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Work Plan Reviewed & Approved 10/20/14 Kusten Lynch NMOCD HOBBS OCD

OCT 2 0 2016

RECEIVED

October 19, 2016

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

Re: Proposed Remediation WorkplanBoyd 4-Inch Historical East Release Site (1RP-4278)Unit Letter "P", Section 23, Township 22 South, Range 37 East, NMPMLea County, New Mexico

Dear Ms. Slade,

TRC Environmental Corporation (TRC), has prepared this Proposed Remediation Workplan (Workplan) for the Boyd 4-Inch Historical East Release Site (1RP-4278). The purpose of this Workplan is to propose remediation activities designed to advance the Boyd 4-Inch Historical East Release Site toward an NMOCD approved Site Closure Status. 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. Irwin Boyd of Eunice, New Mexico. A Site Location Map and Site Details and Confirmation Soil Sample Location Map are provided as Figure 1 and Figure 2, respectively. Release Site photographs are attached to this Workplan.

Following the completion of the soil investigation activities, designed to provide vertical and horizontal delineation, the analytical results appear to indicate the Boyd 4-Inch Historical Release Site comprises two (2) distinct releases (Boyd 4-Inch Historical West (1RP-4277) and Boyd 4-Inch Historical East (1RP-4278)). This Workplan addresses proposed remediation activities designed to remediate the eastern portion (Boyd 4-Inch Historical East) of the Release Site. A Workplan designed to remediate the western portion (Boyd 4-Inch Historical West) of Release Site will be submitted under separate cover.

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 New Mexico Oil Conservation Division (NMOCD) Hobbs District Office, indicates groundwater should be encountered at approximately fifty-three (53) feet below ground surface (bgs). Analytical results derived from preliminary soil samples collected from the floor of the existing Release Site excavation indicates hydrocarbon impact exists at approximately twenty (20) feet bgs. Based on the

NMOCD site classification system, twenty (20) points will be assigned to the subject area ranking as a result of this criterion.

An unregistered water well (windmill) is located approximately nine hundred seventy-eight (978) feet north-northwest (upgradient) of the Release Site. Based on the NMOCD site classification system, twenty (20) points will be assigned to the subject area ranking as a result of this criterion.

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

Based on the NMOCD Site Classification criteria, the Release Site remediation levels are 10 mg/Kg for benzene, 50 mg/Kg for benzene, toluene, ethylbenzene and toluene (BTEX) and 100 mg/Kg for total petroleum hydrocarbons (TPH). Chloride remediation levels for the Release Site are 250 mg/Kg.

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, New Mexico. The area excavated by the previous contractor is open 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 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'.

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 hand auger to collect additional soil samples for laboratory analysis. In the vicinity of previously collected soil sample Floor-1 @ 10', a 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 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 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 -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-2 @ 20', which exhibited a TPH concentration of 2.390.1 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' represents delineation activities conducted in the vicinity of the southwest sidewall of the existing 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 excavation are represented by soil samples T-ESW-1 @ 5', T-ESW-1 @ 10', and T-ESW-1 @ 16' and horizontal delineation activities are 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 are represented by soil samples T-NSW-2 @ 16', T-NSW-3 @ 4'. Soil samples were collected 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'.

On June 27, 2016, during excavation activities for the Boyd 4-Inch Historical West Release Site, fifteen (15) preliminary soil status samples (West Excavation Floor-1 @ 20', West Excavation SSW-1 @ 19', West Excavation NSW-1 @ 19', West Excavation ESW-1 @ 19', West Excavation Floor-2 @ 20', West Excavation SSW-2 @ 19', West Excavation NSW-2 @ 19', West Excavation Floor-3 @ 20', West Excavation SSW-3 @ 19', West Excavation NSW-3 @ 19', West Excavation WSW-3 @ 19', West Excavation Floor-4 @ 20', West Excavation ESW-4 @ 19', West Excavation NSW-4 @ 19', West Excavation NSW-4 @ 19', and West Excavation Floor-5 @ 15') were collected. The southeast sidewall of the Boyd 4" Historical West Release Site, which correlates with the northwest sidewall of the Boyd 4" Historical East Release site, is 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 Release Site. Please reference Figure 2 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 @ 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 (Confirmation Floor-1 @ 32', Confirmation Floor-2 @ 28', Confirmation Floor-3 @ 20', Confirmation SW-1 @ 19', Confirmation SW-2 @ 19', Confirmation

Floor-4 @ 20', Confirmation Floor-5 @ 20', Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', Confirmation EW-3 @ 19', Confirmation NW-1 @ 19', Confirmation Floor-7 @ 20', Confirmation Floor-6 @ 20', Confirmation NW-2 @ 19', Confirmation NW-3 @ 7.5', Confirmation NW-4 @ 10', Confirmation NW-5 @ 12', Confirmation WW-3 @ 19') were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The southeast wall of the Boyd 4" Historical West Release Site, which correlates with the northwest wall of the Boyd 4" Historical East Release Site, are represented by soil samples Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', Confirmation EW-2 @ 19', and Confirmation EW-3 @ 19'. The laboratory results indicated benzene, BTEX, and TPH concentrations for soil samples Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', and Confirmation EW-3 @ 19'. The laboratory MDL and NMOCD regulatory guidelines. Chloride concentrations for soil samples Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', and Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', and Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', and Confirmation EW-1 @ 19', Confirmation EW-2 @ 19', and Confirmation EW-3 @ 19'. The 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'.

Based on the analytical results of soil samples collected from March 8, 2016 to October 10, 2016, ETC proposes the following remediation activities designed to remediate the eastern portion (Boyd 4-Inch Historical East) Release Site:

- Utilizing a trackhoe, excavate the Release Site (Boyd 4-Inch Historical East) to a depth of approximately twenty (20) feet bgs. Excavated soil will be stockpiled adjacent to the excavation pending transportation to a NMOCD approved disposal facility.
- Collect an appropriate number of excavation sidewall and floor soil samples and submit the soil samples to the laboratory for determination of concentrations of BTEX, TPH, and Chloride.
- On receipt of favorable analytical results, request NMOCD permission to backfill the excavation with locally purchased non-impacted "like" soil or caliche. On NMOCD approval, the excavation will be backfilled with the non-impacted material.
- Transport excavated soil under manifest to an NMOCD approved disposal facility.
- Prepare and submit a "Remediation Summary and Site Closure Request" to the NMOCD.

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

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

Thank you,

Meen

Nikki Green Project Manager TRC Environmental Corporation

FOR

Jeffrey Kindley, PG Senior Project Manager TRC Environmental Corporation

Attachments:

Figure 1 - Site Location Map Figure 2 – Site Details and Confirmation Soil Sample Locations Map Figure SB-1 – Soil Boring Log Detail Table 1 – Concentrations of Benzene, BTEX, TPH and Chloride in Soil Release Site Photographs Laboratory Analytical Results

cc: File

DRAWING NAME: H:\Nova\Project Files\ETC Field Services\Boyd 4 Inch Historica1\CAD\ Site Location.dwg --- PLOT DATE: March 28, 2016 - 8:42AM --- LAYOUT: Layout1





DRAWING NAME: H:\Nova\Project Files\ETC Field Services\Boyd 4 Inch Historica\CAD\ SB-1.dwg - PLOT DATE: September 28, 2016 - 1:10PM - LAYOUT: Model

					Soil Bori	ing Log SB-1		
Depth	Soil	PID		Chloride		Soil Description	Soil Bo	ring Details
(feet)	Columns	Reading	Odor	Field Screen		Soli Description	Date Drilled	1-14-2016
							Depth of Exploratory	Well 33 ft
- 0'							Depth to Water	N/A
-					0-4' 8" -	Previously Excavated.		
-								
F								
F								
- 5'	612		None		4' 8"-6' -	White-Tan Silty Dry Sand.		
F								
E			None		6'-9' 6" -	White Hard Dry Caliche		
E					000	trince riard bry callener	Completi	an Notoo
L 10'	12.5 m al a	25	Nono	200			Completio	on Notes
	and the second	2.0	None	300			A Dellharing	and a local second second second
_					9' 6"-14' -	Dark Brown Silty Dry Sand.	1. Soll boring Using Air F	j was plugged same day. Rotary drilling Technique.
	and the second second						o oning i mi	terary annual rearrangeer
-	100 million (100 million)						2. 10 Cubic F	eet of Bentonite.
- 15'		2.0	None	336				
-	Same manufacture and	1111			14'-18' - 1	Light Tanish White Sandy Dry Clay	3. 0.0	Indicates Samples submitted
-							to Laborat	ory for analysis.
-	111							
-	111	(10)	None	111				
- 20'	(11)	1.0	None	144				
	111							
E	111				18'-25' - 1	Light Tan Silty Dry Sand.		
	111							
- 25'	111	1.5	None	120				
	11				25' 28'	Light Tap Silty Dry Sand with Pehr	ble	
-	11,1				25-20 -	Sized Nodules.	ole.	
-	////							
					28'-30' -	Red Dry Coarse Sand with Fine Pe	ebble Rocks.	
- 30'	677	1.6	None	232	30'-32' -	White Slightly Damp Silty Sand/Ca	aliche	
	11	16	None	172		with Fine Pebble Sized Grains.		
-	20202	1.0	None	000	32'-32' 6"	- White Hard Dry Caliche with Ro	ounded Gravel.	
-		5 1.7	None	232	32' 6"-33'	- Light Tan very Moist Poorly Sort	ted Sand	
L 25'					52 0 00	with Cobble Rocks.		
- 35				1			and the second second	
LEGEND:						SB-1	Scale: None	
					18. A. P. 19.	Soil Boring Log Detail	CAD By: TA	
						ETC Field Services	Checked By: NG	
						Boyd 4" Historical (East)	Draft: September 21, 2016	2057 Commerce Drive
							Lat. N 32.371914°, Long. W 103.126890°	Midland, Texas 79703 432 520 7720
					the second second second second	Lea County, NW	TRC Proj. No.: 242316	102.020.1120

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														
						METHODS:	SW 846-8021b				METHOD: S	SW 8015M		E 300.1
	SAMPLE LOCATION	SAMPLE	SOIL			FTHVI		0	TOTAL	ТРН	ТРН	TPH	TOTAL	
	SAMPLE LOCATION	DATE	STATUS	BENZENE	TOLUENE	DENZENE	WVI ENES	VVI ENE	DTEV	GRO	DRO	ORO	TPH	CHLORIDE
		1				DEILEILE	AILENES	AILENE	DIEA	C6-C12	C12-C28	C28-C35	C6-C35	
	**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
1	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
52.1	*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	-	-	-	-	-	- 1	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	0.059	0.5736	444	1,920	26	2,390.1	32.3
	Sample -10 @ 2.5'	04/05/16	Excavated	< 0.00149	< 0.00199	< 0.00199	< 0.00199	< 0.00298	< 0.00298	<15.0	<15.0	<15.0	<15.0	40.9
	*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													
					METHODS:	SW 846-8021b		METHOD: S	SW 8015M		E 300.1		
SAMPLE LOCATION	SAMPLE	SOIL			FTHVI-	mn	0	TOTAL	TPH	TPH	TPH	TOTAL	
SAMI LE LOCATION	DATE	STATUS	BENZENE	TOLUENE	BENZENE	XVI ENES	VUENE	BTEX	GRO	DRO	ORO	TPH	CHLORIDE
					DENZENE	ATLENES	ATLENE	DIEA	C6-C12	C ₁₂ -C ₂₈	C28-C35	C6-C35	
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														
					METHODS:	SW 846-8021b				METHOD: S	SW 8015M		E 300.1	
SAMPLE LOCATION	SAMPLE DATE	SOIL STATUS	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o- Xylene	TOTAL BTEX	TPH GRO C ₆ -C ₁₂	ТРН DRO C ₁₂ -С 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	
	Contraction of the	1.11	1212 1 22 1		State of the			A CONTRACTOR	Carlos Maria		and all the set		marile and a	

** = 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 will be submitted under separate cover.



Photographic Documentation

Client: ETC Field Services, LLC Project Name: Boyd 4 Inch Historical East **Prepared by:** TRC Environmental Corp. **Location:** Lea County, NM



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)





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:

08-FEB-16

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,

Kurs hoah

 Kelsey Brooks

 Project Manager

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Sample Cross Reference 524056

TRC Solutions, Inc, Midland, TX Boyd 4 Inch Historical

Compared and the second second

Sample Id

Matrix

Date Collected

Sample Depth

Lab Sample Id



CASE NARRATIVE



Client Name: TRC Solutions, Inc Project Name: Boyd 4 Inch Historical

Project ID: ETC Field Services Work Order Number(s): 524056 Report Date: 08-FEB-16 Date Received: 02/01/2016

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



TRC Solutions, Inc, Midland, TX Project Name: Boyd 4 Inch Historical



Project Id:ETC Field ServicesContact:Curt StanleyProject Location:Lea County, NM

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

	Lab Id:	524056-001		524056-0	002	524056-	003	524056-004		524056-	005	524056-006		
Amelusia Descreted	Field Id:	Floor-1@	0 10'	SSW-1 @	2 8'	NSW-1	@ 7'	Floor-2 @	æ 4'	SSW-2 (a) 3'	NSW-2 @	0, 2.5'	
Analysis Kequestea	Depth:	10 ft		8 ft		7 ft		4 ft		3 ft		2.5 ft	t	
	Matrix:	SOIL		SOIL		SOII	_	SOIL		SOIL		SOIL	_	
	Sampled:	Jan-29-16 1	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	Feb-04-16 16:31		Feb-03-16 21:01		21:18	Feb-04-16	16:48	Feb-03-16	21:56	Feb-03-16	6 22:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
zene		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-04-162	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-07-162	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	

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

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Huns Boah

Kelsey Brooks Project Manager

Page 5 of 12



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
- PQL Practical Quantitation Limit MQL Method Quantitation Limit

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

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LOD Limit of Detection

LOQ Limit of Quantitation

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9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr Suite 102, Tempe AZ 85282	(602) 437-0330	



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



Project ID: ETC Field Services

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

BRL - Below Reporting Limit



524056

Work Order # :

Form 3 - MS / MSD Recoveries

Project Name: Boyd 4 Inch Historical



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.

Xer	nco Labora	tories										СН	AIN	OF	= Cl	US	TODY	RE	co	RD	AN	DA	NA	LY	SIS	RE	QUE	ST						
The Env	vironmental Lab of Texas								12	2600 V dessa	Nes , Te	t I-	20 E s 79	ast 765									P	hon Fax:	e: 4 4	32-5 32-5	63-1 63-1	800 713						
,	Project Manager:	curt Stanley																Proj	ect	Nam	e:_		-		ET	CF	ield	Ser	vice	S				
	Company Name T	RC Solutions, Inc										_				_			Pro	ject	#:		_		Boy	d 4	nch	His	torie	cal			_	
	Company Address: 2	057 Commerce						_										P	37	t Lo	c:_					Lea	Cour	ity, N	M				_	
	City/State/Zip: <u>N</u>	lidland, TX 79703					-					_						5	3	PO	#:												-	000
	Telephone No: 4	32.520.7720	A	L	/	Fax No:		432	2.52	20.770)1					_	Re	ort		nat:	1		Stan	darc	1	Ľ	TR	RP		0,	NPD	ES		nal 1
	Sampler Signature:	Alla	l	~		e-mail:			C	dstan	ley(@t	rcso	lutio	ons	.00	m		9							-					_			iI.
(lab uso	ophi		, (1				ľ	OSE	e.slad		Den	nerg	ytra	inst	er.c	com		-1		-	TCI	P:	Ana	lyze	For:	Т				-	2		
(iab use	50405L								_							_	Mak			_	-	TOT	AL:	-	-	×	1					1 72 4		
2 ORDER	R#: 0 ~ 10 0 4							-	F	Prese	Vallo	in a	# OF C	Jonta			Soll/Solid	city Other	15M 8015	TX 1006	(V)	(Alinity)		I Cr Pb Hg Se		ALEX 8260			-			hedule) 24, 4]	
uB # (lab use on			sginning Depth	nding Depth	Date Sampled	Time Sampled	old Filtered	tal #. of Containen	8	INO3	CI	1 ₂ SO4	HOH	la ₂ S ₂ O ₃	tone	Other (Specify)	W=Drinking Water SL W = Groundwater S=	P=Non-Potable Spe	PH: 418.1 801	PH: TX 1005	anons (ca, mg, na	nions (Cl, SO4, Alk	AR / ESP / CEC	etals: As Ag Ba Co	olatiles	TEX 8021B/5030 c	0	.O.R.M.	hlorides E 300.			USH TAT (Pre-Se	tandard IAI	o 11 of 12
2	FIELD	CODE	- m	ū	1/20/2016	1400	Ē	1	Ê		-	-	-	-	-	-	0 0	2	F	F		2	0	2	> 0		2	Z	X		ť	X O	2 X	Ded
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	NSW-	107	-	-	1/29/2016	1410	+	1	Ê		+					-	So		x	+	+	+	1	+	+	X			x	\vdash	+		x	
	Floor-	2@4'	-	-	1/29/2016	1430	T	1	×		1						So	1	x	1	1	1	1	1	T	X	T		x		T	;	x	
	SSW-	2 @ 3'			1/29/2016	1435	T	1	x	(So	1	x							X			x		T	3	x	
	NSW-2	2 @ 2.5'			1/29/2016	1440		1	×	(-						So	1	x	+	-	-	+	+	+	X	-		X		+	;	×	
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Special Bill to R	Instructions:	I Dotd		ime	Peceived by											Da	te		ime	LSV	abo am	ple o	Con	Corr taine of He	ers in eadsp	nts: ntact	?			Y Y Y		2 2 2	-	
Retinquis	- Shill	Date	16	<u>38</u>	Received by:	7 All	1	1	2	-					2	1) Ba	l6 te	16	3 Time	800	ust am	ody ody ple l oy Sa	sea sea Han ampli	Is or Is or Id De Ier/C	lient l	taine ler(s ed Rep. PS	r(s)) ? DH	IL.	Fed	Y Y Y Ex	h h h h	N N Star		
Relinquis	shed by:	Date	T	me	Received by ELC	OT:	-	1	_							Da	te		Time	T	em	pera	iture	Up	on R	ecei	pt:	-	-	0	9	C		



XENCO Laboratories **XENCO Laboratories** ABORATORIES Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc	Acceptable Temperature Range: 0 - 6 degC
Date/ Time Received: 02/01/2016 04:38:00 PM	Air and Metal samples Acceptable Range: Ambient
Work Order #: 524056	Temperature Measuring device used : r8
Sample Recei	pt 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 h	bubble)? N/A
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? E samples for the analysis of HEM or HEM-SGT which are verifi analysts.	Except for N/A ied by the
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnA	Ac+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

Checklist reviewed by: Mms Hoah Kelsey Brooks

Date: 02/02/2016

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,

Huns Boah

 Kelsey Brooks

 Project Manager

 Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies.

