1 @19'	S	11-29-16 14:20	- 19 ft	541160-005

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 541160

TRC Solutions, Inc, Midland, TX

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

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

Date Received in Lab: Wed Nov-30-16 02:24 pm
Report Date: 08-DEC-16
Project Manager: Kelsey Brooks

Analysis Requested												
	Lab Id:	541160-001		541160-002		541160-003		541160-004		541160-005		
	Field Id:	Floor-1 @20'		Floor-2 @20'		Eastwall-1 @20'		Eastwall-2 @20'		Northwall-1 @19'		
	Depth:	20 ft		20 ft		20 ft		20 ft		19 ft		
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	Nov-29-16 14:00		Nov-29-16 14:05		Nov-29-16 14:10		Nov-29-16 14:15		Nov-29-16 14:20		
Inorganic Anions by EPA 300/300.1	***Extracted:***	Dec-02-16 13:00		Dec-02-16 13:00		Dec-07-16 13:00		Dec-07-16 13:00		Dec-02-16 13:00		
	Analyzed:	Dec-03-16 19:51		Dec-03-16 19:58		Dec-07-16 14:20		Dec-07-16 14:27		Dec-03-16 20:19		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		299	5.00	218	5.00	410	5.00	444	5.00	297	5.00	

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 (East)

Work Order #: 541160, 541160 **Project ID:**

Analyst: MNR **Date Prepared:** 12/02/2016 **Date Analyzed:** 12/02/2016

Lab Batch ID: 3004963 **Sample:** 716760-1-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	246	98	250	247	99	0	90-110	20	

Analyst: SLU **Date Prepared:** 12/07/2016 **Date Analyzed:** 12/07/2016

Lab Batch ID: 3005174 **Sample:** 716946-1-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	232	93	250	232	93	0	90-110	20	

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

Form 3 - MS / MSD Recoveries

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

Work Order # : 541160 **Project ID:**

Lab Batch ID: 3004963 **QC- Sample ID:** 541088-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/03/2016 **Date Prepared:** 12/02/2016 **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	1050	564	1620	101	564	1620	101	0	90-110	20	

Lab Batch ID: 3004963 **QC- Sample ID:** 541168-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/02/2016 **Date Prepared:** 12/02/2016 **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	475	250	700	90	250	704	92	1	90-110	20	

Lab Batch ID: 3005174 **QC- Sample ID:** 541536-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/07/2016 **Date Prepared:** 12/07/2016 **Analyst:** SLU

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	3510	1250	4600	87	1250	4710	96	2	90-110	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

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 (East)

Project #:

Project Loc: Lea County, NM

PO #:

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

(lab use only)

ORDER #: 541160

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 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 @ 20'			11/29/2016	1400		1	x								Soil												x				x
	Floor-2 @ 20'			11-29 MG 11/30/2016	1405		1	x								Soil												x				x
	Eastwall-1 @ 20'			11-29 MD 12/1/2016	1410		1	x								Soil												x				x
	Eastwall-2 @ 20'			11-29 MG 12/2/2016	1415		1	x								Soil												x				x
	Northwall-1 @ 19'			11-29 MG 12/3/2016	1420		1	x								Soil												x				x

Special Instructions:

Bill to Rose Slade at Energy Transfer.

	Date	Time		Date	Time
Relinquished by: Nikki Green	11/30	1340	Received by: Matthew Green	11-30	1340
Relinquished by: Matthew Green	11-30	1424	Received by: CRAMER		1424
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Temp: IR ID:R-8
CF:+ 0.1 1.4
Corrected Temp: 1.5

Laboratory Comments:

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

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: °C

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 11/30/2016 02:24:00 PM

Work Order #: 541160

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)?	1.5
#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: 12/01/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 12/01/2016

Analytical Report 541500

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (East)

08-DEC-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)

08-DEC-16

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

Reference: XENCO Report No(s): **541500**
Energy Transfer Boyd 4" Historical (East)
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) 541500. 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. 541500 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 541500

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (East)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
South Wall-1 @ 19'	S	12-06-16 12:00	- 19 ft	541500-001
Floor-3 @20'	S	12-06-16 12:05	- 20 ft	541500-002

Sample receipt non conformances and comments:

TPH verbal report due 12/07/16 and full report Due 12/8/16

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3005210 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 541500-002.

Certificate of Analysis Summary 541500

TRC Solutions, Inc, Midland, TX

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

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

Date Received in Lab: Tue Dec-06-16 03:20 pm
Report Date: 08-DEC-16
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	541500-001		541500-002					
	Field Id:	South Wall-1 @ 19'		Floor-3 @20'					
	Depth:	19 ft		20 ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Dec-06-16 12:00		Dec-06-16 12:05					
BTEX by EPA 8021B	***Extracted:***	Dec-07-16 08:15		Dec-07-16 08:15					
	Analyzed:	Dec-07-16 11:15		Dec-07-16 19:09					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.00150	ND	0.00149				
Toluene		ND	0.00200	ND	0.00199				
Ethylbenzene		ND	0.00200	0.171	0.00199				
m_p-Xylenes		ND	0.00200	3.90 D	0.00988				
o-Xylene		ND	0.00300	0.0867	0.00298				
Total Xylenes		ND	0.00200	3.99	0.00298				
Total BTEX		ND	0.00150	4.16	0.00149				
Inorganic Anions by EPA 300/300.1	***Extracted:***	Dec-06-16 16:00		Dec-06-16 16:00					
	Analyzed:	Dec-06-16 20:33		Dec-06-16 20:41					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		519	5.00	22.0	5.00				
TPH By SW8015 Mod	***Extracted:***	Dec-06-16 17:00		Dec-06-16 17:00					
	Analyzed:	Dec-06-16 21:48		Dec-06-16 23:08					
	Units/RL:	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	1580	74.8				
C10-C28 Diesel Range Hydrocarbons		ND	15.0	6040	74.8				
Total TPH		ND	15.0	7620	74.8				