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

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San	np	le	Id

Sample-1 BOE
Sample-1 BOE
Sample-1 BOE
Sample-2 BOE
Sample-2 BOE
Sample-2 BOE
Sample-3
Sample-3
Sample-3
Sample-4
Sample-4
Sample-4
Sample-5
Sample-5
Sample-5
Sample-6 Surface
Sample-7 Surface
Sample-8 Surface

Sample Cross Reference 526570



TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical

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



CASE NARRATIVE



Client Name: TRC Solutions, Inc Project Name: Energy Transfer Boyd 4" Historical

Project ID: Work Order Number(s): 526570 Report Date: 15-MAR-16 Date Received: 03/09/2016

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.



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

	Lab Id:	526570-001		526570-0	002	526570-0	003	526570-	004	526570-0	005	526570-0	006
Anglusia Demonstrad	Field Id:	Sample-1	BOE	Sample-1	BOE	Sample-1	BOE	Sample-2	BOE	Sample-2 I	BOE	Sample-2	BOE
Analysis Kequestea	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	mg/kg RL i		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	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
SUB: TX104704215	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

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

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Huns Boah

Kelsey Brooks Project Manager

Page 5 of 25



TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical



Project Id: Contact: N Project Location: Le

Nikki Green Lea County, NM Date Received in Lab: Wed Mar-09-16 04:30 pm Report Date: 15-MAR-16 Project Manager: Kelsey Brooks

	Lab Id:	526570-0	007	526570-0	008	526570-	009	526570-	010	526570-0	011	526570-	012
Anglusis Paguastad	Field Id:	Sample	-3	Sample	-3	Sample	-3	Sample-4		Sample-4		Sample	e-4
Analysis Kequestea	Depth:	2 ft		6 ft		10 ft		2 ft		6 ft		10 ft	1
	Matrix:	SOIL		SOII	2								
	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										
	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										
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	Extracted:	Mar-11-16	17:00										
SUB: TX104704215	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										
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										
	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										
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
C6-C10 Gasoline Range Hydrocarbons C10-C28 Diesel Range Hydrocarbons C28-C35 Oil Range Hydrocarbons Total TPH		ND	15.0	27.3	15.0	20.6	14.9	ND	15.0	ND	15.0	28.1	15.0

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

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Huns Boah

Kelsey Brooks Project Manager



TRC Solutions, Inc, Midland, TX

Project Name: Energy Transfer Boyd 4" Historical



Project Id: Nikki Green **Contact: 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

	Lab Id:	526570-0)13	526570-0	014	526570-	015	526570-0	16	526570-0)17	526570-0	018
Analysis Progressiad	Field Id:	Sample-	-5	Sample	-5	Sample-5		Sample-6 Surface		Sample-7 Surface		Sample-8 Surface	
Anulysis Requested	Depth:	2 ft		6 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	Extracted:	Mar-11-16	17:00	Mar-11-16	17:00	Mar-11-16	17:00	Mar-11-16	7:00	Mar-11-16	17:00	Mar-11-16	17:00
SUB: TX104704215	Analyzed:	Mar-11-16	22:54	Mar-11-16	23:08	Mar-11-16	23:22	Mar-11-16 2	3:37	Mar-11-16 2	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	1:00	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 (7:03	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

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

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

Kuns Boah

Kelsey Brooks Project Manager

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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

PQL Practical Quantitation Limit MQL Method Quantitation Limit

DL Method Detection Limit

NC Non-Calculable

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

LOD Limit of Detection

LOQ Limit of Quantitation

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

	Phone	Fax
4147 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr Suite 102, Tempe AZ 85282	(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Energy Transfer Boyd 4" Historical

Work Orders : 526 Lab Batch #: 990033	5570, Sample: 526570-001 / SMP	Batc	Project ID: h: 1 Matrix:	Soil					
Units: mg/kg	Date Analyzed: 03/10/16 14:43	16 14:43 SURROGATE RECOVERY STUDY							
TPF	I 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	Batc	h: 1 Matrix:	Soil					
Units: mg/kg	Date Analyzed: 03/10/16 16:06	SURROGATE RECOVERY STUDY							
TPH	I 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	Batc	h: 1 Matrix:	Soil					
Units: mg/kg	Date Analyzed: 03/10/16 16:34	SURROGATE RECOVERY STUDY							
TPF	I 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	Batc	h: 1 Matrix:	: Soil	11				
Units: mg/kg	Date Analyzed: 03/10/16 17:02	SURROGATE RECOVERY STUDY							
TPF	I 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	Batc	h: 1 Matrix:	Soil					
Units: mg/kg	Date Analyzed: 03/10/16 18:01	SU	JRROGATE R	ECOVERY	STUDY				
TPH	I By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1-Chlorooctane	z mary tos	122	00.7	122	70,120				
o Terphenyl		57.0	99.7	123	70-130				
0-replicityi		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, Lab Batch #: 990033 Sample: 526570-007 / SMI	Bate	Project ID h: 1 Matrix	: Soil							
Units: mg/kg Date Analyzed: 03/10/16 18:29	SU	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 / SMI	P Bate	h: 1 Matrix	: Soil							
Units: mg/kg Date Analyzed: 03/10/16 18:57	SU	SURROGATE RECOVERY STUDY								
TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags					
1-Chlorooctane	100	00.8	100	70.130						
o_Tembenyl	54.4	99.8	109	70-130						
Lab Batch #: 990033 Sample: 526570-009 / SMI	D Bate	47.9 h• 1 Matriv	· Soil	70-135						
Units: mg/kg Date Analyzed: 03/10/16 19:25	SI	RROGATE R	ECOVERY	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 / SMI	Bate	h: 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 / SMI	P Bate	h: 1 Matrix	: Soil							
Units: mg/kg Date Analyzed: 03/10/16 20:51	SU	RROGATE R	ECOVERY	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						

* 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.


Project Name: Energy Transfer Boyd 4" Historical

Work Orders : 526570, Lab Batch #: 990033 Sample: 526570-012 / SMP	Batc	Project ID h: 1 Matrix	: : Soil		
Units: mg/kg Date Analyzed: 03/10/16 21:20	SU	RROGATE R	ECOVERY	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	Bate	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 03/10/16 21:50	SU	RROGATE R	ECOVERY	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	Bate	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 03/10/16 22:18	SU	RROGATE R	ECOVERY	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	Batc	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 03/10/16 22:47	SU	RROGATE R	ECOVERY	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	Bate	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 03/11/16 00:14	SU	RROGATE R	ECOVERY	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	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: Energy Transfer Boyd 4" Historical

Units: mg/kg Date Analyzed: 03/11/16 OT:03 SURROGATE RECOVERY STUDY TPH By SW8015B Mod Amount [A] True Analytes Amount [B] True Meeovery (MR) Control Limits 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 Amount [A] True Amount [B] Recovery %R Control Limits 1-Chlorooctane 108 99.8 108 70-130 o-Terphenyl 50.5 49.9 101 70-135 Lab Batch #: 90116 Sample: 526570-001 / SMP Batch: 1 Matrix: Soil Units: mg/kg Date Analyzed: 03/11/16 7:38 SURROGATE Recovery MRCOVERY STUDY 1.4-Difduoroben	Work Ord Lab Batch #	lers: 52657	70, Sample: 526570-016 / SMP	Batch	Project ID:	: Soil				
TPH By SW8015B Mod Analytes Amount Found [A] True Amount [B] Recovery % (D) Control Limits %R 1-Chlorooctane 111 99.8 111 70-130 e-Terphenyl 52.4 49.9 105 70-135 Lab Batch #: 99033 Sample: 526570-017 / SMP Batch: 1 Matrix: Soil Units: mg/g Date Analyzed: 03/11/16 07:29 SURROGATE RECOVERY STUDY TPH By SW8015B Mod Amount [A] True Found [A] Matrix: Soil Control Manount [B] Control Manount [B]	Units:	mg/kg	Date Analyzed: 03/11/16 07:03	SURROGATE RECOVERY STUDY						
1-Chlorooctane 111 99.8 111 70-130 o-Terphenyl 52.4 49.9 105 70-135 Lab Batch #: 90033 Sample: 52.6570-017 / SMP Batch: 1 Matrix: Soil Units: mg/kg Date Analyzed: 03/11/16 07:29 SURROGATE Recovery Control Inits: mg/kg Date Analyzed: 03/11/16 07:29 SURROGATE Recovery Control 1-Chlorooctane 108 99.8 108 70-130 O- 0-Terphenyl 50.5 49.9 101 70-135 Imits Lab Batch #: 99116 Sample: 526570-001 / SMP Batch: 1 Matrix: Soil Units: mg/kg Date Analyzed: 03/11/16 07:38 SURROGATE Recovery Control 1.4-Difluorobenzene 0.0262 0.0300 87 80-120 Lab Batch #: 90116 Sample: S26570-007 / SMP Batch: 1 Matrix: Soil		TPH F	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
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 Amount [A] Amount [B] True Amount [B] Recovery %R [D] Control Limits %R 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 Control Limits %R [D] Control Limits %R [D] Control Limits %R [D] %R Control Limits %R [D] %R Control Limits %R [D] Control Limits %R [D] %R Control Limits %R [D] %R Control Limits %R [D] %R Control Limits %R [D] %R %R <td>1-Chlorooctar</td> <td>ne</td> <td></td> <td>111</td> <td>99.8</td> <td>111</td> <td>70-130</td> <td></td>	1-Chlorooctar	ne		111	99.8	111	70-130			
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 Amount [A] True [B] Recovery %R Control Limits %R 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 Control BTEX by EPA 8021B Amount Found [A] True Amount [B] Recovery %R Control Limits %R 1.4-Difluorobenzene 0.0262 0.0300 87 80-120 Lab Batch #: 990116 Sample: Sample: Surroof Amount Found [A] Recovery [D] Control 1.4-Difluorobenzene 0.0262 0.0300 87 80-120 Lab Batch #: 990116 Sample: Surroof ATE RECOVERY STUDY Matrix: mount [A	o-Terphenyl			52.4	49.9	105	70-135			
Units: mg/kg Date Analyzed: 03/11/16 07:29 SURROGATE RECOVERY STUDY TPH By SW8015B Mod Amount [A] True Amount [A] Recovery [B] Control Limits %R 1-Chlorooctane 108 99.8 108 70-130 o-Terphenyl 50.5 49.9 101 70-135 Lab Batch #: 99.16 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 Amount Found [A] True Amount [B] Recovery %R Control Limits 1.4-Difluorobenzene 0.0262 0.0300 87 80-120 Lab Batch #: 90116 Sample: 526570-007 / SMP Batch: 1 Matrix: Soil I.4-Difluorobenzene 0.0260 0.0300 87 80-120 Lab Batch #: 90116 Sample: 526570-007 / SMP Batch: 1 Matrix: Soil Units: mg/kg Date Analyzed: 03/11/16 07:55 SURROGATE RECOVERY STUDY Lab Batch #: 90033 Sample: 526570-005 / SMP Batch: 1 Matrix: Soil <td< td=""><td>Lab Batch #</td><td>: 990033</td><td>Sample: 526570-017 / SMP</td><td>Batch</td><td>: 1 Matrix</td><td>: Soil</td><td></td><td></td></td<>	Lab Batch #	: 990033	Sample: 526570-017 / SMP	Batch	: 1 Matrix	: Soil				
TPH By SW8015B Mod Amount [A] True Amount [A] True Amount [B] Recovery % R Control Limits % R 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 Amount [A] True Amount [B] Recovery % R (D] Control Limits % R 1.4-Difluorobenzene 0.0262 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 Amount [A] True Amount [A] Recovery % R [D] Control Limits % R 1.4-Difluorobenzene 0.0284 0.0300 95 80-120 Lab Batch #: 990033 Sample: 526570-005 / SMP Batch: 1 Matrix: Soil 1.4-Diflu	Units:	mg/kg	Date Analyzed: 03/11/16 07:29	SUI	RROGATE R	ECOVERYS	STUDY			
Indity Co Indity Co 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 Amount Found [B] True Amount [B] Recovery %R Control Limits 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 Amount [A] True Amount [A] Recovery [D] Control Limits 1.4-Difluorobenzene 0.0284 0.0300 95 80-120 1.4-Difluorobenzene 0.0284 0.0300 100 80-120 1.4-Bromofluorobenzene 0.0301 0.0300 100		TPH I	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
Ites 10s 93.8 10s 10s </td <td>1-Chlorooctar</td> <td>ne</td> <td></td> <td>108</td> <td>00.8</td> <td>108</td> <td>70-130</td> <td></td>	1-Chlorooctar	ne		108	00.8	108	70-130			
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 Amount [A] True [B] Recovery %R Control Limits %R 1.4-Diffuorobenzene 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 Control BTEX by EPA 8021B Amount Found [A] True [B] Recovery [D] Control Limits BTEX by EPA 8021B Amount Found [A] True [B] Recovery %R Control Limits 1.4-Difluorobenzene 0.0284 0.0300 95 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 Control Limits TPH By SW8015B Mod Amount Found [A] True Amount Found [A] <	o-Terphenyl			50.5	40.0	100	70-135			
Lab Batch if Profile Date Analyzed: 03/11/16 07:38 SURROGATE RECOVERY STUDY BTEX by EPA 8021B Amount [A] True [B] Recovery %B Control Limits 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 Amount [A] True Amount [A] Recovery %R Control Limits BTEX by EPA 8021B Amount [A] True [B] Recovery %R Control Limits 1.4-Difluorobenzene 0.0284 0.0300 95 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 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 Amount Found [A] True Faount [A]	Lab Batch #	990116	Sample: 526570-001 / SMP	Batch	· 1 Matrix	· Soil	70-155			
BTEX by EPA 8021B AnalytesAmount Found [A]True Amount [B]Recovery %RControl Limits %R1,4-Difluorobenzene0.02620.03008780-1204-Bromofluorobenzene0.02600.03008780-120Lab Batch #: 990116Sample: 526570-007 / SMPBatch:1Matrix: SoilUnits:mg/kgDate Analyzed: 03/11/16 07:55SURROGATE RECOVERY STUDYBTEX by EPA 8021B AnalytesAmount [A]True Amount [B]Recovery %RControl Limits %R1,4-Difluorobenzene0.02840.03009580-120Lab Batch #: 990033Sample: 526570-005 / SMPBatch:1Matrix: SoilLab Batch #: 990033Sample: 526570-005 / SMPBatch:1Matrix: SoilUnits:mg/kgDate Analyzed: 03/11/16 08:00SURROGATE RECOVERY STUDYTPH By SW8015B ModAmount Found [A]True Amount [B]Control Limits %R	Units:	mg/kg	Date Analyzed: 03/11/16 07:38	SUI	RROGATE R	ECOVERY S	STUDY			
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 Amount Found [A] True Amount [B] Recovery %R [D] Control Limits %R 1,4-Difluorobenzene 0.0284 0.0300 95 80-120 4-Bromofluorobenzene 0.0284 0.0300 95 80-120 1,4-Difluorobenzene 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 Amount Found [A] True Amount [A] Control Limits %R Limits %R		BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
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 Amount Found [A] True [B] Recovery %R [D] Control Limits 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 Amount [A] True Amount [A] Recovery [B] %R %R Control Limits %R	1,4-Difluorob	enzene		0.0262	0.0300	87	80-120			
Lab Batch #: 990116Sample: 526570-007 / SMPBatch:1Matrix: SoilUnits:mg/kgDate Analyzed: 03/11/16 07:55SURROGATE RECOVERY STUDYBTEX by EPA 8021BAmount Found [A]True [B]Recovery %R [D]Analytes0.02840.03009580-1201,4-Difluorobenzene0.02840.03009580-1204-Bromofluorobenzene0.03010.030010080-120Lab Batch #:990033Sample: 526570-005 / SMPBatch:1Matrix: SoilUnits:mg/kgDate Analyzed: 03/11/16 08:00SURROGATE RECOVERY STUDYTPH By SW8015B ModAmount Found [A]True (B]Recovery %RControl Limits %R	4-Bromofluor	obenzene		0.0260	0.0300	87	80-120			
Units: mg/kg Date Analyzed: 03/11/16 07:55 SURROGATE RECOVERY STUDY BTEX by EPA 8021B Amount Found [A] True Amount [B] Recovery %R Control Limits %R Analytes 0.0284 0.0300 95 80-120 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 Amount [A] True Amount [A] Control Limits %R Control Limits %R	Lab Batch #	: 990116	Sample: 526570-007 / SMP	Batch	: 1 Matrix	: Soil				
BTEX by EPA 8021BAmount Found [A]True Amount [B]Control Limits %RAnalytes	Units:	mg/kg	Date Analyzed: 03/11/16 07:55	SU	RROGATE R	ECOVERY	STUDY			
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 Amount Found [A] True [B] Recovery %R Control Limits %R		BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
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 Amount Found [A] True [B] Recovery %R Control Limits %R	1,4-Difluorob	enzene		0.0284	0.0300	95	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 Amount Found [A] True [B] Recovery %R Control Limits %R	4-Bromofluor	obenzene		0.0301	0.0300	100	80-120			
Units: mg/kg Date Analyzed: 03/11/16 08:00 SURROGATE RECOVERY STUDY TPH By SW8015B Mod Amount Found [A] True Amount [B] Control binits %R	Lab Batch #	: 990033	Sample: 526570-005 / SMP	Batch	: 1 Matrix	: Soil				
TPH By SW8015B Mod Amount Found True Amount Control Limits [A] [B] %R %R	Units:	mg/kg	Date Analyzed: 03/11/16 08:00	SU	RROGATE R	ECOVERY	STUDY			
Analytes [D]		ТРН І	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chlorooctane 96.9 100 07 70-130	1-Chlorooctar	ne		96.9	100	97	70-130			
0-Tembervl 56.5 50.0 112 70.125	o-Terphenyl			56.5	50.0	112	70-130			

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: Energy Transfer Boyd 4" Historical

Work Orders : 526570, Lab Batch #: 990116 Sample: 526570.008 / SMP	Datah	Project ID	. Soil						
Units: mg/kg Date Analyzed: 03/11/16 08:11	SUI	RROGATE R	ECOVERY S	STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	True mount [B] %R [D] Control Limits %R						
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	00 120					
Units: mg/kg Date Analyzed: 03/11/16 08:28	SUI	RROGATE R	ECOVERY	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	SUI	RROGATE R	ECOVERY	ERY 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	SUI	RROGATE R	ECOVERY	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	SUI	RROGATE R	ECOVERY	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



Project Name: Energy Transfer Boyd 4" Historical

Work Orde Lab Batch #:	rs: 52657 990116	70, Sample: 526570-014 / SMP	Batch	Project ID	: Soil		
Units:	mg/kg	Date Analyzed: 03/11/16 09:34	SU	RROGATE R	ECOVERY S	STUDY	
	rs : 5265 990116 mg/kg BTE 2ene enzene 990116 mg/kg BTE 2ene enzene 990191 mg/kg BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorober	zene		0.0246	0.0300	82	80-120	
4-Bromofluorob	enzene		0.0286	0.0300	95	80-120	
Lab Batch #:	990116	Sample: 526570-013 / SMP	Batch	n: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 03/11/16 09:50	SU	RROGATE R	ECOVERY S	STUDY	
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorober	zene		0.0291	0.0300	97	80-120	
4-Bromofluorol	enzene		0.0297	0.0300	99	80-120	
Lab Batch #:	990191	Sample: 526570-015 / SMP	Batch	n: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 03/11/16 12:06	SU	RROGATE R	ECOVERY S	STUDY	
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorober	zene		0.0290	0.0300	97	80-120	
4-Bromofluorol	benzene		0.0296	0.0300	99	80-120	
Lab Batch #:	990191	Sample: 526570-003 / SMP	Batch	n: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 03/11/16 17:50	SU	RROGATE R	ECOVERY	STUDY	
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorober	zene		0.0244	0.0300	81	80-120	
4-Bromofluorol	benzene		0.0251	0.0300	84	80-120	
Lab Batch #:	990191	Sample: 526570-006 / SMP	Batch	n: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 03/11/16 18:06	SU	RROGATE R	ECOVERY S	STUDY	
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorober	izene		0.0271	0.0300	90	80-120	
4-Bromofluorok	enzene		0.0347	0.0200	116	90.120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: Energy Transfer Boyd 4" Historical

Work Or Lab Batch	ders: 52657 #: 990191	70, Sample: 526570-005 / SMP	Batch	Project ID: 1 Matrix:	Soil		
Units:	mg/kg	Date Analyzed: 03/11/16 18:23	SUI	RROGATE RI	ECOVERY	STUDY	
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluoro	benzene	-	0.0247	0.0300	82	80-120	
4-Bromoflue	orobenzene		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	SUI	RROGATE RI	ECOVERY	STUDY	
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluoro	benzene	5	0.0280	0.0300	93	80-120	
4-Bromoflue	orobenzene		0.0266	0.0300	89	80-120	
Lab Batch	#: 990191	Sample: 526570-004 / SMP	Batch	: 1 Matrix:	Soil	00 120	
Units:	mg/kg	Date Analyzed: 03/11/16 18:55	SUI	RROGATE RI	ECOVERY	STUDY	
	BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluoro	obenzene		0.0251	0.0300	84	80-120	
4-Bromoflue	orobenzene		0.0358	0.0300	119	80-120	
Lab Batch	#: 990033	Sample: 706222-1-BLK / BI	K Batch	: 1 Matrix:	Solid		
Units:	mg/kg	Date Analyzed: 03/10/16 13:16	SUI	RROGATE RI	ECOVERY	STUDY	
	ТРН І	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooct	ane		109	100	109	70-130	
o-Terphenyl	l		53.9	50.0	108	70-135	
Lab Batch	#: 990116	Sample: 706268-1-BLK / BI	K Batch	: 1 Matrix:	Solid		
Units:	mg/kg	Date Analyzed: 03/10/16 19:08	SUI	RROGATE RI	ECOVERY	STUDY	
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluoro	benzene		0.0274	0.0300	91	80-120	
4-Bromoflue	orobenzene		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



Project Name: Energy Transfer Boyd 4" Historical

Work Orders: 526570, Lab Batch #: 990191 Sample: 706321-1-	-BLK / BLK Batc	Project ID h: 1 Matrix	: Solid		
Units: mg/kg Date Analyzed: 03/11/16	11:50 SU	RROGATE R	ECOVERY	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	id DVERY STUDY Recovery %R [D] 80-120 90 80-120 91 80-120 91 80-120 91 80-120 id DVERY STUDY Recovery %R [D] 70-130 104 70-135 id DVERY STUDY Recovery %R [D] 80-120 93 80-120 98 80-120 98 80-120 98 80-120 98 80-120 98 80-120 98 80-120 98 80-120 99 80-120 106 80-120 106 80-120 106 80-120 106 80-120 106 80-120 107 STUDY Recovery %R [D] 99 80-120 106 80-120 107 STUDY Recovery %R [D] 99 80-120 106 80-120 106 80-120 106 80-120 107 STUDY Secovery %R [D] 99 80-120 107 STUDY Secovery %R [D] 90 Secovery %R [D] 90 Secov	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	
Lab Batch #: 990033 Sample: 706222-1-	-BKS / BKS Bate	h: 1 Matrix	: Solid		
Units: mg/kg Date Analyzed: 03/10/16	13:45 SU	RROGATE R	ECOVERY	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 Batc	h: 1 Matrix	: Solid		
Units: mg/kg Date Analyzed: 03/10/16	17:39 SU	RROGATE R	ID: trix: Solid RECOVERY STUDY Recovery %R [D] Control Limits %R 90 80-120 91 80-120 91 80-120 trix: Solid RECOVERY STUDY Recovery %R [D] 70-130 104 70-135 trix: Solid Recovery %R [D] 70-130 104 70-135 trix: Solid Recovery %R [D] %R 93 80-120 98 80-120 11mits %R 98 80-120 trix: Solid Recovery %R [D] %R 99 80-120 trix: Solid Recovery %R [D] %R 99 80-120 trix: Solid Recovery %R 101 99 80-120 trix: Solid Recovery %R 101 99 80-120 trix: Solid Recovery %R 101 99 80-120 trix: Solid Recovery %R 101 99 80-120 106 80-120 trix: Solid Recovery %R 101 99 80-120 106 80-120 trix: Solid Recovery %R 101 99 80-120 106 80-120 trix: Solid		
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		
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 Bate	h: 1 Matrix	: Solid		
Units: mg/kg Date Analyzed: 03/11/16	10:23 St	RROGATE R	ECOVERY	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 Bate	h: 1 Matrix	: Solid		
Units: mg/kg Date Analyzed: 03/10/16	14:14 SU	RROGATE R	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	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: Energy Transfer Boyd 4" Historical

Work Orders : 526570,) Potob	Project ID	Salid		
Units: mg/kg Date Analyzed: 03/10/16 17:55		DDOCATE D	ECOVEDV	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes	0.0295	0.0200	05	80.120	
4-Bromofluorohenzene	0.0285	0.0300	93	80.120	
Lab Batch #: 990191 Sample: 706321-1-BSD / BSI) Batch	• 1 Matrix	· Solid	00-120	
Units: mg/kg Date Analyzed: 03/11/16 10:40	SU	RROGATE R	ECOVERY S	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	00 120	
Units: mg/kg Date Analyzed: 03/10/16 15:11	SU	RROGATE R	ECOVERY	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	10155	
Units: mg/kg Date Analyzed: 03/10/16 18:19	SU	RROGATE R	ECOVERY	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	SU	RROGATE R	ECOVERY	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	0.0014				

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: Energy Transfer Boyd 4" Historical

Work Orders : 526570,		Project ID	:		
Lab Batch #: 990033 Sample: 526570-001 SD / 1	MSD Bate	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 03/10/16 15:39	SU	RROGATE R	ECOVERY	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 / 1	MSD Bate	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 03/10/16 18:36	SU	RROGATE R	ECOVERY	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
14-Difluorohenzene	0.0201	0.0200	100	80.120	
	0.0301	0.0300	100	80-120	
4-Bromonuorobenzene	0.0315	0.0300	105	80-120	
Lab Batch #: 990191 Sample: 526570-015 SD / 1	MSD Bate	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 03/11/16 11:13	SU	RROGATE R	ECOVERY	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	D	ate Prepar	ed: 03/10/20	16			Date A	nalyzed:	03/10/2016		
Lab Batch ID: 990116 Sample: 706268-1-H	BKS	Batch	h #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K/BLANK	SPIKE /]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
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-E	BKS	Batch	h #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE / 1	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	÷
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							Pro	ject ID:			
Analyst: DEP	D	ate Prepar	ed: 03/11/20	16			Date A	nalyzed:	03/11/2016		
Lab Batch ID: 990124 Sample: 700	5272-1-BKS	Batc	h #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K/BLANK	SPIKE /	BLANK	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
Inorganic Anions by EPA 300/300. Analytes	.1 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	D	Date Prepared: 03/10/2016 Date Analyzed: 03/10/2016							1		
Lab Batch ID: 990033 Sample: 706	5222-1-BKS	Batch	h #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /	BLANK	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
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	
And and a second s					-	1					-

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 II):				
Lab Batch ID: 990116	QC- Sample ID:	526061	-009 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed: 03/10/2016	Date Prepared:	03/10/2	016	An	alyst: I	PJB					
Reporting Units: mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
BTEX by EPA 8021B	Parent Sample Result	Spike	Spiked Sample Result	Spiked Sample %R	Spike	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD	Control Limits %R	Control Limits %RPD	Flag
Analytes	[A]	[B]		[D]	[E]		[G]		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
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	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed: 03/11/2016	Date Prepared:	03/10/2	016	An	alyst: F	ЪJВ					
Reporting Units: mg/kg		M	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY S	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	Х
Toluene	<0.00200	0.0998	0.0586	59	0.0992	0.0597	60	2	70-130	35	Х
Ethylbenzene	<0.00200	0.0998	0.0637	64	0.0992	0.0647	65	2	71-129	35	Х
m_p-Xylenes	<0.00200	0.200	0.135	68	0.198	0.137	69	1	70-135	35	Х
o-Xylene	<0.00299	0.0998	0.0680	68	0.0992	0.0672	68	1	71-133	35	Х

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 ApplicableN = 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 II	D:				
Lab Batch ID:	990124	QC- Sample ID:	526570	-001 S	Ba	tch #:	1 Matri	x: Soil				
Date Analyzed:	03/11/2016	Date Prepared:	03/11/2	016	An	nalyst: I	DEP					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Inorga	nic Anions by EPA 300/300.1	Parent Sample Bosult	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
	Analytes	[A]	Added [B]	[0]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
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	Ba	tch #:	1 Matri	x: Soil				
Date Analyzed:	03/11/2016	Date Prepared:	03/11/2	016	An	alyst: I	DEP					
Reporting Units:	mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Inorga	nic Anions by EPA 300/300.1	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]		[D]	[E]		[G]				
Chloride		102	488	592	100	488	594	101	0	80-120	20	
Lab Batch ID:	990033	QC- Sample ID:	526570	-001 S	Ba	tch #:	1 Matri	k: Soil		1.1.1		
Date Analyzed:	03/10/2016	Date Prepared:	03/10/2	016	An	alyst: A	ARM					
Reporting Units:	mg/kg		M	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Г	PH By SW8015B Mod	Parent Sample Result	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
	Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%к [G]	%	%K	%RPD	
C6-C10 Gasolin	e 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 $[D] = 100^{\circ}(C-A)/B$ Relative Percent Difference RPD = $200^{\circ}[(C-F)/(C+F)]$ 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 ApplicableN = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

The Envi	ironmental Lab of Tex	85							12 00	600 ies:	We sa, '	est l Texa	-20 as 7	Eas 976	5							F	Fax	: 4	432-	563-1 563-1	800 713					
	Project Manager:	Nikki Green						-								_	F	Proje	ct I	Vame		E	nerg	y Tr	rans	fer B	oyd	4" I	Histo	rical		
	Company Name	TRC Solutions, Inc											_					1	Pro	ect #	-											
	Company Address:	2057 Commerce																Pro	ojec	t Loc	:				Lea	Cour	nty, M	M				
	City/State/Zip:	Midland, TX 79703																		PO #	:											0
	Telephone No:	432 520 7720		1		Fax No		43	2 52	0 7	701						Rep	ort F	om	nat:		Sta	ndan	d	[ТЕ	RP				S	1.00
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	Sampler Signature	June	A	a	~	e-mail		-	rose	e.sla	ade	@e	nerg	gytr	ans	fer.	com	E		5	4	_	An	alyze	e For	:	_	_		T	1	
(lab use	only)	~																\mathbf{F}		1	TO	CLP: TAL:		-	+	-				72 hrs		
ORDER	1 2005 1	0			1		-	-	F	Pres	erva	tion &	# of	Con	ainer	S	Matro	K	Both		Γ		lg Se		nard	2020				14, 48,	\vdash	I
# (lab use only)			inning Depth	ing Depth	e Sampled	le Sampled	Filtered	#. of Containers		5		04	н	5 ₂ 0 ₅	e	er (Specify)	Drinking Water SL=Sludge Groundwater S=Soil/Solid	Ion-Potable Specify Other	0 MCINO 1.014	TX 1005 TX 100 ins (Ca. Mg. Na. K)	ns (Cl, SO4, Alkalinity)	/ ESP / CEC	ls: As Ag Ba Cd Cr Pb H	lles	ivolatiles	and in none in the	R.M.	orides E 300.0		H TAT (Pre-Schedule) 2	Idard TAT	23 of 25
LAB	FIE	LD CODE	Begi	Endi	Dat	1 L	Field	Total	8	Ň	ΗÇ	H2S	NaO	Naz	Non	ě.	BW=	N=dN	E I	Catio	Anior	SAR	Meta	Volat	Semi	RCI	N.O.	G	\square	RUS	Star	Page
	Sam	ple-1 BOE	2'		3/8/2016	1030		1	x	\vdash		1					Soil	+	×	-	-			-	2	<	-	×		+	×	-
	Sam	ple-1 BOE	8.5'		3/8/2016	1103	-	1	x		1						Soil	+	×	-	-			-	1	<	+	×	\vdash	+	x	
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	Sam	ple-2 BOE	2'		3/8/2016	1150		1	x								Soil	+	x						2	(x	\vdash	+	x	
	Sam	ple-2 BOE	4'		3/8/2016	1230		1	x		-						Soil	+	×	-				_		4	\vdash	x		+	x	
	Sam	ple-2 BOE	4.6'		3/8/2016	1245		1	x		-	-					Soil	+	×	-	+			-	-	4	-	x	\vdash	+	x	
	Sa	ample-3	2'		3/8/2016	1317	-	1	x	-	-	+					Soil	+	×	-	-			-	- '	4		x	\vdash	+	x	
	Sa	ample-3	6'		3/8/2016	1350		1	x	1							Soil	4	×	+	1			-	- '	4		x	\vdash	+	x	
	Sa	ample-3	10'		3/8/2016	1433		1	X	-	-	-					Soil	+	×	-	+			-	- 1	4		x	\vdash	+	x	
	Sa	ample-4	2'		3/8/2016	1501		1	X								Soil		x	-			600		1	(X			X	
Special Bill to Re	ose Slade at Energy T	ransfer. TPH Extended 3	35	me	Received by:	-100		_	1							Da	te	T	me		mple DCs l	Free on c	of H	ers l eads iner(intaci space (s)	?			Y Y Y	NNN		
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Xenco Laboratories