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 (East)

Work Orders : 541500,

Project ID:

Lab Batch #: 3005115 **Sample:** 541500-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/06/16 21:48

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	99.8	111	70-130	
o-Terphenyl	59.2	49.9	119	70-135	

Lab Batch #: 3005115 **Sample:** 541500-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/06/16 23:08

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	99.7	129	70-130	
o-Terphenyl	64.3	49.9	129	70-135	

Lab Batch #: 3005210 **Sample:** 541500-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/07/16 11:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 3005210 **Sample:** 541500-002 / DL **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/07/16 11:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0249	0.0300	83	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

Lab Batch #: 3005210 **Sample:** 541500-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/07/16 19:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0342	0.0300	114	80-120	
4-Bromofluorobenzene	0.0564	0.0300	188	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 (East)

Work Orders : 541500,

Project ID:

Lab Batch #: 3005115 **Sample:** 716893-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/06/16 20:28

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	100	129	70-130	
o-Terphenyl	64.7	50.0	129	70-135	

Lab Batch #: 3005210 **Sample:** 716968-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/07/16 10:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 3005115 **Sample:** 716893-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/06/16 20:54

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-130	
o-Terphenyl	63.9	50.0	128	70-135	

Lab Batch #: 3005210 **Sample:** 716968-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/07/16 08:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 3005115 **Sample:** 716893-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/06/16 21:21

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	100	116	70-130	
o-Terphenyl	64.2	50.0	128	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 (East)

Work Orders : 541500,

Project ID:

Lab Batch #: 3005210 **Sample:** 716968-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/07/16 08:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 3005115 **Sample:** 541500-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/06/16 22:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	99.9	130	70-130	
o-Terphenyl	60.1	50.0	120	70-135	

Lab Batch #: 3005210 **Sample:** 541500-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/07/16 09:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 3005115 **Sample:** 541500-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/06/16 22:41

SURROGATE RECOVERY STUDY

TPH By SW8015 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	59.8	50.0	120	70-135	

Lab Batch #: 3005210 **Sample:** 541500-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/07/16 10:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0338	0.0300	113	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 (East)

Work Order #: 541500 **Project ID:**

Analyst: ALJ **Date Prepared:** 12/07/2016 **Date Analyzed:** 12/07/2016

Lab Batch ID: 3005210 **Sample:** 716968-1-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	<0.00151	0.101	0.0766	76	0.0998	0.0837	84	9	70-130	35	
Toluene	<0.00201	0.101	0.0741	73	0.0998	0.0824	83	11	70-130	35	
Ethylbenzene	<0.00201	0.101	0.0801	79	0.0998	0.0894	90	11	71-129	35	
m_p-Xylenes	<0.00201	0.201	0.161	80	0.200	0.179	90	11	70-135	35	
o-Xylene	<0.00302	0.101	0.0810	80	0.0998	0.0903	90	11	71-133	35	

Analyst: SLU **Date Prepared:** 12/06/2016 **Date Analyzed:** 12/06/2016

Lab Batch ID: 3005135 **Sample:** 716898-1-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	230	92	250	234	94	2	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 (East)

Work Order #: 541500 **Project ID:**

Analyst: ARM **Date Prepared:** 12/06/2016 **Date Analyzed:** 12/06/2016

Lab Batch ID: 3005115 **Sample:** 716893-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	974	97	1000	964	96	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1010	101	1000	1010	101	0	70-135	35	

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

Form 3 - MS / MSD Recoveries

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

Work Order # : 541500 **Project ID:**

Lab Batch ID: 3005210 **QC- Sample ID:** 541500-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/07/2016 **Date Prepared:** 12/07/2016 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00149	0.0994	0.0802	81	0.0986	0.0720	73	11	70-130	35	
Toluene	<0.00199	0.0994	0.0780	78	0.0986	0.0690	70	12	70-130	35	
Ethylbenzene	<0.00199	0.0994	0.0831	84	0.0986	0.0730	74	13	71-129	35	
m_p-Xylenes	<0.00199	0.199	0.165	83	0.197	0.146	74	12	70-135	35	
o-Xylene	<0.00298	0.0994	0.0816	82	0.0986	0.0733	74	11	71-133	35	

Lab Batch ID: 3005135 **QC- Sample ID:** 540902-009 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/06/2016 **Date Prepared:** 12/06/2016 **Analyst:** SLU

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	5080	5000	9840	95	5000	9910	97	1	90-110	20	

Lab Batch ID: 3005135 **QC- Sample ID:** 541375-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/06/2016 **Date Prepared:** 12/06/2016 **Analyst:** SLU

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	31.7	250	282	100	250	291	104	3	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 (East)

Work Order # : 541500 **Project ID:**

Lab Batch ID: 3005115 **QC- Sample ID:** 541500-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/06/2016 **Date Prepared:** 12/06/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	999	931	93	999	926	93	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	999	993	99	999	986	99	1	70-135	35	

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

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

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

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

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

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200)

Dallas, Texas (214-902-0300)

Service Center - San Antonio, Texas (210-509-3334)

Odessa, Texas (432-563-1800)

Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

www.xenco.com

Xenco Quote #

Xenco Job # 541500

Client / Reporting Information

Company Name / Branch: TRC

Company Address: 2057 Commerce Dr

Email: rose.slade@energytransfer.com ngreen@trcsolutions.com

Phone No: 4326046699

Project Contact: Nikki Green

Samplers's Name: Nikki Green

Project Information

Project Name/Number: ETC Boyd 4" Historical East

Project Location: Lea County, NM

Invoice To: Rose Slade EnergyTransfer

PO Number:

Analytical Information

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH 8015M	Chloride E300	BTEX 8021	Field Comments
1	South Wall-1@19'		12/6	1200	S	1								X	X	X	X	
2	Floor-3@20'		1	1205	S	1								X	X	X	X	
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [X] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Nikki Green	12/10 3:20	1 JREAMER	2	1520	2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X

Temp: IR ID:R-8
CF:+ 0.1 9.1
Corrected Temp: 9.2

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previo

Final 1.000

Page 14 of 15

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 12/06/2016 03:20:00 PM

Work Order #: 541500

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
#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: 12/06/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 12/07/2016

Analytical Report 542090

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (East)

21-DEC-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)

21-DEC-16

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

Reference: XENCO Report No(s): **542090**
Energy Transfer Boyd 4" Historical (East)
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) 542090. 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. 542090 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 542090

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (East)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Floor-3a @ 30'	S	12-13-16 16:00	- 30 ft	542090-001

Sample receipt non conformances and comments:

client called and added chlorides 12/16/16

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 542090

TRC Solutions, Inc, Midland, TX

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

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

Date Received in Lab: Wed Dec-14-16 10:15 am
Report Date: 21-DEC-16
Project Manager: Kelsey Brooks

Analysis Requested								
	Lab Id:	542090-001						
	Field Id:	Floor-3a @ 30'						
	Depth:	30 ft						
	Matrix:	SOIL						
	Sampled:	Dec-13-16 16:00						
Inorganic Anions by EPA 300/300.1	***Extracted:***	Dec-17-16 13:00						
	Analyzed:	Dec-17-16 19:30						
	Units/RL:	mg/kg	RL					
Chloride		157	5.00					
TPH By SW8015 Mod	***Extracted:***	Dec-15-16 14:00						
	Analyzed:	Dec-16-16 05:11						
	Units/RL:	mg/kg	RL					
C6-C10 Gasoline Range Hydrocarbons		30.2	15.0					
C10-C28 Diesel Range Hydrocarbons		1350	15.0					
C28-C35 Oil Range Hydrocarbons		25.9	15.0					
Total TPH		1410	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 (East)

Work Orders : 542090,

Project ID:

Lab Batch #: 3005863 **Sample:** 542090-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/16 05:11

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.3	99.8	92	70-130	
o-Terphenyl	41.1	49.9	82	70-135	

Lab Batch #: 3005863 **Sample:** 717332-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/15/16 20:55

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-130	
o-Terphenyl	57.0	50.0	114	70-135	

Lab Batch #: 3005863 **Sample:** 717332-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/15/16 21:17

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-130	
o-Terphenyl	42.4	50.0	85	70-135	

Lab Batch #: 3005863 **Sample:** 717332-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/15/16 21:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-130	
o-Terphenyl	45.5	50.0	91	70-135	

Lab Batch #: 3005863 **Sample:** 541854-020 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/16 02:31

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	120	99.9	120	70-130	
o-Terphenyl	48.1	50.0	96	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 (East)

Work Orders : 542090,

Project ID:

Lab Batch #: 3005863 **Sample:** 541854-020 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/16 02:53

SURROGATE RECOVERY STUDY

TPH By SW8015 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	50.0	49.9	100	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 (East)

Work Order #: 542090 **Project ID:**

Analyst: MNR **Date Prepared:** 12/17/2016 **Date Analyzed:** 12/17/2016

Lab Batch ID: 3005931 **Sample:** 717402-1-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	242	97	250	248	99	2	90-110	20	

Analyst: ARM **Date Prepared:** 12/15/2016 **Date Analyzed:** 12/15/2016

Lab Batch ID: 3005863 **Sample:** 717332-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	883	88	1000	940	94	6	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	950	95	1000	1030	103	8	70-135	35	

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

Form 3 - MS / MSD Recoveries

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

Work Order # : 542090 **Project ID:**

Lab Batch ID: 3005931 **QC- Sample ID:** 541854-006 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/17/2016 **Date Prepared:** 12/17/2016 **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	4330	1250	5530	96	1250	5730	112	4	90-110	20	X

Lab Batch ID: 3005931 **QC- Sample ID:** 542375-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/19/2016 **Date Prepared:** 12/17/2016 **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	262	250	529	107	250	528	106	0	90-110	20	

Lab Batch ID: 3005863 **QC- Sample ID:** 541854-020 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/16/2016 **Date Prepared:** 12/15/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	999	947	95	998	900	90	5	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	999	1020	102	998	996	100	2	70-135	35	

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

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

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Nikki Green

Company Name: TRC 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 (East)

Project #:

Project Loc: Lea County, NM

PO #:

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

(lab use only)

ORDER #: 542090

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-3a @ 30'			12/13/2016	1600		1	x								Soil	X												x

Special Instructions:

Bill to Rose Slade at Energy Transfer.