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUES

The Env	Ironmental Lab of Texas							120 Od	600 less	Wes a, Te	t I-20 exas) Ea	st 65								Pł	ax:	e: 4:	32-5 32-5	63-1 63-1	800 713					
	Project Manager: Nikki Green														_	Pre	oject	t Nar	ne:		Ene	ergy	Tra	ansf	er B	oyd	4 " ⊦	listo	rical		_
	Company Name TRC Solutions, Inc.			-											-		Pr	ojec	#:						_	_		_			_
	Company Address: 2057 Commerce									_					_	F	Proje	ect L	oc:_					Lea	Cour	nty, M	M		_		-
	City/State/Zip: Midland, TX 79703														_			PO	#:												000
	Telephone No: 432.520.7720	14	1		Fax No:		432	2.52	0.77	01						Repor	t For	ranat		🗆 s	tand	dard		C		RP	-		IPDE	S	nal 1.(
	Sampler Signature:	L	U	in	e-mail:			r	ngre	en@	trcs	olut	ion	S.COI	n	-	ŝ	5		-		1	-		_				_		Ξ
(lab use	only)			/			n	ose	e.sia		lene	ergy	tran	STEL	COII	V	E			TCL	P:	Ana	iyze	FOR:	T	Τ		Т	- 2		
ORDER	# 526570								Prese	ervatio	on & #	of Co	ontain	ers	M	atrix	58			TOTA	Li	8	+	0					48, 72	L	_
AB # (lab use only)	FIELD CODE	3eginning Depth	Ending Depth	Date Sampled	Time Sampled	ield Filtered	fotal #. of Containers	ke	HNOs	Ę	H ₂ SO ₄	NaCH	Narozus None	Other (Specify)	DW=Drinking Water SL=Studge	GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: 418.1 6015M 801	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (CI, SO4, Alkalinity)		Metals: As Ag Ba Cd Cr Pb Hg	Volaures Semivolatilae	BTEX 0218/030 or BTEX 826	RCI	N.O.R.M.	Chlorides E 300.1		RUSH TAT (Pre-Schedule) 24,	Standard TAT	age 24 of 25
	Sample-4	6'		3/8/2016	1536		1	x							1	Soil	x	İ						x	1		x			x	- 4
	Sample-4	10'		3/8/2016	1549		1	x							5	Soil	x							×			x			x	
	Sample-5	2'		3/8/2016	1601		1	x							5	Boil	x							×	:		x			x	
	Sample-5	6'		3/8/2016	1615		1	x							5	Soil	x							×			x			x	
	Sample-5	10'		3/8/2016	1645		1	x							5	Soil	x							×			x			x	
	Sample-6 Surface			3/8/2016	1650		1	x							5	Soil	x		_								x	_	_	x	
	Sample-7 Surface			3/8/2016	1655		1	x			-	-	-		5	Boil	x		_	+	+	-	-	-			x	-	+	x	4
	Sample-8 Surface		-	3/8/2016	1700		1	x			+	+	+	+	5	Soil	x		+	+	+	+	+	+	+	\vdash	x	+	+	×	-
												+									t		+								
Special Bill to R Relinquis Relinquis	Instructions: ose Slade at Energy Transfer TPH Exter de by: hed by:	ded 35	ime 30 ime	Received by: Received by	T Oli	1	2		2					3/9	ate //((ate		Tim 63 Tim	e () e	Labe Sam VOC Labe Cust Sam	ple C s Free els on ody s ody s ple H by Sa by Co	ry (cont ee o seal land mple	Com taine of He ntair is on is on d De er/Cli r?	iner(s con coo liver ient l	nts: ntact pace) ntaine ler(s red Rep. PS	? ? er(s)) ? DH	ĩL	Fedi	Y Y Y Y Y Y Ex L	N N N N N N N Sone S	tar	
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Pg 2 of 2



XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc	Acceptable Temperature R	ange: 0 - 6 degC
Date/ Time Received: 03/09/2016 04:30:00 PM	Air and Metal samples Acc	eptable Range: Ambient
Work Order #: 526570	Temperature Measuring de	evice used : r8
Sample Recei	ot 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 b	ubble)? N/A	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? E samples for the analysis of HEM or HEM-SGT which are verific analysts	xcept for N/A ed by the	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAd	c+NaOH? N/A	

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

Analyst:

PH Device/Lot#:

Date: 03/10/2016

Checklist completed by: Carley Owens Carley Owens Checklist reviewed by: Mmg Moah Kelsey Brooks

Date: 03/10/2016

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,

Ams Boah

 Kelsey Brooks

 Project Manager

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

 Certified and approved by numerous States and Agencies.

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

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



Sample Id

Sample -1 @ 21' T-SSW-1 @ 6' T-NSW-1@7' T-WSW-1 @11' Sample-2 @ 20' Sample-10 @ 2.5' T-SSW-2 @7' T-ESW-1 @ 10' T-ESW-1 @ 10' T-ESW-1 @ 16' T-NSW-2 @ 16' T-NSW-2 @ 16' T-SSW-2 @ 4' T-ESW-2 @ 4' T-ESW-3 @4' T-ESW-4 @ 4'

Sample Cross Reference 528239



TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	04-05-16 10:45	- 21 ft	528239-001
S	04-05-16 11:09	- 6 ft	528239-002
S	04-05-16 11:34	- 7 ft	528239-003
S	04-05-16 11:45	- 11 ft	528239-004
S	04-05-16 14:00	- 20 ft	528239-005
S	04-05-16 15:00	- 2.5 ft	528239-006
S	04-06-16 10:00	- 7 ft	528239-007
S	04-06-16 10:30	- 5 ft	528239-008
S	04-06-16 10:50	- 10 ft	528239-009
S	04-06-16 11:20	- 16 ft	528239-010
S	04-06-16 13:30	- 16 ft	528239-011
S	04-06-16 14:00	- 4 ft	528239-012
S	04-06-16 14:25	- 4 ft	528239-013
S	04-06-16 14:45	- 4 ft	528239-014
S	04-06-16 15:20	- 4 ft	528239-015





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 Collect	ted: 04.05.16 10	0.45	Date R	eceived: 04.08.	16 15.2	23
Analytical Method: Inorganic Anions by E	PA 300/300.1				Prep M	lethod: E300P		
Analyst: MNR		% Moist:			Tech:	MNR		
Seq Number: 992431		Date Prep: 0	4.13.16 16.00					
		Prep seq: 7	07674					
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 Mc	d				Prep M	ethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 992219		Date Prep: 0	4.11.16 15.00					
		Prep seq: 7	07587					
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 IPH	PHC635	ND		9.86	mg/kg	04.11.16 19:47	U	
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
1-Chlorooctane		107		70 - 1	30 %			
o-Terphenyl		110		70 - 1	35 %	0		
Analytical Method: BTEX by EPA 8021B					Prep M	ethod: 5030B		
Analyst: PIB		% Moist:			Tech	PIR		
Sea Number: 992159		Date Prep: 0	4 11 16 15 00		r con.	100		
seq realized system		Pren sea: 7	07546					
	CAS	Trep seq.	07510					DUE
Parameter	Number	Result	MQL	SDL	Units	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	1/9001-23-1	ND	0.00199	0.00169	mg/kg	04.11.16 18:18	U	1
Total Xylenes	1330-20-7	ND	0.00298	0.000840	mg/kg	04.11.10 18:18	U	1
Total BTEX	100-20-1	ND		0.000333	mg/kg	04.11.16.18.18	U	
a work for a field b		110		0.0000000	mg/ ng	57.11.10 10.10	0	
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
1,4-Difluorobenzene		108		80 - 1	20 %	5		
4-Bromofluorobenzene		92		80 - 1	20 %	5		





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 Collecte	ed: 04.05.16 1	1.09	Date R	eceived: 04.08.1	16 15.2	.3
Analytical Method: Inorganic Anions by E	EPA 300/300.1				Prep M	lethod: E300P		
Analyst: MNR		% Moist:			Tech:	MNR		
Seq Number: 992431		Date Prep: 04	4.13.16 16.00					
		Prep seq: 70	07674					
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 M	od				Prep M	lethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 992219		Date Prep: 04	4.11.16 15.00					
		Prep seq: 70	07587					
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	Uni	its Analysis	Date	Flag
1-Chlorooctane		101		70 - 1	30 %	Ď		
o-Terphenyl		104		70 - 1	35 %	Ď		
Analytical Method: BTEX by EPA 8021B					Prep M	ethod: 5030B		
Analyst: PJB		% Moist:			Tech:	PJB		
Sea Number: 992159		Date Prep: 04	11.16 15.00					
Seq realized system		Prep sea: 70)7546					
		and body.						Dil Fastan
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	DII Factor
Parameter Benzene	CAS Number 71-43-2	Result	MQL 0.00149	SDL 0.000333	Units mg/kg	Analysis Date 04.11.16 19:07	Flag U	1 l
Parameter Benzene Toluene	CAS Number 71-43-2 108-88-3	Result ND ND	MQL 0.00149 0.00198	SDL 0.000333 0.000992	Units mg/kg mg/kg	Analysis Date 04.11.16 19:07 04.11.16 19:07	Flag U U	1 1
Parameter Benzene Toluene Ethylbenzene	CAS Number 71-43-2 108-88-3 100-41-4	Result ND ND ND	MQL 0.00149 0.00198 0.00198	SDL 0.000333 0.000992 0.000486	Units mg/kg mg/kg mg/kg	Analysis Date 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07	Flag U U U	1 1 1
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	CAS Number 71-43-2 108-88-3 100-41-4 179601-23-1	Result ND ND ND	MQL 0.00149 0.00198 0.00198 0.00198	SDL 0.000333 0.000992 0.000486 0.00169	Units mg/kg mg/kg mg/kg mg/kg	Analysis Date 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07	Flag U U U U	1 1 1
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene	CAS Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Result ND ND ND ND	MQL 0.00149 0.00198 0.00198 0.00198 0.00298	SDL 0.000333 0.000992 0.000486 0.00169 0.000839	Units mg/kg mg/kg mg/kg mg/kg	Analysis Date 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07	Flag U U U U U	1 1 1 1 1 1
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Total Xylenes Total DTEX	CAS Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6 1330-20-7	Result ND ND ND ND ND	MQL 0.00149 0.00198 0.00198 0.00198 0.00298	SDL 0.000333 0.000992 0.000486 0.00169 0.000839 0.000839	Units mg/kg mg/kg mg/kg mg/kg mg/kg	Analysis Date 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07	Flag U U U U U U	1 1 1 1 1
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Total Xylenes Total BTEX	CAS Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6 1330-20-7	Result ND ND ND ND ND ND ND	MQL 0.00149 0.00198 0.00198 0.00198 0.00298	SDL 0.000333 0.000992 0.000486 0.00169 0.000839 0.000839 0.000839	Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Analysis Date 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07	Flag U U U U U U U U	1 1 1 1 1
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Total Xylenes Total BTEX Surrogate	CAS Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6 1330-20-7	Result ND ND ND ND ND ND	MQL 0.00149 0.00198 0.00198 0.00198 0.00298	SDL 0.000333 0.000992 0.000486 0.00169 0.000839 0.000839 0.000333 Limits	Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Analysis Date 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07	Flag U U U U U U U U	1 1 1 1 1 Flag
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Total Xylenes Total BTEX Surrogate 1,4-Difluorobenzene	CAS Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6 1330-20-7	Result ND ND ND ND ND ND ND ND ND	MQL 0.00149 0.00198 0.00198 0.00198 0.00298	SDL 0.000333 0.000992 0.000486 0.00169 0.000839 0.000839 0.000333 Limits 80 - 1	Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg Uni 20 %	Analysis Date 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07 04.11.16 19:07	Flag U U U U U U U Date	1 1 1 1 1 Flag





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 Collecte	ed: 04.05.16 1	1.34	Date R	eceived: 04.08.	16 15.2	23
Analytical Method: Inorganic Anions by E	PA 300/300.1				Prep M	ethod: E300P		
Analyst: MNR		% Moist:			Tech:	MNR		
Seq Number: 992431		Date Prep: 04	1.13.16 16.00					
		Prep seq: 70	07674					
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 Mc	d				Prep M	lethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 992219		Date Prep: 04	1.11.16 15.00					
		Prep seq: 70	07587					
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	PHC035	ND		9.87	mg/kg	04.11.10 21:38	U	
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
1-Chlorooctane		101		70 - 1	30 %	Ó		
o-Terphenyl		103		70 - 1	35 %	Ď		
Analytical Method: BTEX by EPA 8021B					Prep M	lethod: 5030B		
Analyst: PJB		% Moist:			Tech:	PJB		
Seq Number: 992159		Date Prep: 04	1.11.16 15.00					
		Prep seq: 70	07546					
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
Etnylbenzene m. p. Vylenes	100-41-4	ND	0.00200	0.000489	mg/kg	04.11.16 19:23	U	1
o-Xylene	95-47-6	ND	0.00200	0.000844	mg/kg	04.11.16 19:23	U	1
Total Xylenes	1330-20-7	ND	0.00233	0.000844	mg/kg	04.11.16 19:23	U	1
Total BTEX		ND		0.000335	mg/kg	04.11.16 19:23	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
1.4.Difluorohenzena		109		80 1	20 9/			0
4-Bromofluorobenzene		94		80 - 1	20 %	6		
		14		00 - 1	//	-		





TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical

Sample Id: T-WSW-1 @11'		Matrix:	Soil		Sample	e Depth: 11 ft		
Lab Sample Id: 528239-004		Date Collecte	ed: 04.05.16 1	1.45	Date R	eceived: 04.08.	16 15.2	23
Analytical Method: Inorganic Anions	by EPA 300/300.1				Prep M	lethod: E300P		
Analyst: MNR		% Moist:			Tech:	MNR		
Seq Number: 992431		Date Prep: 04	4.13.16 16.00					
		Prep seq: 70	07674					
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 SW8015	B Mod				Prep M	lethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 992219		Date Prep: 04	4.11.16 15.00					
		Prep seq: 70	07587					
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 Hydrocarbon	ns 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	Un	its Analysis	Date	Flag
1-Chlorooctane		116		70 - 1	130 %	0		
o-Terphenyl		118		70 - 1	135 %	6		
Analytical Method: BTEX by EPA 8	021B				Prep M	lethod: 5030B		
Analyst: PJB		% Moist:			Tech:	PJB		
Seq Number: 992159		Date Prep: 04	4.11.16 15.00					
		Prep seq: 70	07546					
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-Aylene Total Xylenes	1330 20 7	ND	0.00298	0.000839	mg/kg	04.11.16 19:40	U	1
Total RTEY	1550-20-7	ND		0.000839	mg/kg	04.11.10 19.40	U	
IUAIDIEA		ND		0.000333	mg/kg	04.11.10 19.40	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
1,4-Difluorobenzene		110		80 -	120 %	0		
4-Bromofluorobenzene		96		80 -	120 %	0		





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 Collecte	d: 04.05.16 14	1.00	Date Re	eceived: 04.08.1	6 15.2	3
Analytical Method: Inorganic Anions by E	PA 300/300.1				Prep M	ethod: E300P		
Analyst: MNR		% Moist:			Tech:	MNR		
Seg Number: 992431		Date Prep: 04	.13.16 16.00					
1		Prep seq: 70	7674					
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 Me	bd				Prep M	ethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Sea Number: 992219		Date Prep: 04	.11.16 15.00					
Seq Rumber. 772217		Pren sea: 70	7587					
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	Uni	its Analysis	Date	Flag
1-Chlorooctane		109		70 - 1	30 %	ò		
o-Terphenyl		103		70 - 1	35 %	þ		
Analytical Method: BTEX by EPA 8021B					Prep M	ethod: 5030B		
Analyst: PJB		% Moist:			Tech:	PJB		
Seq Number: 992159		Date Prep: 04	.11.16 15.00					
		Prep seq: 70	07546					
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 Aylenes	1330-20-7	0.374		0.000840	mg/kg	04.11.10.21:33		
I OTAL BIEA		0.574		0.000333	mg/kg	04.11.10 21:33		
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
1.4-Difluorobenzene		106		80 - 1	20 %	6		
4-Bromofluorobenzene		115		80 - 1	120 %	6		





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 Collecte	ed: 04.05.16 1	5.00	Date R	eceived: 04.08.1	6 15.2	.3
Analytical Method: Inorganic Anions by	EPA 300/300.1				Prep M	ethod: E300P		
Analyst: MNR		% Moist:			Tech:	MNR		
Seq Number: 992431		Date Prep: 04	1.13.16 16.00					
1		Prep seg: 70	07674					
	CAS	rrep seq.				Amelouis		Dil Fastan
Parameter	Number	Result	MQL	SDL	Units	Date	Flag	Dii Factor
Chloride	16887-00-6	40.9	10.0	1.70	mg/kg	04.13.16 23:03		5
Analytical Method: TPH By SW8015B M	Ind				Pren M	ethod: 1005		
Analyste APM	iou	% Moist			Tech.	APM		
See Number: 002210		Date Pren: 04	11 16 15 00		reen.	ARM		
Seq Number. 992219		Pren sea: 70)7587					
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	Uni	its Analysis	Date	Flag
1-Chlorooctane		111		70 - 1	30 %	6		
o-Terphenyl		113		70 - 1	35 %	5		
Analytical Method: BTEX by EPA 80211	В				Prep M	ethod: 5030B		
Analyst: PJB		% Moist:			Tech:	PJB		
Seq Number: 992159		Date Prep: 04	4.11.16 15.00					
		Prep seq: 70	07546					
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	
Surrogata		% Decovery		Limit	11-4	ite Analusia	Data	Flag
Surrogate		70 Recovery		Limits	Un	Analysis	Date	Flag
1,4-Difluorobenzene		110		80 - 1	20 %	Ď		
4-Bromofluorobenzene		98		80 - 1	20 %	D		





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 Collect	ed: 04.06.16 10	0.00	Date R	eceived: 04.08.	16 15.2	3		
Analytical Met	thod: Inorganic Anions by E	PA 300/300.1				Prep M	lethod: E300P				
Analyst:	MNR		% Moist:			Tech:	MNR				
Seq Number:	992431		Date Prep: 0	4.13.16 16.00							
			Prep seq: 7	07674							
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 Met	thod: TPH By SW8015B Mc	od				Prep M	lethod: 1005				
Analyst:	ARM		% Moist:			Tech:	ARM				
Seg Number:	992219		Date Prep: 0	4.11.16 15.00							
1			Prep sea: 7	07587							
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor		
C6-C10 Gasol	line Range Hydrocarbons	C6C10GRO	ND	15.0	9.86	mg/kg	04.11.16 23:30	U	1		
C10-C28 Di	esel Range Hydrocarbons	C10C28DRO	ND	15.0	9.86	mg/kg	04.11.16 23:30	U	1		
C28-C35 Oi	1 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	Uni	its Analysis	Date	Flag		
1-Chlorooct	ane		105		70 - 1	30 %	0				
o-Terphenyl	l		108		70 - 1	35 %	0				
Applution Mat	had DTEV by EDA 9021D					Dress M	lathed 5020D				
Analytical Met	INOU: DIEA UY EPA 8021D		0/ Maiste			Ргер М	lethod: 5050B				
Analyst:	ЫВ		70 IVIOISI:			Tech:	PJB				
Seq Number:	992159		Date Prep: 0	4.11.16 15.00							
			Prep seq: 7	07546							
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		
Ethylbenzen	ne	100-41-4	ND	0.00200	0.000489	mg/kg	04.11.16 20:12	U	1		
m_p-Xylene	es	179601-23-1	ND	0.00200	0.00170	mg/kg	04.11.16 20:12	U	1		
o-Xvlene		43-41-6	ND	0.00299	0.000844	mg/kg	04.11.16 20:12	U	1		
Tat-1 V-1		1220 20 7	NIC		0.000044	11	04 11 16 30.13	7 1			
Total Xylen	es	1330-20-7	ND		0.000844	mg/kg	04.11.16 20:12	U			
Total Xylen Total BTEX	es	1330-20-7	ND ND		0.000844 0.000335	mg/kg mg/kg	04.11.16 20:12 04.11.16 20:12	U U			
Total Xylen Total BTEX	es	1330-20-7	ND ND % Recovery		0.000844 0.000335 Limits	mg/kg mg/kg Uni	04.11.16 20:12 04.11.16 20:12 its Analysis	U U Date	Flag		
Total Xylend Total BTEX Surrogate 1,4-Difluoro	es	1330-20-7	ND ND % Recovery 106		0.000844 0.000335 Limits 80 - 1	mg/kg mg/kg Uni 20 %	04.11.16 20:12 04.11.16 20:12 its Analysis	U U Date	Flag		





TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical

Sample Id: T-ESW-1 @ 5'		Matrix:	Soil		Sample	e Depth: 5 ft		
Lab Sample Id: 528239-008		Date Collect	ed: 04.06.16 10	0.30	Date R	eceived: 04.08.	16 15.2	23
Analytical Method: Inorganic Anions by E	PA 300/300.1				Prep M	lethod: E300P		
Analyst: MNR		% Moist:			Tech:	MNR		
Seg Number: 992431		Date Prep: 0	4.13.16 16.00					
		Prep seq: 7	07674					
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
Applytical Methods TDU Dy SW/2015D M	.d				Drop M	lathadi 1005		
Analytical Method. TFH by 5w 8015b Mc	Ja	0/ 1/			Flep M	iethod. 1003		
Analyst: ARM		% MOIST:			Tech:	ARM		
Seq Number: 992219		Date Prep: 0	4.11.16 15.00					
		Prep seq: 7	07587					
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	Un	its Analysis	Date	Flag
1-Chlorooctane		88		70 - 1	30 %	6		
o-Terphenyl		89		70 - 1	35 %	0		
Analytical Method: BTEX by EPA 8021B					Prep M	lethod: 5030B		
Analyst: PJB		% Moist:			Tech:	PJB		
Seq Number: 992159		Date Prep: 0	4.11.16 15.00					
		Prep seq: 7	07546					
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-Aylenes	1/9601-23-1	ND	0.00198	0.00169	mg/kg	04.11.16.20:28	U	1
U-Aylene	1330.20.7	ND	0.00298	0.000839	mg/kg	04.11.16.20:28	U	1
Total BTEX	1330-20-7	ND		0.000839	mg/kg	04.11.10.20:28	U	
COMI DI LIA				0.000333	mg/kg	07.11.10 20.20	0	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
1,4-Difluorobenzene		109		80 - 1	120 %	0		
4-Bromofluorobenzene		98		80 - 1	120 %	0		





TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical

Sample Id: T-ESW-1 @ 10'		Matrix:	Soil		Sample	Depth: 10 ft				
Lab Sample Id: 528239-009		Date Collecte	ed: 04.06.16 10	0.50	Date Received: 04.08.16 15.23					
Analytical Method: Inorganic Anions by E	PA 300/300.1			Prep Method: E300P						
Analyst: MNR		% Moist:			Tech:	MNR				
Seq Number: 992431		Date Prep: 04	4.13.16 16.00							
		Prep seq: 70	07674							
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 Mc	od				Prep M	ethod: 1005				
Analyst: ARM		% Moist:			Tech:	ARM				
Sea Number: 992219		Date Prep: 04	4.11.16 15.00			1 11 11 1				
Seq realiser. SS2215		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	Uni	its Analysis	Date	Flag		
1-Chlorooctane		120		70 - 1	30 %	þ				
o-Terphenyl		122		70 - 1	35 %	þ				
Analytical Method: BTEX by EPA 8021B					Prep M	ethod: 5030B				
Analyst: PJB		% Moist:			Tech:	PJB				
Sea Number: 992159		Date Prep. 04	4.11.16 15.00							
		Prep seg: 70	07546							
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		
I otal Xylenes	1330-20-7	ND		0.000844	mg/kg	04.11.16.20:45	U			
I OTAL DI EA		ND		0.000335	mg/kg	04.11.10 20:45	0			
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag		
Surrogate 1,4-Difluorobenzene		% Recovery		Limits 80 - 1	Uni 120 %	its Analysis	Date	Flag		





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 Collecte	d: 04.06.16 1	1.20	Date Received: 04.08.16 15.23				
Analytical Meth	hod: Inorganic Anions by E	PA 300/300.1				Prep Method: E300P				
Analyst:	MNR		% Moist:		Tech:	MNR				
Seq Number:	992431		Date Prep: 04	.13.16 16.00						
·			Prep seq: 70	7674						
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 Meth	hod: TPH By SW8015B Mo	bd				Prep M	lethod: 1005			
Analyst:	ARM		% Moist:			Tech:	ARM			
Seq Number:	992219		Date Prep: 04	.11.16 15.00						
			Prep seq: 70	7587						
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor	
C6-C10 Gasol	ine Range Hydrocarbons	C6C10GRO	ND	15.0	9.85	mg/kg	04.12.16 00:56	U	1	
C10-C28 Die	esel 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	Un	its Analysis	Date	Flag	
1-Chloroocta	ane		110		70 - 1	30 %	ó			
o-Terphenyl			113		70 - 1	35 %	0			
Analytical Met	hod: BTEX by EPA 8021B					Prep M	lethod: 5030B			
Analyst:	РЈВ		% Moist:			Tech:	PJB			
Seq Number:	992159		Date Prep: 04	.11.16 15.00						
			Prep seq: 70	07546						
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	
Ethylbenzen	e	100-41-4	ND	0.00200	0.000489	mg/kg	04.11.16 21:00	U	1	
m_p-Xylene	S	1/9601-23-1	ND	0.00200	0.00170	mg/kg	04.11.16.21:00	U	1	
o-Aylene		93-47-6	ND	0.00299	0.000844	mg/kg	04.11.16.21:00	U	1	
Total DTEV		1330-20-7	ND		0.000844	mg/kg	04.11.16.21:00	U		
TOTAL BIEX			ND		0.000355	mg/kg	04.11.10 21:00	U		
Surrogate			% Recovery		Limits	Un	its Analysis	Date	Flag	
1,4-Difluoro	benzene		107		80 - 1	20 %	6			
							·			





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 Collec	ted: 04.06.16 13	3.30	Date R	eceived: 04.08.1	6 15.2	3
Analytical Method: Inorganic Anions by El	PA 300/300.1				Prep M	ethod: E300P		
Analyst: MNR		% Moist:			Tech:	MNR		
Seq Number: 992431		Date Prep:	04.13.16 16.00					
		Pren sea:	707674					
	CAS	riep ord.				Amelania		Dil Fastar
Parameter	Number	Result	MQL	SDL	Units	Date	Flag	DIIFACIOF
Chloride	16887-00-6	1440	100	17.0	mg/kg	04.14.16 01:25		50
Analytical Method: TPH By SW8015B Mo	d				Prep M	lethod: 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	Un	its Analysis	Date	Flag
1-Chlorooctane		95		70 - 1	130 %	, ,		
o-1 erpnenyl		90		70 - 1	135 7	0		
Analytical Method: BTEX by EPA 8021B					Prep M	lethod: 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	Un	its Analysis	Date	Flag
1,4-Difluorobenzene		105		80 -	120 %	6		
4-Bromofluorobenzene		103		80 -	120 %	6		





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 Collect	ed: 04.06.16 14	4.00	Date R	eceived: 04.08.1	16 15.2	23
Analytical Method: Inorganic Anions by E	PA 300/300.1				Prep M	ethod: E300P		
Analyst: MNR		% Moist:			Tech:	MNR		
Seq Number: 992431		Date Prep: 0	4.13.16 16.00					
		Prep seq: 7	07674					
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 Mo	od				Prep M	ethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Sea Number: 992219		Date Prep: 0	4.11.16 15.00					
Seq Hambert 992213		Prep sea: 7	07587					
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	Uni	its Analysis	Date	Flag
1-Chlorooctane o-Terphenyl		99 102		70 - 1 70 - 1	130 %	0		
Analytical Method: BTEX by EPA 8021B					Prep M	lethod: 5030B		
Analyst: PJB		% Moist:			Tech:	PJB		
Seq Number: 992302		Date Prep: 0	4.11.16 20.00					
		Prep seq: 7	07618					
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	Uni	its Analysis	Date	Flag
1,4-Difluorobenzene		107		80 -	120 %	6		
4-Bromofluorobenzene		98		80 -	120 %	0		





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 Collecte	ed: 04.06.16 14	4.25	Date Received: 04.08.16 15.23				
Analytical Method: Inorganic Anions b	by EPA 300/300.1				Prep M	ethod: E300F	,		
Analyst: MNR		% Moist:			Tech:	MNR			
Seq Number: 992431		Date Prep: 04	4.13.16 16.00						
		Prep seq: 70	07674						
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 SW8015E	3 Mod				Prep M	ethod: 1005			
Analyst: ARM		% Moist:			Tech:	ARM			
Seq Number: 992219		Date Prep: 04	4.11.16 15.00						
		Prep seq: 70	07587						
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	Uni	its Analysis	Date	Flag	
1-Chlorooctane		102		70 - 1	130 %	ó			
o-Terphenyl		103		70 - 1	135 %	Ď			
Analytical Method: BTEX by EPA 802	21B				Prep M	lethod: 5030E	3		
Analyst: PJB		% Moist:			Tech:	PJB			
Seq Number: 992302		Date Prep: 04	4.11.16 20.00						
		Prep seq: 70	07618						
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 Aylenes	1330-20-7	ND		0.000845	mg/kg	04.11.10 23:38	U		
I UUI DIEA		ND		0.000335	mg/kg	04.11.10 23:38	U		
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag	
1,4-Difluorobenzene		104		80 - 1	120 %	ó			
4 December of the second									





TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical

Chloride		16887-00-6	361	20.0	3.41	mg/kg	04.14.16 03:06		10		
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor		
			Prep seq: 7	07674							
Seq Number:	992431		Date Prep: 0	4.13.16 16.00							
Analyst:	MNR		% Moist:			Tech:	MNR				
Analytical Me	thod: Inorganic Anions	by EPA 300/300.1				Prep M	lethod: E300P				
Lab Sample Id	: 528239-015		Date Collect	ed: 04.06.16	15.20	Date R	eceived: 04.08.	16 15.2	23		
Sample Id:	T-ESW-4 @ 4'		Matrix:	Soil		Sample	e Depth: 4 ft				
Chloride		16887-00-6	321	40.0	6.82	mg/kg	04.14.16 02:46		20		
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor		
			Prep seq: 7	07674							
Seq Number:	992431		Date Prep: 0	4.13.16 16.00							
Analyst:	MNR		% Moist:			Tech:	MNR				
Analytical Me	thod: Inorganic Anions	by EPA 300/300.1				Prep M	lethod: E300P				
Lab Sample Id	: 528239-014		Date Collect	ed: 04.06.16 1	Date Received: 04.08.16 15.23						
Sample Id:	T-ESW-3 @4'		Matrix: Soil			Sample Depth: 4 ft					



o-Terphenyl

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 Collecte	ed:		Date R	eceived:		
Analytical Method: BTEX by EPA 8021B					Prep M	ethod: 5030B		
Analyst: PJB		% Moist:			Tech:	PJB		
Seq Number: 992159		Date Prep: 04	4.11.16 11.00)				
		Prep seq: 70	07546					
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	Uni	its Analysis	Date	Flag
1.4-Difluorobenzene		101		80 - 1	20 %			
4-Bromofluorobenzene		90		80 - 1	20 %			
Sample Id: 707587-1-BLK		Matrix:	Solid		Sample	Depth:		
Lab Sample Id: 707587-1-BLK		Date Collected:			Date Received:			
Analytical Method: TPH By SW8015B Mo	od				Prep M	ethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 992219		Date Prep: 04	4.11.16 15.00)				
		Prep seq: 70	07587					
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	Uni	its Analysis	Date	Flag
1-Chlorooctane		117		70 - 1	130 %	b		

121

70 - 135

%





TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical

Chloride	16887-00-6	ND	2.00	0.341	mg/kg	04.13.16 20:00	U	1
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
		Prep seq: 7	707674					
Seq Number: 992431		Date Prep: 0	4.13.16 16.00					
Analyst: MNR		% Moist:			Tech:	MNR		
Analytical Method: Inorganic Anions by I	EPA 300/300.1				Prep M	iethod: E300P		
And de la Martin de Terrenerie Antonio fert	TDA 200/200 1				Deem	athed E200E		
Lab Sample Id: 707674-1-BLK		Date Collect	ted:		Date R	eceived:		
Sample Id: 707674-1-BLK		Matrix:	Solid		Sample	e Depth:		
4-Bromofluorobenzene		90		80 - 1	20 %	0		
1,4-Difluorobenzene		99		80 - 1	20 %	ó		
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
o-Xylene	95-47-0	ND	0.00300	0.000845	mg/kg	04.11.10 23:23	0	1
m_p-Xylenes	179601-23-1	ND	0.00200	0.00170	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
Toluene	108-88-3	ND	0.00200	0.00100	mg/kg	04.11.16 23:25	U	1
Benzene	71-43-2	ND	0.00150	0.000335	mg/kg	04.11.16 23:25	U	1
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
		Prep seq: 7	07618					
Seq Number: 992302		Date Prep: 0	4.11.16 20.00					
Analyst: PJB		% Moist:			Tech:	PJB		
Analytical Method: BTEX by EPA 8021E					Prep M	lethod: 5030B		
Lab Sample Id: 707618-1-BLK		Date Collect	ted:		Date R	eceived:		
Sample Id: 707618-1-BLK		Matrix:	Solid		Sample	Depth:		



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 Extracte d (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	Р
T-NSW-1@7'	Apr. 5, 2016	Apr. 8, 2016				Apr.13, 2016	28	8	Р
T-WSW-1 @11'	Apr. 5, 2016	Apr. 8, 2016			1	Apr.13, 2016	28	8	Р
Sample-2 @ 20'	Apr. 5, 2016	Apr. 8, 2016				Apr.13, 2016	28	8	Р
Sample-10 @ 2.5'	Apr. 5, 2016	Apr. 8, 2016				Apr.13, 2016	28	8	Р
T-SSW-2 @7'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	Р
T-ESW-1 @ 5'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	Р
T-ESW-1 @ 10'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	Р
T-ESW-1 @16'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	Р
T-NSW-2 @ 16'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	Р
T-NSW-3 @4'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	Р
T-ESW-2 @ 4'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	Р
T-ESW-3 @4'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	Р
T-ESW-4 @ 4'	Apr. 6, 2016	Apr. 8, 2016				Apr.14, 2016	28	8	Р