Temp: 5.1 IR ID:R-8
CF:+ 0.1
Corrected Temp: 5.2

Laboratory Comments:

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

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: °C

Relinquished by:	Date	Time	Received by:	Date	Time
Matthew Green	12-14-16	1015	[signature]	12-14	1015
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Final 1.001

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 12/14/2016 10:15:00 AM

Work Order #: 542090

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)?	5.2
#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: 12/14/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 12/14/2016

Analytical Report 542913

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (East)

04-JAN-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

04-JAN-17

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

Reference: XENCO Report No(s): **542913**
Energy Transfer Boyd 4" Historical (East)
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) 542913. 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. 542913 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 542913

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (East)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Floor-3b @ 30'	S	12-27-16 11:15	- 30 ft	542913-001

Sample receipt non conformances and comments:

Call 432-664-6699 with verbals

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 542913

TRC Solutions, Inc, Midland, TX

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

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

Date Received in Lab: Tue Dec-27-16 01:34 pm
Report Date: 04-JAN-17
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	542913-001					
	Field Id:	Floor-3b @ 30'					
	Depth:	30 ft					
	Matrix:	SOIL					
	Sampled:	Dec-27-16 11:15					
TPH By SW8015 Mod	***Extracted:***	Dec-27-16 16:00					
	Analyzed:	Dec-29-16 09:11					
	Units/RL:	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		ND	15.0				
C10-C28 Diesel Range Hydrocarbons		2080	15.0				
C28-C35 Oil Range Hydrocarbons		ND	15.0				
Total TPH		2080	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 (East)

Work Orders : 542913,

Project ID:

Lab Batch #: 3006647 **Sample:** 542913-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/29/16 09:11

SURROGATE RECOVERY STUDY

TPH By SW8015 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	64.5	49.9	129	70-135	

Lab Batch #: 3006647 **Sample:** 717867-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/28/16 08:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.2	100	98	70-130	
o-Terphenyl	49.7	50.0	99	70-135	

Lab Batch #: 3006647 **Sample:** 717867-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/28/16 09:23

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-130	
o-Terphenyl	53.2	50.0	106	70-135	

Lab Batch #: 3006647 **Sample:** 717867-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/28/16 09:54

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-130	
o-Terphenyl	53.0	50.0	106	70-135	

Lab Batch #: 3006647 **Sample:** 542785-101 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/28/16 11:06

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	99.8	115	70-130	
o-Terphenyl	55.0	49.9	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 (East)

Work Orders : 542913,

Project ID:

Lab Batch #: 3006647 **Sample:** 542785-101 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/28/16 11:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	99.7	115	70-130	
o-Terphenyl	53.8	49.9	108	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 (East)

Work Order #: 542913 **Project ID:**

Analyst: ARM **Date Prepared:** 12/27/2016 **Date Analyzed:** 12/28/2016

Lab Batch ID: 3006647 **Sample:** 717867-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	897	90	1000	937	94	4	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1030	103	1000	1040	104	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 (East)

Work Order # : 542913 **Project ID:**

Lab Batch ID: 3006647 **QC- Sample ID:** 542785-101 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/28/2016 **Date Prepared:** 12/27/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	998	951	95	997	920	92	3	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	998	1020	102	997	998	100	2	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.

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200)

Dallas, Texas (214-902-0300)

Service Center - San Antonio, Texas (210-509-3334)

www.xenco.com

Odessa, Texas (432-563-1800)

Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

Xenco Quote # | Xenco Job # 542913

Client / Reporting Information

Company Name / Branch: TRC

Company Address: 2057 Commerce Dr 79703

Email: ngreen@etcsolutions.com, rose.slade@energytransfer.com

Phone No: 432 664 6699

Project Contact: Nikki Green

Samplers's Name: Nikki Green

Project Information

Project Name/Number: GC Boyd 4" Historical East

Project Location: Lea Cty, NM

Invoice To: Rose Slade @ ETC

PO Number:

Analytical Information

TPH 8015 M Extended

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH 8015 M Extended	Field Comments
1	Floor-3bE 30'		12/27	1115	S	1								X	X	
2																
3																
4																
5																
6																
7																
8																
9																
10																

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

Call 432 664-6699 w/ verbals

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Nikki Green	11/27 1333		2	12/27/16 1334	
3	Relinquished by:	12/27	Received By:	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X Cooler Temp: 5.8°

Temp: IR ID:R-8
CF:+ 0.1
Corrected Temp: 5.8°

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 12/27/2016 01:34:00 PM

Work Order #: 542913

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)?	5.8
#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: Jessica Kramer
Jessica Kramer
Date: 12/27/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 12/28/2016

Analytical Report 543050

for

TRC Solutions, Inc

Project Manager: Nikki Green

-

09-JAN-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

09-JAN-17

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

Reference: XENCO Report No(s): **543050**
-
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) 543050. 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. 543050 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 543050

TRC Solutions, Inc, Midland, TX

-

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Floor-3c @ 34'	S	12-28-16 16:00	- 34 ft	543050-001

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3007108 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Lab Sample ID 543050-001 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: 543050-001.
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 543050