XENCO Laboratories CHRONOLOGY OF HOLDING TIMES



Analytical Method : TPH By SW8015B Mod

Work Order #: 528239

Client : TRC Solutions, Inc

Project ID:

							A COLUMN TWO IS NOT THE OWNER.	And the second se	_
Field Sample ID	Date Collected	Date Received	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracte d (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	Р
T-SSW-1 @ 6'	Apr. 5, 2016	Apr. 8, 2016	Apr. 11, 2016	14	6	Apr.11, 2016	14	0	Р
T-NSW-1@7'	Apr. 5, 2016	Apr. 8, 2016	Apr. 11, 2016	14	6	Apr.11, 2016	14	0	Р
T-WSW-1 @11'	Apr. 5, 2016	Apr. 8, 2016	Apr. 11, 2016	14	6	Apr.11, 2016	14	0	Р
Sample-2 @ 20'	Apr. 5, 2016	Apr. 8, 2016	Apr. 11, 2016	14	6	Apr.11, 2016	14	0	Р
Sample-10 @ 2.5'	Apr. 5, 2016	Apr. 8, 2016	Apr. 11, 2016	14	6	Apr.11, 2016	14	0	Р
T-SSW-2 @7'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.11, 2016	14	0	Р
T-ESW-1 @ 5'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.11, 2016	14	0	Р
T-ESW-1 @ 10'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.12, 2016	14	1	Р
T-ESW-1 @16'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.12, 2016	14	1	Р
T-NSW-2 @ 16'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.12, 2016	14	1	Р
T-NSW-3 @4'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.12, 2016	14	1	Р
T-ESW-2 @ 4'	Apr. 6, 2016	Apr. 8, 2016	Apr. 11, 2016	14	5	Apr.12, 2016	14	1	Р


XENCO Laboratories CHRONOLOGY OF HOLDING TIMES



Analytical Method : BTEX by EPA 8021B

Work Order #: 528239

Client : TRC Solutions, Inc

Project ID:

Field Sample ID	Date Collected	Date Received	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracte d (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	Р
T-SSW-1 @ 6'	Apr. 5, 2016	Apr. 8, 2016			1.1	Apr.11, 2016	14	6	Р
T-NSW-1@7'	Apr. 5, 2016	Apr. 8, 2016				Apr.11, 2016	14	6	Р
T-WSW-1 @11'	Apr. 5, 2016	Apr. 8, 2016				Apr.11, 2016	14	6	Р
Sample-2 @ 20'	Apr. 5, 2016	Apr. 8, 2016		Sec. 2		Apr.11, 2016	14	6	Р
Sample-10 @ 2.5'	Apr. 5, 2016	Apr. 8, 2016				Apr.11, 2016	14	6	Р
T-SSW-2 @7'	Apr. 6, 2016	Apr. 8, 2016				Apr.11, 2016	14	5	Р
T-ESW-1 @ 5'	Apr. 6, 2016	Apr. 8, 2016				Apr.11, 2016	14	5	Р
T-ESW-1 @ 10'	Apr. 6, 2016	Apr. 8, 2016	1 1 2-		1. N. A. U.	Apr.11, 2016	14	5	P
T-ESW-1 @16'	Apr. 6, 2016	Apr. 8, 2016	-			Apr.11, 2016	14	5	Р
T-NSW-2 @ 16'	Apr. 6, 2016	Apr. 8, 2016				Apr.12, 2016	14	6	Р
T-NSW-3 @4'	Apr. 6, 2016	Apr. 8, 2016			ec. in	Apr.11, 2016	14	5	Р
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

PQL Practical Quantitation Limit MQL Method Quantitation Limit

LOD Limit of Detection

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

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5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr Suite 102, Tempe AZ 85282	(602) 437-0330	



Analytical Method:	BTEX by EPA 8021B	Batch #:	992159
Project Name:	Energy Transfer Boyd 4" Histor	rical Project ID:	
Client Name:	TRC Solutions, Inc	WO Number:	528239
Client Sa	mple Id	Lab Sample Id	QC Types

Cheffe Sample Id	Lao Sampie Ia	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
1.1	528243-002 S	MS
	528243-002 SD	MSD
	707546-1-BKS	BKS
	707546-1-BLK	BLK
Contraction of the second	707546-1-BSD	BSD



Analytical Method:	TPH By SW8015B Mod		Batch #:	992219	
Project Name:	Energy Transfer Boyd 4" Histo	orical	Project ID:		
Client Name:	TRC Solutions, Inc		WO Number:	528239	
Client San	mple Id	Lab Sample Id		QC Types	
Sample -1	@ 21'	528230-001		SMD	

Sample -1 @ 21	
Sample-10 @ 2.5'	
Sample-2 @ 20'	
T-ESW-1 @ 10'	
T-ESW-1 @ 5'	
T-ESW-1 @16'	
T-ESW-2 @ 4'	
T-NSW-1@7'	
T-NSW-2 @ 16'	
T-NSW-3 @4'	
T-SSW-1 @ 6'	
T-SSW-2 @7'	
T-WSW-1 @11'	
2.55.6	
5 M	

Lab Sample Id	QC Types
528239-001	SMP
528239-006	SMP
528239-005	SMP
528239-009	SMP
528239-008	SMP
528239-010	SMP
528239-013	SMP
528239-003	SMP
528239-011	SMP
528239-012	SMP
528239-002	SMP
528239-007	SMP
528239-004	SMP
528239-001 S	MS
528239-001 SD	MSD
707587-1-BKS	BKS
707587-1-BLK	BLK
707587-1-BSD	BSD

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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 Sa	nple Id	Lab Sample Id	1	QC Types
T-ESW-2	@ 4'	528239-013		SMP
T-NSW-3	@4'	528239-012		SMP
		528239-013 S	Sec. 2	MS
		528239-013 SI)	MSD
		707618-1-BKS		BKS
		707618-1-BLK		BLK
		707618-1-BSD		BSD



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	
Sample -1 @ 21'	_
Sample-10 @ 2.5'	
Sample-2 @ 20'	
T-ESW-1 @ 10'	_
T-ESW-1 @ 5'	
T-ESW-1 @16'	
T-ESW-2 @ 4'	
T-ESW-3 @4'	-
T-ESW-4 @ 4'	-
T-NSW-1@7'	-
T-NSW-2 @ 16'	-
T-NSW-3 @4'	-
T-SSW-1 @ 6'	-
T-SSW-2 @7'	-
T-WSW-1 @11'	-
	-
	-
	-
	-

Lab Sample Id	QC Types
528239-001	SMP
528239-006	SMP
528239-005	SMP
528239-009	SMP
528239-008	SMP
528239-010	SMP
528239-013	SMP
528239-014	SMP
528239-015	SMP
528239-003	SMP
528239-011	SMP
528239-012	SMP
528239-002	SMP
528239-007	SMP
528239-004	SMP
528239-001 S	MS
528239-011 S	MS
707674-1-BKS	BKS
707674-1-BLK	BLK
707674-1-BSD	BSD

_ _



Project Name: Energy Transfer Boyd 4" Historical

Ork Orders : 528239 Lab Batch #: 992159	9, Sample: 707546-1-BKS / B	KS Batel	Project II	D: :Solid		
Units: mg/kg	Date Analyzed: 04/11/16 11:05	SU	RROGATE R	ECOVERY	STUDY	
BTE	X 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		0.0291	0.0300	97	80-120	
Lab Batch #: 992159	Sample: 707546-1-BSD / B	SD Batcl	h: 1 Matrix	:Solid		
Units: mg/kg	Date Analyzed: 04/11/16 11:21	SU	RROGATE R	ECOVERY	STUDY	
BTE	X 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		0.0285	0.0300	95	80-120	
Units: mg/kg BTE	Date Analyzed: 04/11/16 11:37 X by EPA 8021B	Amount Found	RROGATE R	Recovery	STUDY Control Limits	Flags
	Analytes	[A]	[B]	%R [D]	%R	
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 / 1	MSD Batcl	h: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 04/11/16 11:54	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
14 Difluorobonzono	Analytes	0.0221	0.0200	107	80.120	
4-Bromofluorobenzene		0.0321	0.0300	111	80-120	
Lab Batab # 902150	Sample: 707546-1-BLK / F	IK Patal	h. 1 Matrix	Solid		
Lab Batch #: 552155	Sample: 101540-1-DERT	Batch Batch	II. I IVIAUIA	FCOVEDV	STUDY	
Units: mg/kg	Date Analyzed: 04/11/16 12:26	SU	RROGATE R	ECOVERI	STUDI	
Units: mg/kg BTE	Date Analyzed: 04/11/16 12:26 X by EPA 8021B	Amount Found [A]	RROGATE R True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Units: mg/kg BTE	Date Analyzed: 04/11/16 12:26 X by EPA 8021B Analytes	Amount Found [A]	RROGATE R True Amount [B]	Recovery %R [D]	Control Limits %R	Flags

* 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



Project Name: Energy Transfer Boyd 4" Historical

ork Orders : 528239 Lab Batch #: 992302	9, Sample: 707618-1-BKS / B	KS Batc	Project II h: 1 Matrix	D: :Solid		
Units: mg/kg	Date Analyzed: 04/11/16 22:05	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
14 Difluorabangana	Analytes	0.0202	0.0200	101	80.120	
4-Bromofluorobenzene		0.0302	0.0300	101	80-120	
4-Bromonuorobenzene		0.0300	0.0300	102	80-120	
Lab Batch #: 992302	Sample: 707618-1-BSD / B	SD Bate	h: 1 Matrix	:Solid		
Units: mg/kg	Date Analyzed: 04/11/16 22:20	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B Analytes	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 #: 997307	Sample: 528239-013 S / M	S Bata	h. 1 Matrix	•Soil		
Units: mg/kg	Date Analyzed: 04/11/16 22:37	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X 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		0.0305	0.0300	102	80-120	
Lab Batch #: 992302	Sample: 528239-013 SD / N	MSD Batc	h: 1 Matrix	:Soil		<u></u>
Units: mg/kg	Date Analyzed: 04/11/16 22:53	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0324	0.0300	108	80-120	
4-Bromofluorobenzene		0.0310	0.0300	103	80-120	
Lab Batch #: 992302	Sample: 707618-1-BLK / E	SLK Bate	h: 1 Matrix	:Solid		
Units: mg/kg	Date Analyzed: 04/11/16 23:25	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B	Amount Found	True Amount	Recovery	Control Limits	Flags
	Analytes	[A]	[B]	[D]	701	
1,4-Difluorobenzene	Analytes	[A]	[B]	[D] 99	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B



Project Name: Energy Transfer Boyd 4" Historical

In the maller	Data Analyzed: 04/11/16 18:20	SU	RROGATE R	ECOVERY	STUDY			
TPH B	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
	Analytes			[D]				
1-Chlorooctane		117	100	117	70-130			
o-Terphenyl		60.5	50.0	121	70-135			
Lab Batch #: 992219	Sample: 707587-1-BKS / BK	KS Bate	h: 1 Matrix	:Solid				
Units: mg/kg	Date Analyzed: 04/11/16 18:50	SU	RROGATE R	ECOVERY	STUDY			
ТРН В	By SW8015B Mod Analytes	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 / BS	SD Bate	h: 1 Matrix	:Solid				
Units: mg/kg	Date Analyzed: 04/11/16 19:19	SU	RROGATE R	ECOVERY	STUDY			
ТРН В	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag		
1-Chlorooctane		126	100	126	70-130			
o-Terphenyl		60.9	50.0	122	70-135			
Lab Batch #: 992219	Sample: 528239-001 S / MS	Bato	h: 1 Matrix	:Soil				
Units: mg/kg	Date Analyzed: 04/11/16 20:15	SURROGATE RECOVERY STUDY						
ТРН Е	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag		
1-Chlorooctane		116	100	116	70-130			
o-Terphenyl		53.9	50.0	108	70-135			
Lab Batch #: 992219	Sample: 528239-001 SD / M	ISD Bate	ch: 1 Matrix	:Soil				
Units: mg/kg	Date Analyzed: 04/11/16 20:42	SU	RROGATE R	ECOVERY	STUDY			
ТРН Е	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag		
	0	110	00.0	110	70.120			
1-Chlorooctane		118	99.8	118	/0-130			

* 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



BS / BSD Recoveries



Project Name: Energy Transfer Boyd 4" Historical

Batch #: 1 Matrix: Solid BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY	Sample: 707546-1-BKS	Lab Batch ID: 992159 Units: mg/kg
Batch #: 1 Matrix: Solid	Sample: 707546-1-BKS	Lab Batch ID: 992159
Date Prepared: 04/11/2016 Date Analyzed: 04/11/2016		Analyst: PJB
Project ID:		Work Order #: 528239

BTEX by E Analytes	PA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene		<0.000335	0.100	0.0968	67	0.100	0.0922	92	5	70-130	35	
Toluene		<0.00100	0.100	0.0967	67	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 Cab Batch ID: 992302	Sample: 707618-1-B	BKS D8	te Prepari Batch	ed: 04/11/201 1#: 1	9			Date Ar	alyzed: 0 Matrix: S	4/11/2016 olid		

Units: mg/kg		BLAN	K /BLANK	SPIKE / H	STANK S	PIKE DUPI	ICATE	RECOVE	ERY STUD	X	
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	66	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	

Units:

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

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BS / BSD Recoveries





Project ID:	Date Analyzed: 04/13/2016	Matrix: Solid	SPIKE DUPLICATE RECOVERY STUDY
	Date Prepared: 04/13/2016	Batch #: 1	BLANK /BLANK SPIKE / BLANK
		Sample: 707674-1-BKS	
Work Order #: 528239	Analyst: MNR	Lab Batch ID: 992431	Units: mg/kg

Inorg	anic Anions by EPA 300/300.1	Blank Sample Result	Spike	Blank Spike	Blank Spike	Spike Added	Blank Spike	Blk. Spk Dup.	RPD	Control Limits	Control Limits	Flag
		[Y]		Result	%R		Duplicate	%R	0%	%R	%RPD	
Analy	ytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
Chloride		<0.341	50.0	49.4	66	50.0	49.7	66	1	90-110	20	
Analyst:	ARM	Da	ite Prepare	d: 04/11/201	9		-	Date An	alyzed: 0	4/11/2016		
Lab Batch ID	: 992219 Sample: 707587-1-B	KS	Batch	#: 1					Matrix: S	olid		
Units:	mg/kg		BLAN	K /BLANK S	PIKE / B	LANK S	PIKE DUPL	ICATE I	RECOVE	CRY STUD	Y	

TPH By SW8015B Mod	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
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	66	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			Proje	ect ID:				
Date Analyzed: 04/13/2016	Date Prepared: 04/13	3/2016	А	nalyst: N	MNR			
QC- Sample ID: 528239-001 S	Batch #: 1		Ν	Matrix: S	Soil			
Reporting Units: mg/kg	MATR	IX / MA	TRIX SPIKE	RECO	VERY STU	DY		
Inorganic Anions by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag		
Analytes	[A]	[B]						
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		ľ	Matrix: S	Soil			
Reporting Units: mg/kg	MATR	IX / MA	TRIX SPIKE	RECO	VERY STU	DY		
Inorganic Anions by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag		
Analytes	[A]	[B]						
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 II):				
Lab Batch ID: 992159	QC- Sample ID:	528243	-002 S	Ba	tch #:	1 Matrix	c: Soil				
Date Analyzed: 04/11/2016	Date Prepared:	04/11/2	016	An	alyst: I	PJB					
Reporting Units: mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
BTEX by EPA 8021B	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes	[A]	[B]		[D]	[E]		[G]				
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	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed: 04/11/2016	Date Prepared:	04/11/2	016	An	alyst: I	PJB					
Reporting Units: mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	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	1.1
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 ApplicableN = 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 II):				
Lab Batch ID:	992219	QC- Sample ID:	528239	-001 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	04/11/2016	Date Prepared:	04/11/2	016	Ar	alyst:	ARM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
T	PH By SW8015B Mod	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
C6-C10 Gasolin	e 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 $[D] = 100^{\circ}(C-A)/B$ Relative Percent Difference RPD = $200^{\circ}|(C-F)/(C+F)|$ 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 ApplicableN = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Attachment A	Laboratory	Data Package Cov	er Page
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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 official 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.

Kmis Broah

Project Manager Official Title (printed) 14-APR-16 Date

A1

Kelsey Brooks Name (Printed)

Signature

- 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.
 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
 NA = Not applicable;
 NR = Not reviewed;
 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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Phone: 432-563-1800 12600 West I-20 East The Environmental Lab of Texas Fax: 432-563-1713 Odessa, Texas 79765 Project Name: Energy Transfer Boyd 4" Historical Project Manager: Nikki Green Project #: **Company Name** TRC Solutions, Inc Project Loc: Lea County, NM Company Address: 2057 Commerce PO #: City/State/Zip: Midland, TX 79703 TRRP **NPDES** Standard Fax No: Report Format: **Telephone No:** 432.520.7701 432.520.7720 e-mail: ngreen@trcsolutions.com Sampler Signature: rose.slade@energytransfer.com Analyze For: TCLP: (lab use only) TOTAL: 72 18 ORDER #: Preservation & # of Containers Matrix Se BTEX 80218/5030 or BTEX 8260 ź Hg 1006 Cr Pb Alkalinity) SL=Sludge Otho BOISM X Na, K) # (lab use only) 300.1 BO **Beginning Depth** Sampled Sampled SAR / ESP / CEC As Ag Ba Water Fotal #. of Contair Cations (Ca, Mg, Anions (CI, SO4, RUSH TAT (Pre Standard TAT Ending Depth ₹¥ TX 1005 ш 418.1 ield Filtered Chlorides DW=Drinking Na2S203 N.O.R.M. Volatiles H₂SO4 Date Time NaOH GW = Gr HNO3 None Other TPH: Ę Hd AB 8 RCI FIELD CODE Soil X X X х 1045 1 4/5/2016 Sample-1 @ 21' X X Soil X X х 1 4/5/2016 1109 X T-SSW-1 @ 6' x х 1 X 1134 Soil 4/5/2016 X T-NSW-1 @ 7' X х x x T-WSW-1 @11' 4/5/2016 1145 1 X Soil X x X 1 Soil x 1400 Sample-2 @ 20' 4/5/2016 X X X 1 X х 1500 X Soil 4/5/2016 X Sample-10 @ 2.5' х 1 x x 1000 Soil 4/6/2016 X X T-SSW-2@7' х 1 Soil x X 4/6/2016 1030 X х T-ESW-1 @ 5' x 1050 1 Soil X X 4/6/2016 x x T-ESW-1 @ 10' x 1120 Soil x x 4/6/2016 1 X T-ESW-1@16' Laboratory Comments: **Special Instructions:** N Y Sample Containers Intact? Bill to Rose Slade at Energy Transfer. TPH Extended 35 N Y VOCs Free of Headspace? Y N Date Labels on container(s) Relinquished by: Time Time Received by: Y N Custody seals on container(s) 3:23 23 -1-1 a 4 N Y Custody seals on cooler(s) N Date Time Sample Hand Delivered Y Relinquished by: Time Date Received by: by Sampler/Client Rep. ? Y N DHI FedEx Lone Star Une by Courier? Temp: 139 IR ID:R-8 Date Received by ELOT: Time Relinguished by: Date Time Temperature Upon FC/F:0 Corrected Temp:

Final 1.000

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13°C

528239

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

The Env	ironmental Lab of Texas								12 Oc	600 less	We a, T	st I- exa	20 E	ast 765								PI	ax:	: 43	2-56	53-1 63-1	800 713	5			
	Project Manager: Nikki Green												_			_	Pro	jec	Nar	ne:		En	ergy	Tra	Insfe	er B	oyd	4"	Histo	orical	
	Company Name TRC Solutions	Inc														_		Pr	ojec	t #:_											
	Company Address: 2057 Commen	e														_	F	roje	ect L	oc:				ι	ea C	Cour	nty, I	NM			
	City/State/Zip: Midland, TX 75	703										_				_			PC) #:											
	Telephone No: 432.520.7720					Fax No:		43	2.52	0.77	01						Report	Fo	mat	. 0	Ø	Stan	dard			TR	RP			NPDE	S
	Sampler Signature:	D	le	n		e-mail:		_	1	ngre	en(@tro	csol	ution	S.CO	m	m	_		-		(Ana	170	For					-	7
(lab use	only)			/				1	030	2.010	act	wei	Torg	ly ti ca	13101		<u>////</u>	E			TC	LP:		-	T	T	Γ	Π	Π	- International	
ORDEF	R #:									Pres	ervat	ion &	# of	Contai	ners	T	Matrix	58			101	AL:	B	+	80	1				48, 73	L
LAB # (lab use only)	FIELD CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	lce	HNO3	HCI	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None Other (Specify)	MAPPicking Mater CI -Chulne	UVPE-UTINUTY VARIET SLE-Studge GW = Groundwater S=Soll/Solid NP=Non-Potable Specify Other	TPH: 418.1 8015M 801	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (CI, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag ballou of Pp Hg.	Semivolatiles	BTEX 8021B/5030 or BTEX 826	RCI	N.O.R.M.	Chlorides E 300.1		RUSH TAT (Pre-Schedule) 24,	Standard TAT
	T-NSW-2 @ 16'				4/6/2016	1330		1	x								SOIL	Х							X			X			X
	T-NSW-3 @ 4'				4/6/2016	1400		1	x							+	Soil	X			-	_	-	-	X	1	\vdash	X	\square	+	X
	T-ESW-2 @ 4'				4/6/2016	1425		1	x						-	+	Soil	x		_	-	_	-	+	×	1		x	\square	+	x
	T-ESW-3 @ 4'				4/6/2016	1445		1	x						+	+	Soil			_	-	-	-	+	+	\vdash	1	x	\vdash	+	X
	T-ESW-4 @ 4'		-		4/6/2016	1520		1	×	-	\vdash	\vdash			+	+	Soil	\vdash		-	+	+	+	+	+	\vdash	+	x	\vdash	+	X
									F	-					-	Ŧ				-	-	-	Ŧ	Ŧ	F	F	F	F	H	+	F
								F	F							1					1	1	1	Ŧ	F	F	F	F	\square	+	F
				-			-	-	\vdash		-			\vdash	+	+		\vdash	\vdash	-	+	+	+	+	+	\vdash	+	\vdash	\vdash	+	+
Special Bill to B	Instructions:	rtended 35			1			-	-	-	_					-				Lab	orate	Cont	Comi	ment rs int	ts: tact?	-	1		Y	N	
Relinquis	hed by:	Unate 18/16 Date	3.2 Ti	me 23 i ³ 4 me	Received by: Received by:	a Neg	20								4/2	Date	63	Time 7 Time	3	VOC Labo Cus Cus Sam	cs Fr els o tody tody pple l by Sa by Ca	ee o n co seal seal Hand ampl ourie	f Heantain s on s on d Del er/Cli r?	er(s) cont cool ivere ent F	ace? ainer er(s) ed tep. 1	r(s) ?	11	Far	YYYYYY		
Relinquis	hed by:	Date	Т	me	Received by EL	OT:					-				C	Date		Time	•	Tem	pera	ture	Upt	emp /F:0	E13	°C d Te	IR II	D:R-	.8 3°(

Final 1.000

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XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc	Acceptable Temperature Range: 0 - 6 degC	
Date/ Time Received: 04/08/2016 03:23:00 PM	Air and Metal samples Acceptable Range: Ambie	nt
Work Order #: 528239	Temperature Measuring device used : R8	
Sample Rece	eipt 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? samples for the analysis of HEM or HEM-SGT which are veri analysts	Except for N/A ified by the	

#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: Murg Moah 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,

Huns Boah

 Kelsey Brooks

 Project Manager

 Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies.

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

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



Sample Id

West Excavation Floor-1 @ 20' West Excavation SSW-1 @ 19' West Excavation NSW-1 @ 19' West Excavation ESW-1 @ 19' West Excavation Floor-2 @ 20' West Excavation SSW-2 @ 19' West Excavation NSW-2 @ 19' West Excavation Floor-3 @ 20' West Excavation SSW-3 @ 19' West Excavation NSW-3 @ 19' West Excavation WSW-3 @ 19' West Excavation Floor-4 @ 20' West Excavation ESW-4 @ 19' West Excavation WSW-4 @ 19' West Excavation NSW-4 @ 19' West Excavation Floor-5 @ 15'

Sample Cross Reference 532437



TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (West)

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	06-27-16 13:00	- 20 ft	532437-001
S	06-27-16 13:05	- 19 ft	532437-002
S	06-27-16 13:10	- 19 ft	532437-003
S	06-27-16 13:15	- 19 ft	532437-004
S	06-27-16 13:20	- 20 ft	532437-005
S	06-27-16 13:25	- 19 ft	532437-006
S	06-27-16 13:30	- 19 ft	532437-007
S	06-27-16 13:35	- 20 ft	532437-008
S	06-27-16 13:40	- 19 ft	532437-009
S	06-27-16 13:45	- 19 ft	532437-010
S	06-27-16 13:50	- 19 ft	532437-011
S	06-27-16 13:55	- 20 ft	532437-012
S	06-27-16 14:00	- 19 ft	532437-013
S	06-27-16 14:05	- 19 ft	532437-014
S	06-27-16 14:10	- 19 ft	532437-015
S	06-27-16 14:15	- 15 ft	532437-016



CASE NARRATIVE



Client Name: TRC Solutions, Inc Project Name: Energy Transfer Boyd 4" Historical (West)

Project ID: Work Order Number(s): 532437 Report Date: 07-JUL-16 Date Received: 06/28/2016

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:

Project Location: Lea

Nikki Green Lea County, NM Date Received in Lab: Tue Jun-28-16 01:45 pm Report Date: 07-JUL-16 Project Manager: Kelsey Brooks

Lab Id:	532437-0	01	532437-0	002	532437-0	03	532437-0	004	532437-0	05	532437-0	006
Field Id:	Vest Excavation F	loor-1 @	West Excavation S	SSW-1 @	West Excavation N	ISW-1 @	West Excavation E	ESW-1 @	West Excavation F	loor-2@	West Excavation S	SSW-2@
Depth:	20 ft		19 ft		19 ft		19 ft		20 ft		19 ft	
Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Sampled:	Jun-27-16 1	3:00	Jun-27-16 1	13:05	Jun-27-16 1	3:10	Jun-27-16 1	3:15	Jun-27-16 1	3:20	Jun-27-16	13:25
Extracted:	Jul-01-16 1	8:00	Jul-01-16 1	8:00	Jul-01-16 1	8:00	Jul-01-16 1	8:00	Jul-01-16 1	8:00	Jul-01-16 1	8:00
Analyzed:	Jul-02-16 0	0:48	Jul-02-16 0	0:56	Jul-02-16 0	1:19	Jul-02-16 0	1:27	Jul-02-16 0	1:35	Jul-02-16 0	1:42
Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
	212	10.0	179	50.0	229	50.0	1600	100	221	50.0	ND	10.0
Extracted:	Jun-28-16 1	6:00	Jun-28-16 1	6:00	Jun-28-16 1	6:00	Jun-28-16 1	6:00	Jun-28-16 1	6:00	Jun-28-16 1	6:00
Analyzed:	Jun-29-16 0	1:17	Jun-29-16 0)1:41	Jun-29-16 0	2:05	Jun-29-16 0	2:54	Jun-29-16 0	3:18	Jun-29-16 0)3:41
Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	25.7	15.0
	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	583	15.0
	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0
	ND	15.0	ND	15.0	ND	15.0	ND	15.0	ND	15.0	609	15.0
	Lab Id: Field Id: Depth: Matrix: Sampled: Extracted: Analyzed: Units/RL: Units/RL:	Lab Id: 532437-0 Field Id: West Excavation F Depth: 20 ft Matrix: SOIL Sampled: Jun-27-16 1 Analyzed: Jul-01-16 1 Analyzed: Jul-02-16 0 Units/RL: mg/kg Extracted: Jun-28-16 1 Analyzed: Jun-28-16 0 Units/RL: mg/kg ND ND ND ND ND ND	Lab Id: 532437-001 Field Id: West Excavation Floor-1 @ Depth: 20 ft Matrix: SOIL Sampled: Jun-27-16 13:00 Extracted: Jul-01-16 18:00 Analyzed: Jul-02-16 00:48 Units/RL: mg/kg RL Z12 10.0 Extracted: Jun-28-16 16:00 Analyzed: Jun-29-16 01:17 Units/RL: mg/kg RL ND 15.0 ND 15.0 ND 15.0 ND 15.0	Lab Id: 532437-001 532437-0 Field Id: West Excavation Floor-1 @ West Excavation S Depth: 20 ft 19 ft Matrix: SOIL SOIL Sampled: Jun-27-16 13:00 Jun-27-16 1 Extracted: Jul-01-16 18:00 Jul-01-16 1 Matrix: mg/kg RL mg/kg Units/RL: mg/kg RL mg/kg Lun-29-16 01:17 Jun-29-16 01 Jun-29-16 01 Units/RL: mg/kg RL mg/kg ND 15.0 ND ND ND 15.0 ND ND ND 15.0 ND ND	Lab Id: 532437-001 532437-002 Field Id: West Excavation Floor-1 @ West Excavation SSW-1 @ Depth: 20 ft 19 ft Matrix: SOIL SOIL Sampled: Jun-27-16 13:00 Jun-27-16 13:05 Extracted: Jul-01-16 18:00 Jul-01-16 18:00 Analyzed: Jul-02-16 00:48 Jul-02-16 00:56 Units/RL: mg/kg RL mg/kg 212 10.0 179 50.0 Extracted: Jun-28-16 16:00 Jun-28-16 16:00 Iun-28-16 16:00 Analyzed: Jun-29-16 01:17 Jun-29-16 01:41 Units/RL: Units/RL: mg/kg RL mg/kg RL ND 15.0 ND 15.0 ND 15.0 ND 15.0 ND 15.0 ND 15.0	Lab Id: 532437-001 532437-002 532437-002 Field Id: West Excavation Floor-1 @ West Excavation SSW-1 @ West Excavation N Depth: 20 ft 19 ft 19 ft 19 ft Matrix: SOIL SOIL SOIL SOIL Sampled: Jun-27-16 13:00 Jun-27-16 13:05 Jun-27-16 1 Extracted: Jul-01-16 18:00 Jul-01-16 18:00 Jul-02-16 00:56 Jul-02-16 0 Units/RL: mg/kg RL mg/kg RL mg/kg Extracted: Jun-28-16 16:00 Jun-28-16 16:00 Jun-28-16 16:00 Jun-28-16 16:00 Units/RL: mg/kg RL mg/kg RL mg/kg Manalyzed: Jun-29-16 01:17 Jun-29-16 01:41 Jun-29-16 01 Units/RL: mg/kg RL mg/kg RL mg/kg MD 15.0 ND 15.0 ND ND MD 15.0 ND 15.0 ND MD 15.0 ND ND ND <	Lab Id: 532437-001 532437-002 532437-003 Field Id: West Excavation Floor-1@ West Excavation SSW-1@ West Excavation NSW-1@ Depth: 20 ft 19 ft 19 ft 19 ft Matrix: SOIL SOIL SOIL SOIL Sampled: Jun-27-16 13:00 Jun-27-16 13:05 Jun-27-16 13:10 Extracted: Jul-01-16 18:00 Jul-01-16 18:00 Jul-02-16 01:19 Units/RL: mg/kg RL mg/kg RL mg/kg RL Units/RL: Jun-28-16 16:00 Jun-28-16 16:00 Jun-28-16 16:00 Jun-28-16 16:00 Units/RL: mg/kg RL mg/kg RL mg/kg RL Units/RL: MD 15.0 ND 15.0 ND <th>Lab Id: $532437-001$ $532437-002$ $532437-003$ $532437-003$ Field Id: West Excavation Floor-1 @ West Excavation SSW-1 @ West Excavation NSW-1 @ West Excavation I Depth: 20 ft 19 ft 19 ft 19 ft 19 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 Extracted: Jul-01-16 18:00 Jul-01-16 18:00 Jul-02-16 01:19 Jul-02-16 0 Units/RL: mg/kg RL mg/kg RL mg/kg RL mg/kg Lanalyzed: 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 Units/RL: mg/kg RL mg/kg RL mg/kg RL mg/kg Units/RL: mg/kg RL mg/kg RL mg/kg RL mg/kg Units/RL: mg/kg RL mg/kg RL mg/kg RL mg/kg MD 15.0 ND<</th> <th>Lab Id: $532437-001$ $532437-002$ $532437-003$ $532437-004$ Field Id: West Excavation Floor-1@ West Excavation SSW-1@ West Excavation NSW-1@ West Excavation ESW-1@ Depth: 20 ft 19 ft 19 ft 19 ft 19 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 Extracted: Jul-01-16 18:00 Jul-01-16 18:00 Jul-02-16 01:19 Jul-02-16 01:27 Units/RL: mg/kg RL mg/kg RL mg/kg RL mg/kg RL Manalyzed: 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-28-16 16:00 Jun-28-16 02:05 Jun-28-16 02:05 Mints//LL: mg/kg RL mg/kg RL mg/kg RL mg/kg RL Mints//LL: Mg/kg RL Mg/kg RL Mg/kg RL</th> <th>Lab Id: $532437-001$ $532437-002$ $532437-003$ $532437-004$ 53</th> <th>Lab Id: $532437-001$ $532437-002$ $532437-003$ $532437-004$ $532437-00-72$ Field Id: West Excavation Floor-1 @ West Excavation SSW-1 @ West Excavation NSW-1 @ West Excavation ESW-1 @ West Excavation Floor-2 @ Depth: 20 ft 19 ft 19 ft 19 ft 19 ft 20 ft SOIL Jun-27-16 13:00 Jun-27-16 01:30 Jun-27-16 13:00 Jun-27-16 01:30 Jun-27-16 13:00 Jun-20-16 01:27 Jun-20-16</th> <th>Lab Id: $532437 - 00$ $881 Excavation E V = 0$ $881 Excavatio Excavation E V = 0$ $881 Exc$</th>	Lab Id: $532437-001$ $532437-002$ $532437-003$ $532437-003$ Field Id: West Excavation Floor-1 @ West Excavation SSW-1 @ West Excavation NSW-1 @ West Excavation I Depth: 20 ft 19 ft 19 ft 19 ft 19 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 Extracted: Jul-01-16 18:00 Jul-01-16 18:00 Jul-02-16 01:19 Jul-02-16 0 Units/RL: mg/kg RL mg/kg RL mg/kg RL mg/kg Lanalyzed: 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 Units/RL: mg/kg RL mg/kg RL mg/kg RL mg/kg Units/RL: mg/kg RL mg/kg RL mg/kg RL mg/kg Units/RL: mg/kg RL mg/kg RL mg/kg RL mg/kg MD 15.0 ND<	Lab Id: $532437-001$ $532437-002$ $532437-003$ $532437-004$ Field Id: West Excavation Floor-1@ West Excavation SSW-1@ West Excavation NSW-1@ West Excavation ESW-1@ Depth: 20 ft 19 ft 19 ft 19 ft 19 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 Extracted: Jul-01-16 18:00 Jul-01-16 18:00 Jul-02-16 01:19 Jul-02-16 01:27 Units/RL: mg/kg RL mg/kg RL mg/kg RL mg/kg RL Manalyzed: 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-28-16 16:00 Jun-28-16 02:05 Jun-28-16 02:05 Mints//LL: mg/kg RL mg/kg RL mg/kg RL mg/kg RL Mints//LL: Mg/kg RL Mg/kg RL Mg/kg RL	Lab Id: $532437-001$ $532437-002$ $532437-003$ $532437-004$ 53	Lab Id: $532437-001$ $532437-002$ $532437-003$ $532437-004$ $532437-00-72$ Field Id: West Excavation Floor-1 @ West Excavation SSW-1 @ West Excavation NSW-1 @ West Excavation ESW-1 @ West Excavation Floor-2 @ Depth: 20 ft 19 ft 19 ft 19 ft 19 ft 20 ft SOIL Jun-27-16 13:00 Jun-27-16 01:30 Jun-27-16 13:00 Jun-27-16 01:30 Jun-27-16 13:00 Jun-20-16 01:27 Jun-20-16	Lab Id: $532437 - 00$ $881 Excavation E V = 0$ $881 Excavatio Excavation E V = 0$ $881 Exc$