TRC Solutions, Inc, Midland, TX

Project Name: -

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

Date Received in Lab: Thu Dec-29-16 10:42 am
Report Date: 09-JAN-17
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	543050-001					
	Field Id:	Floor-3c @ 34'					
	Depth:	34 ft					
	Matrix:	SOIL					
	Sampled:	Dec-28-16 16:00					
BTEX by EPA 8021B	***Extracted:***	Jan-06-17 09:00					
	Analyzed:	Jan-06-17 11:31					
	Units/RL:	mg/kg RL					
Benzene		ND 0.00150					
Toluene		0.00324 0.00200					
Ethylbenzene		ND 0.00200					
m_p-Xylenes		ND 0.00200					
o-Xylene		ND 0.00299					
Total Xylenes		ND 0.00200					
Total BTEX		0.00324 0.00150					
TPH By SW8015 Mod	***Extracted:***	Jan-04-17 09:00					
	Analyzed:	Jan-04-17 15:01					
	Units/RL:	mg/kg RL					
C6-C10 Gasoline Range Hydrocarbons		33.0 15.0					
C10-C28 Diesel Range Hydrocarbons		2250 15.0					
C28-C35 Oil Range Hydrocarbons		ND 15.0					
Total TPH		2280 15.0					

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: -

Work Orders : 543050,

Project ID:

Lab Batch #: 3006885 **Sample:** 543050-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/04/17 15:01

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.1	99.7	91	70-130	
o-Terphenyl	51.9	49.9	104	70-135	

Lab Batch #: 3007108 **Sample:** 543050-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/06/17 11:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 3006885 **Sample:** 718042-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/04/17 13:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.6	100	99	70-130	
o-Terphenyl	47.2	50.0	94	70-135	

Lab Batch #: 3007108 **Sample:** 718191-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/06/17 15:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 3006885 **Sample:** 718042-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/04/17 14:07

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-130	
o-Terphenyl	48.2	50.0	96	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: -

Work Orders : 543050,

Project ID:

Lab Batch #: 3007108 **Sample:** 718191-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/06/17 08:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0347	0.0300	116	80-120	

Lab Batch #: 3006885 **Sample:** 718042-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/04/17 14:33

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-130	
o-Terphenyl	48.5	50.0	97	70-135	

Lab Batch #: 3007108 **Sample:** 718191-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/06/17 09:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0352	0.0300	117	80-120	

Lab Batch #: 3007108 **Sample:** 543050-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/06/17 09:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 3007108 **Sample:** 543050-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/06/17 10:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	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: -

Work Order #: 543050 **Project ID:**

Analyst: ALJ **Date Prepared:** 01/06/2017 **Date Analyzed:** 01/06/2017

Lab Batch ID: 3007108 **Sample:** 718191-1-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	0.113	113	0.0996	0.0928	93	20	70-130	35	
Toluene	<0.00200	0.100	0.108	108	0.0996	0.0847	85	24	70-130	35	
Ethylbenzene	<0.00200	0.100	0.111	111	0.0996	0.0875	88	24	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.223	112	0.199	0.182	91	20	70-135	35	
o-Xylene	<0.00301	0.100	0.110	110	0.0996	0.0917	92	18	71-133	35	

Analyst: PJB **Date Prepared:** 01/04/2017 **Date Analyzed:** 01/04/2017

Lab Batch ID: 3006885 **Sample:** 718042-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	968	97	1000	946	95	2	75-125	25	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	940	94	1000	1020	102	8	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

Version: 1.%

Form 3 - MS / MSD Recoveries

Project Name: -

Work Order # : 543050 **Project ID:**

Lab Batch ID: 3007108 **QC- Sample ID:** 543050-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/06/2017 **Date Prepared:** 01/06/2017 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00151	0.101	0.0316	31	0.0994	0.0318	32	1	70-130	35	X
Toluene	0.00324	0.101	0.0195	16	0.0994	0.0219	19	12	70-130	35	X
Ethylbenzene	<0.00202	0.101	0.00874	9	0.0994	0.0113	11	26	71-129	35	X
m_p-Xylenes	<0.00202	0.202	0.0155	8	0.199	0.0190	10	20	70-135	35	X
o-Xylene	<0.00302	0.101	0.00908	9	0.0994	0.0114	11	23	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.

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200)

Dallas, Texas (214-902-0300)

Service Center - San Antonio, Texas (210-509-3334)

Odessa, Texas (432-563-1800)

Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

www.xenco.com

Xenco Quote #

Xenco Job # 543050

Client / Reporting Information

Company Name / Branch: TRC

Company Address: 2057 Commerce Dr 79703

Email: ngreene@trcsolutions.com Phone No: 432 664 6699
rose.slade@energytransfer.com

Project Contact: Nikki Green 432 664 6699

Samplers's Name: Nikki Green

Project Information

Project Name/Number:

Project Location: Lea Cty, NM

Invoice To: Rose Slade
ETC

PO Number:

Analytical Information

TPH 8015M Ext

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	Floor-3c @34'		12/28	1600	S									X	X
2															
3															
4															
5															
6															
7															
8															
9															
10															

Turnaround Time (Business days)

- ☐ Same Day TAT
- ☒ 5 Day TAT
- ☐ Next Day EMERGENCY
- ☐ 7 Day TAT
- ☐ 2 Day EMERGENCY
- ☐ Contract TAT
- ☐ 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- ☐ Level II Std QC
- ☐ Level IV (Full Data Pkg /raw data)
- ☐ Level III Std QC+ Forms
- ☐ TRRP Level IV
- ☐ Level 3 (CLP Forms)
- ☐ UST / RG -411
- ☐ TRRP Checklist

Notes:

Std TAT for ETC

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Nikki Green	12/28 1042	1 NCAMEK 1042	2		2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X

Temp: IR ID:R-8
CF:+ 0.1 8.3 8.4
Corrected Temp:

Note: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless pre

Final 1.001

Page 11 of 12

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 12/29/2016 10:42:00 AM

Work Order #: 543050

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)?	8.4
#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: 12/29/2016

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 12/30/2016

Analytical Report 544787

for

TRC Solutions, Inc

Project Manager: Nikki Green

Energy Transfer Boyd 4" Historical (East)

27-JAN-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

27-JAN-17

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

Reference: XENCO Report No(s): **544787**
Energy Transfer Boyd 4" Historical (East)
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) 544787. 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. 544787 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 544787

TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (East)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Floor-1 @20'	S	01-24-17 09:00	- 20 ft	544787-001
Northwall-1 @19'	S	01-24-17 09:10	- 19 ft	544787-002
Eastwall-1a @ 19'	S	01-24-17 09:15	- 19 ft	544787-003
Floor-2 @20'	S	01-24-17 09:20	- 20 ft	544787-004
Eastwall-2a @ 20'	S	01-24-17 09:25	- 20 ft	544787-005
Floor-4 @ 20'	S	01-24-17 09:30	- 20 ft	544787-006
Floor-3c @ 34'	S	01-24-17 09:40	- 34 ft	544787-007
Northwall-2 @ 29'	S	01-24-17 10:20	- 29 ft	544787-008
Eastwall-3 @ 29'	S	01-24-17 10:45	- 29 ft	544787-009
Southwall-1b @ 29'	S	01-24-17 11:25	- 29 ft	544787-010
Westwall-1 @ 29'	S	01-24-17 11:50	- 29 ft	544787-011

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3008339 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3008588 Inorganic Anions by EPA 300/300.1
Lab Sample ID 545051-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 544787-003, -005, -006, -007, -008, -009, -010, -011.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 544787

TRC Solutions, Inc, Midland, TX

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

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

Date Received in Lab: Tue Jan-24-17 01:55 pm
Report Date: 27-JAN-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	544787-001		544787-002		544787-003		544787-004		544787-005		544787-006	
	Field Id:	Floor-1 @20'		Northwall-1 @19'		Eastwall-1a @ 19'		Floor-2 @20'		Eastwall-2a @ 20'		Floor-4 @ 20'	
	Depth:	20 ft		19 ft		19 ft		20 ft		20 ft		20 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-24-17 09:00		Jan-24-17 09:10		Jan-24-17 09:15		Jan-24-17 09:20		Jan-24-17 09:25		Jan-24-17 09:30	
BTEX by EPA 8021B	***Extracted:***	Jan-24-17 15:30		Jan-24-17 15:30		Jan-24-17 15:30		Jan-24-17 15:30		Jan-24-17 15:30		Jan-24-17 15:30	
	Analyzed:	Jan-24-17 17:00		Jan-24-17 17:17		Jan-24-17 17:33		Jan-24-17 17:50		Jan-24-17 18:06		Jan-24-17 18:22	
	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	0.00152	ND	0.00152	ND	0.00150	ND	0.00148	ND	0.00152
Toluene		ND	0.00199	ND	0.00202	ND	0.00203	ND	0.00200	ND	0.00198	ND	0.00202
Ethylbenzene		ND	0.00199	ND	0.00202	ND	0.00203	ND	0.00200	ND	0.00198	ND	0.00202
m_p-Xylenes		ND	0.00199	ND	0.00202	ND	0.00203	ND	0.00200	ND	0.00198	ND	0.00202
o-Xylene		ND	0.00298	ND	0.00304	ND	0.00304	ND	0.00299	ND	0.00296	ND	0.00303
Total Xylenes		ND	0.00199	ND	0.00202	ND	0.00203	ND	0.00200	ND	0.00198	ND	0.00202
Total BTEX		ND	0.00149	ND	0.00152	ND	0.00152	ND	0.00150	ND	0.00148	ND	0.00152
Inorganic Anions by EPA 300/300.1	***Extracted:***					Jan-26-17 16:11				Jan-26-17 16:11		Jan-26-17 16:11	
	Analyzed:					Jan-26-17 20:18				Jan-26-17 18:39		Jan-26-17 18:46	
	Units/RL:					mg/kg	RL			mg/kg	RL	mg/kg	RL
Chloride						294	5.00			295	5.00	13.2	5.00
TPH By SW8015 Mod	***Extracted:***	Jan-25-17 16:00		Jan-25-17 16:00		Jan-25-17 16:00		Jan-25-17 16:00		Jan-25-17 16:00		Jan-25-17 16:00	
	Analyzed:	Jan-26-17 01:39		Jan-26-17 02:51		Jan-26-17 03:15		Jan-26-17 03:40		Jan-26-17 04:05		Jan-26-17 04:30	
	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 Organics		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 544787

TRC Solutions, Inc, Midland, TX

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

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

Date Received in Lab: Tue Jan-24-17 01:55 pm
Report Date: 27-JAN-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	544787-007		544787-008		544787-009		544787-010		544787-011		
	Field Id:	Floor-3c @ 34'		Northwall-2 @ 29'		Eastwall-3 @ 29'		Southwall-1b @ 29'		Westwall-1 @ 29'		
	Depth:	34 ft		29 ft		29 ft		29 ft		29 ft		
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	Jan-24-17 09:40		Jan-24-17 10:20		Jan-24-17 10:45		Jan-24-17 11:25		Jan-24-17 11:50		
BTEX by EPA 8021B	***Extracted:***			Jan-24-17 15:30		Jan-24-17 15:30		Jan-24-17 15:30		Jan-24-17 15:30		
	Analyzed:			Jan-24-17 18:38		Jan-24-17 18:54		Jan-24-17 19:10		Jan-24-17 19:26		
	Units/RL:			mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Benzene				ND	0.00150	ND	0.00147	ND	0.00149	ND	0.00149	
Toluene				ND	0.00200	ND	0.00196	ND	0.00198	ND	0.00198	
Ethylbenzene				ND	0.00200	ND	0.00196	ND	0.00198	ND	0.00198	
m_p-Xylenes				ND	0.00200	ND	0.00196	ND	0.00198	ND	0.00198	
o-Xylene				ND	0.00299	ND	0.00294	ND	0.00298	ND	0.00297	
Total Xylenes				ND	0.00200	ND	0.00196	ND	0.00198	ND	0.00198	
Total BTEX				ND	0.00150	ND	0.00147	ND	0.00149	ND	0.00149	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Jan-26-17 16:11		Jan-26-17 16:11		Jan-26-17 16:11		Jan-26-17 16:11		Jan-26-17 16:11		
	Analyzed:	Jan-26-17 18:53		Jan-26-17 19:14		Jan-26-17 19:21		Jan-26-17 19:28		Jan-26-17 19:35		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		44.1	5.00	54.4	5.00	645	5.00	220	5.00	301	5.00	
TPH By SW8015 Mod	***Extracted:***			Jan-25-17 16:00		Jan-25-17 16:00		Jan-25-17 16:00		Jan-25-17 16:00		
	Analyzed:			Jan-26-17 04:55		Jan-26-17 05:20		Jan-26-17 05:45		Jan-26-17 06:10		
	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 Organics				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 (East)

Work Orders : 544787, 544787 **Project ID:**

Lab Batch #: 3008339 **Sample:** 544787-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/17 17:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0336	0.0300	112	80-120	

Lab Batch #: 3008339 **Sample:** 544787-002 / SMP **Batch:** 1 **Matrix:** Soil

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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0351	0.0300	117	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 3008339 **Sample:** 544787-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/17 17:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0359	0.0300	120	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 3008339 **Sample:** 544787-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/17 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	0.0360	0.0300	120	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 3008339 **Sample:** 544787-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/17 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	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0336	0.0300	112	80-120	

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

Form 2 - Surrogate Recoveries

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

Work Orders : 544787, 544787 **Project ID:**

Lab Batch #: 3008339 **Sample:** 544787-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/17 18:22

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0355	0.0300	118	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 3008339 **Sample:** 544787-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/17 18:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0346	0.0300	115	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 3008339 **Sample:** 544787-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/17 18:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0346	0.0300	115	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 3008339 **Sample:** 544787-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/17 19:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0347	0.0300	116	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 3008339 **Sample:** 544787-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/17 19:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0348	0.0300	116	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.

Form 2 - Surrogate Recoveries

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

Work Orders : 544787, 544787 **Project ID:**

Lab Batch #: 3008470 **Sample:** 544787-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/26/17 01:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.8	99.8	84	70-130	
o-Terphenyl	45.8	49.9	92	70-135	

Lab Batch #: 3008470 **Sample:** 544787-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/26/17 02:51

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.3	99.7	88	70-130	
o-Terphenyl	47.7	49.9	96	70-135	

Lab Batch #: 3008470 **Sample:** 544787-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/26/17 03:15

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.9	100	87	70-130	
o-Terphenyl	48.1	50.0	96	70-135	

Lab Batch #: 3008470 **Sample:** 544787-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/26/17 03:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.8	99.9	97	70-130	
o-Terphenyl	53.9	50.0	108	70-135	

Lab Batch #: 3008470 **Sample:** 544787-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/26/17 04:05

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	70.2	99.9	70	70-130	
o-Terphenyl	38.0	50.0	76	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 (East)

Work Orders : 544787, 544787 **Project ID:**

Lab Batch #: 3008470 **Sample:** 544787-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/26/17 04:30 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	74.5	99.8	75	70-130	
o-Terphenyl	41.0	49.9	82	70-135	

Lab Batch #: 3008470 **Sample:** 544787-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/26/17 04:55 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.9	99.7	91	70-130	
o-Terphenyl	49.6	49.9	99	70-135	

Lab Batch #: 3008470 **Sample:** 544787-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/26/17 05:20 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.7	99.7	89	70-130	
o-Terphenyl	48.5	49.9	97	70-135	

Lab Batch #: 3008470 **Sample:** 544787-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/26/17 05:45 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.8	99.9	84	70-130	
o-Terphenyl	46.0	50.0	92	70-135	

Lab Batch #: 3008470 **Sample:** 544787-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/26/17 06:10 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.7	99.8	78	70-130	
o-Terphenyl	42.1	49.9	84	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 (East)

Work Orders : 544787, 544787 **Project ID:**

Lab Batch #: 3008339 **Sample:** 718963-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/24/17 16:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0359	0.0300	120	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 3008470 **Sample:** 718965-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/26/17 00:25

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	100	124	70-130	
o-Terphenyl	64.3	50.0	129	70-135	

Lab Batch #: 3008339 **Sample:** 718963-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/24/17 15:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 3008470 **Sample:** 718965-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/26/17 00:50

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	100	128	70-130	
o-Terphenyl	63.6	50.0	127	70-135	

Lab Batch #: 3008339 **Sample:** 718963-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/24/17 15:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

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

Form 2 - Surrogate Recoveries

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

Work Orders : 544787, 544787 **Project ID:**

Lab Batch #: 3008470 **Sample:** 718965-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/26/17 01:16

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	100	118	70-130	
o-Terphenyl	59.8	50.0	120	70-135	

Lab Batch #: 3008339 **Sample:** 544787-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/17 15:44

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0340	0.0300	113	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

Lab Batch #: 3008470 **Sample:** 544787-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/26/17 02:02

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.9	103	70-130	
o-Terphenyl	51.6	50.0	103	70-135	

Lab Batch #: 3008339 **Sample:** 544787-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/17 16:00

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0346	0.0300	115	80-120	
4-Bromofluorobenzene	0.0339	0.0300	113	80-120	

Lab Batch #: 3008470 **Sample:** 544787-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/26/17 02:26

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.9	99.9	100	70-130	
o-Terphenyl	48.4	50.0	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.

BS / BSD Recoveries

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

Work Order #: 544787, 544787 **Project ID:**

Analyst: ALJ **Date Prepared:** 01/24/2017 **Date Analyzed:** 01/24/2017

Lab Batch ID: 3008339 **Sample:** 718963-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00149	0.0994	0.109	110	0.0998	0.101	101	8	70-130	35	
Toluene	<0.00199	0.0994	0.102	103	0.0998	0.0953	95	7	70-130	35	
Ethylbenzene	<0.00199	0.0994	0.110	111	0.0998	0.114	114	4	71-129	35	
m_p-Xylenes	<0.00199	0.199	0.233	117	0.200	0.219	110	6	70-135	35	
o-Xylene	<0.00298	0.0994	0.111	112	0.0998	0.104	104	7	71-133	35	

Analyst: MGO **Date Prepared:** 01/26/2017 **Date Analyzed:** 01/26/2017

Lab Batch ID: 3008588 **Sample:** 719103-1-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	264	106	250	264	106	0	90-110	20	

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

Form 3 - MS / MSD Recoveries

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

Work Order # : 544787 **Project ID:**

Lab Batch ID: 3008339 **QC- Sample ID:** 544787-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/24/2017 **Date Prepared:** 01/24/2017 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00150	0.100	0.0878	88	0.0996	0.0784	79	11	70-130	35	
Toluene	<0.00200	0.100	0.0816	82	0.0996	0.0734	74	11	70-130	35	
Ethylbenzene	<0.00200	0.100	0.0948	95	0.0996	0.0823	83	14	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.184	92	0.199	0.160	80	14	70-135	35	
o-Xylene	<0.00301	0.100	0.0895	90	0.0996	0.0787	79	13	71-133	35	

Lab Batch ID: 3008588 **QC- Sample ID:** 544787-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/26/2017 **Date Prepared:** 01/26/2017 **Analyst:** MGO

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	294	250	567	109	250	572	111	1	90-110	20	X

Lab Batch ID: 3008588 **QC- Sample ID:** 545051-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/26/2017 **Date Prepared:** 01/26/2017 **Analyst:** MGO

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	22.1	250	242	88	250	231	84	5	90-110	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

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 (East)

Project #:

Project Loc: Lea County, NM

PO #:

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

(lab use only)

ORDER #: 544787

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: 8015B	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
	Floor-1 @ 20'			1/24/2017	900		1	x								Soil	x									x							
	Northwall-1 @ 19'			1/24/2017	910		1	x								Soil	x									x							
	Eastwall-1a @ 19'			1/24/2017	915		1	x								Soil	x									x			x				
	Floor-2 @ 20'			1/24/2017	920		1	x								Soil	x									x							
	Eastwall-2a @ 20'			1/24/2017	925		1	x								Soil	x									x			x				
	Floor-4 @ 20'			1/24/2017	930		1	x								Soil	x									x			x				
	Floor-3c @ 34'			1/24/2017	940		1	x								Soil													x				
	Northwall-2 @ 29'			1/24/2017	1020		1	x								Soil	x									x			x				
	Eastwall-3 @ 29'			1/24/2017	1045		1	x								Soil	x									x			x				
	Southwall-1b @ 29'			1/24/2017	1125		1	x								Soil	x									x			x				
	Westwall-1 @ 29'			1/24/2017	1150		1	x								Soil	x									x			x				

Special Instructions:

Bill to Rose Slade at Energy Transfer. Please see Alec for TAT

Relinquished by:	Date	Time	Received by:	Date	Time
Nikki Green	1/24/17	1355	[illegible]	1.24.17	1355
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 DHI		

Temperature Upo Temp: IR ID:R-8 CF:+ 0.1 10.3 Corrected Temp: 10.4

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 01/24/2017 01:55:00 PM

Work Order #: 544787

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)?	10.4
#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: 01/24/2017

Checklist reviewed by: Kelsey Brooks
Kelsey Brooks
Date: 01/24/2017

Photographic Documentation

Client: ETC Field Services, LLC
Project Name: Boyd 4 Inch Historical East

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
Project Name: Boyd 4 Inch Historical East

Prepared by: TRC Environmental Corp.
Location: Lea County, NM

Photograph No. 3 **Date:** **December 5, 2016** **Description:** **Looking southwest** **View of excavation activities.**	
Photograph No. 4 **Date:** **January 24, 2017** **Description:** **Looking northwest** **View of excavation activities.**	

Photographic Documentation

Client: ETC Field Services, LLC
Project Name: Boyd 4 Inch Historical East

Prepared by: TRC Environmental Corp.
Location: Lea County, NM

Photograph No. 5 **Date:** **January 24, 2017** **Description:** **Looking east** **View of excavation activities.**	
Photograph No. 6 **Date:** **January 24, 2016** **Description:** **Looking southwest** **View of excavation activities.**	

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

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 Approved by NMOCD:	
Printed Name: Rose L. Slade		
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