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Kms Boah

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: Nil Project Location: Lea

Nikki Green Lea County, NM Date Received in Lab: Tue Jun-28-16 01:45 pm Report Date: 07-JUL-16

Project Manager: Kelsey Brooks

	Lab Id:	532437-0	07	532437-0	800	532437-0	09	532437-0	010	532437-0	11	532437-0	12
Analysis Roquested	Field Id:	West Excavation N	ISW-2 @	West Excavation F	Floor-3 @	West Excavation S	SSW-3 @	West Excavation N	NSW-3 @	West Excavation V	VSW-3 @	West Excavation H	Floor-4@3
Anulysis Requested	Depth:	19 ft		20 ft		19 ft		19 ft		19 ft		20 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-27-16 1	3:30	Jun-27-16 1	13:35	Jun-27-16 1	13:40	Jun-27-16 1	3:45	Jun-27-16 1	3:50	Jun-27-16	13:55
Inorganic Anions by EPA 300/300.1	Extracted:	Jul-01-16 1	8:00	Jul-01-16 1	8:00	Jul-01-16 1	8:00	Jul-06-16 1	0:00	Jul-06-16 1	0:00	Jul-06-16 1	0:00
	Analyzed:	Jul-02-16 0	1:50	Jul-02-16 0	1:58	Jul-02-16 0	2:06	Jul-06-16 1	5:36	Jul-06-16 1	5:44	Jul-06-16 1	5:52
	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 1	6:00	Jun-28-16 1	6:00	Jun-28-16 1	6:00	Jun-28-16 1	6:00	Jun-28-16 1	6:00	Jun-28-16 1	6:00
	Analyzed:	Jun-29-16 ()4:05	Jun-29-16 0	04:28	Jun-29-16 0	4:52	Jun-29-16 0	5:17	Jun-29-16 0	5:42	Jun-29-16 0	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

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Kuns Boah

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: Project Location:

Nikki Green Lea County, NM Date Received in Lab: Tue Jun-28-16 01:45 pm Report Date: 07-JUL-16

Project Manager: Kelsey Brooks

	Lab Id:	532437-0	13	532437-0	14	532437-0	15	532437-0	16	
Analysis Poguastad	Field Id:	West Excavation I	ESW-4 @	West Excavation V	WSW-4@	West Excavation N	ISW-4@	West Excavation H	loor-5@	
Analysis Kequestea	Depth:	19 ft		19 ft		19 ft		15 ft		
	Matrix:	SOIL		SOIL		SOIL		SOIL		
	Sampled:	Jun-27-16	14:00	Jun-27-16 1	4:05	Jun-27-16 1	14:10	Jun-27-16	4:15	
Inorganic Anions by EPA 300/300.1	Extracted:	Jul-06-16 1	0:00	Jul-06-16 1	2:00	Jul-06-16 1	2:00	Jul-06-16 1	2:00	
	Analyzed:	Jul-06-16 1	6:00	Jul-06-16 1	9:07	Jul-06-16 1	8:43	Jul-06-16 1	9:14	
	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 1	4:00	Jun-29-16 1	4:00	Jun-29-16 1	4:00	
	Analyzed:	Jun-29-16	8:19	Jun-29-16 1	8:46	Jun-29-16 1	9:12	Jun-29-16 1	9:38	
	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	

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Kunskoah

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
- PQL Practical Quantitation Limit MQL Method Quantitation Limit

LOD Limit of Detection

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

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	(281) 240-4200 (214) 902 0300 (210) 509-3334 (432) 563-1800 (602) 437-0330



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

Work Or Lab Batch	ders : 53243 #: 997172	37, 532437 Sample: 532437-001 / SMP	Batch:	Project ID	: : Soil		
Units:	mg/kg	Date Analyzed: 06/29/16 01:17	SUR	ROGATE R	ECOVERY	STUDY	
	TPH E	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chloroocts	ane	Analytts	06.2	00.0	06	70.120	
o-Terphenyl			90.2	50.0	90	70-135	
Lah Batch	#• 997172	Sample: 532437-002 / SMP	Batch:	1 Matrix	· Soil	70-155	
Units:	mg/kg	Date Analyzed: 06/29/16 01:41	SUR	RROGATE R	ECOVERY	STUDY	
	TPH E	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chloroocta	ane	Timity too	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	SUR	RROGATE R	ECOVERY	STUDY	
	TPH E	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chloroocta	ane		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	SUR	RROGATE R	ECOVERY	STUDY	
	TPH E	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chloroocta	ane		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	SUR	RROGATE R	ECOVERY	STUDY	
	TPH F	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chloroocta	ane	-	98.3	99.8	98	70-130	

* 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



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

Work Orde	ers: 53243	37, 532437		Project ID	:		
Lab Batch #:	997172	Sample: 532437-006 / SMP	Batch	a: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 06/29/16 03:41	SUI	RROGATE R	ECOVERY	STUDY	
	TPH F	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
1.011		Analytes			[2]		
I-Chlorooctane	0		101	99.8	101	70-130	
o-Terphenyl	005150		48.1	49.9	96	70-135	
Lab Batch #:	99/1/2	Sample: 532437-0077 SMP	Batch	i: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 06/29/16 04:05	SUI	RROGATE R	ECOVERY	STUDY	
	TPH I	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9		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	SUI	RROGATE R	ECOVERY	STUDY	
	TPH I	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9	-	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	SUI	RROGATE R	ECOVERY	STUDY	
	TPH I	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	e		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	SUI	RROGATE R	ECOVERY	STUDY	
	TPH I	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	e		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



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

Work Or Lab Batch	rders : 53243 #: 997172	87, 532437 Sample: 532437-011 / SMP	Bate	Project ID h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 06/29/16 05:42	SU	RROGATE R	ECOVERY	STUDY	
	TPH E	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1-Chlorooc	tane		97.8	99.8	98	70-130	
o-Terpheny	/1		45.8	49.9	92	70-135	
Lab Batch	#: 997172	Sample: 532437-012 / SMP	Bate	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 06/29/16 06:06	SU	RROGATE R	ECOVERY	STUDY	
	TPH F	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooc	tane		97.4	99.9	97	70-130	
o-Terpheny	/1		45.1	50.0	90	70-135	
Lab Batch	#: 997250	Sample: 532437-013 / SMP	Bate	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 06/29/16 18:19	SU	RROGATE R	ECOVERY	STUDY	
	TPH F	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooc	ctane	<i>u</i>	93.5	99.9	94	70-130	
o-Terpheny	/1		46.8	50.0	94	70-135	
Lab Batch	#: 997250	Sample: 532437-014 / SMP	Bate	h: 1 Matrix	: Soil	10100	
Units:	mg/kg	Date Analyzed: 06/29/16 18:46	SU	RROGATE R	ECOVERY	STUDY	
	TPH F	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooc	ctane		96.8	100	97	70-130	
o-Terpheny	yl		48.3	50.0	97	70-135	
Lab Batch	#: 997250	Sample: 532437-015 / SMP	Batc	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 06/29/16 19:12	su	RROGATE R	ECOVERY	STUDY	
	ТРН І	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooc	ctane		97.3	99.8	97	70-130	
o-Terpheny	y1		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



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

Work Orders : 532437, 532437 Lab Batch #: 997250 Sample: 532437-016 / SMP		Project ID: Batch: 1 Matrix: Soil							
Units: mg/kg	Date Analyzed: 06/29/16 19:38	SURROGATE RECOVERY STUDY							
TPH By SW8015B Mod		Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
	Analytes			[D]					
1-Chlorooctane		102	99.8	102	70-130				
o-Terphenyl		51.1	49.9	102	70-135				
Lab Batch #: 997172	Sample: 710459-1-BLK / BL	K Batch	: 1 Matrix	: Solid					
Units: mg/kg	Date Analyzed: 06/28/16 13:32	SURROGATE RECOVERY STUDY							
ТРН В	By SW8015B Mod	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 / BL	K Batch	: 1 Matrix	: Solid					
Units: mg/kg	Date Analyzed: 06/29/16 14:19	SURROGATE RECOVERY STUDY							
ТРН В	By SW8015B Mod	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 / BK	S Batch	: 1 Matrix	: Solid	10 100				
Units: mg/kg	Date Analyzed: 06/28/16 13:56	SUI	RROGATE R	ECOVERY	STUDY				
ТРН В	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 / BK	S Batch	: 1 Matrix	: Solid					
Units: mg/kg	Date Analyzed: 06/29/16 14:45	SUI	RROGATE R	ECOVERY	STUDY				
ТРН В	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



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

Work Orders : 532437, 532437 Lab Batch #: 997172 Sample: 710459-1-BSD / B	SD Bate	Project ID h: 1 Matrix	: Solid						
Units: mg/kg Date Analyzed: 06/28/16 14:20	SURROGATE RECOVERY STUDY								
TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes			[10]						
1-Chlorooctane	117	100	117	70-130					
o-Terphenyl	59.6	50.0	119	70-135					
Lab Batch #: 997250 Sample: 710500-1-BSD / B	SD Bate	h: 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	B Batc	h: 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	S Batc	h: 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 / M	ASD Bate	h: 1 Matrix	: Soil						
Units: mg/kg Date Analyzed: 06/28/16 15:30	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					

* 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



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

Work Orders : 532437, 532437								
Lab Batch #: 997250 Sample: 532368-021 SD / M		MSD Batc	h: 1 Matrix	: Soil				
Units: mg/kg	Date Analyzed: 06/29/16 16:32	SURROGATE RECOVERY STUDY						
TPH By SW8015B Mod		Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
	Analytes			[D]				
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



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-	-BKS Batch #: 1				Matrix: Solid						
Units: mg/kg	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RE					RECOV	ECOVERY 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	D	ate Prepare	ed: 07/06/20	016			Date A	nalyzed:	07/06/2016		
Lab Batch ID: 997612 Sample: 710654-1-BKS Batch #: 1				Matrix: Solid							
Units: mg/kg		BLAN	K /BLANK	SPIKE /	BLANK	SPIKE DUP	LICATE	RECOV	ERY STUI	Y	
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							Proj	ect ID:						
Analyst: ARM	D	ate Prepare	ed: 06/28/20	16		Date Analyzed: 06/28/2016								
Lab Batch ID: 997172 Sample: 710459-1-	BKS	Batch	n #: 1					Matrix:	Solid					
Units: mg/kg		BLAN	K/BLANK	SPIKE /]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY				
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	D	ate Prepar	ed: 06/29/20	16			Date A	nalyzed:	06/29/2016					
Lab Batch ID: 997250 Sample: 710500-1-	BKS	Batch	n #: 1					Matrix:	Solid					
Units: mg/kg		BLAN	K/BLANK	SPIKE /]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY				
TPH By SW8015B Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag			
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	1040	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



Work Order #: 532437													
Lab Batch #: 997472			Proj	ect ID:									
Date Analyzed: 07/02/2016	Date Prepared: 07/01	1/2016	Α	nalyst: N	MNR								
QC- Sample ID: 532595-002 S	Batch #: 1		1	Matrix: S	Soil								
Reporting Units: mg/kg	MATR	MATRIX / MATRIX SPIKE RECOVERY											
Inorganic Anions by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag							
Analytes	[**]	[D]				-							
Chloride	177	1250	1300	90	80-120								
Lab Batch #: 99/4/2													
Date Analyzed: 07/01/2016	Date Prepared: 07/0	1/2016	Α	Analyst: N	ИNR								
QC- Sample ID: 532690-002 S	Batch #: 1		1	Matrix: S	Soil								
Reporting Units: mg/kg	MATR	RIX / MA	TRIX SPIKE	RECO	VERY STU	JDY							
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag							
Chloride		2500	2200	06	80.120								
Lab Batch #: 997589	679	2300	5290	90	80-120								
Date Analyzed: 07/06/2016	Date Prenared: 07/06	5/2016		nalvst: N	MNR								
OC- Sample ID: 532769-001 S	Batch #: 1		1	Matrix: S	Soil								
Reporting Units: mg/kg			TOIL	DECO	VEDV OT	UDV							
reporting cintar mg ng	MATR	IX / MA	TRIX SPIKE	RECO	VERY STU	JDY							
Inorganic Anions by EPA 300 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					1								
Date Analyzed: 07/06/2016	Date Prepared: 07/00	6/2016	A	nalyst: N	MNR								
QC- Sample ID: 532769-011 S	Batch #: 1		1	Matrix: S	Soil								
Reporting Units: mg/kg	MATR	RIX / MA	TRIX SPIKE	RECO	VERY STU	JDY							
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag							
Analytes	1100	2500	2550	0.4	00.100								
Chioride	1190	2500	3550	94	80-120	1							

Matrix Spike Percent Recovery $[D] = 100^{\circ}(C-A)/B$ Relative Percent Difference $[E] = 200^{\circ}(C-A)/(C+B)$ 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		Proje	ect ID:						
Date Analyzed: 07/07/2016	Date Prepared: 07/06/2010	6 A	nalyst: N	INR					
QC- Sample ID: 532368-009 S	Batch #: 1	N	Matrix: S	oil					
Reporting Units: mg/kg	MATRIX /	MATRIX / MATRIX SPIKE RECOVERY STUDY							
Inorganic Anions by EPA 300	Parent Sample Spi Result Add	ke Spiked Sample Result	%R [D]	Control Limits %R	Flag				
Analytes	[A] [E	5]							
Chloride	441 26	635	74	80-120	X				
Lab Batch #: 997612									
Date Analyzed: 07/06/2016	Date Prepared: 07/06/2010	6 A	nalyst: N	INR					
QC- Sample ID: 532437-015 S	Batch #: 1	Ν	Matrix: S	oil					
Reporting Units: mg/kg	MATRIX /	MATRIX SPIKE	RECO	VERY STU	DY				
Inorganic Anions by EPA 300	Parent Sample Spi Result Add	ke Spiked Sample Result	%R [D]	Control Limits %R	Flag				
Analytes	[A] [E	[0]]	[]						
Chloride	529 12	50 1620	87	80-120					

Matrix Spike Percent Recovery $[D] = 100^{\circ}(C-A)/B$ Relative Percent Difference $[E] = 200^{\circ}(C-A)/(C+B)$ 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 II):				
Lab Batch ID:	997172	QC- Sample ID:	532336	-006 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	06/28/2016	Date Prepared:	06/28/2	2016	An	alyst:	ARM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Г	TPH By SW8015B Mod	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
	Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
C6-C10 Gasolir	ne Range Hydrocarbons	213	999	1040	83	1000	1060	85	2	75-125	25	
C10-C28 Diese	l Range Hydrocarbons	22.0	999	972	95	1000	966	94	1	75-125	25	
Lab Batch ID:	997250	QC- Sample ID:	532368	-021 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	06/29/2016	Date Prepared:	06/29/2	016	An	alyst:	ARM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Т	TPH By SW8015B Mod	Parent Sample Result	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]	[0]	[D]	[E]	Account [1]	[G]		1011	/ did b	
C6-C10 Gasolir	ne Range Hydrocarbons	<15.6	1040	887	85	1040	880	85	1	75-125	25	
C10-C28 Diese	l 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 ApplicableN = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Sample Duplicate Recovery



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

Work Order #: 532437						
Lab Batch #: 997472				Project I	D:	
Date Analyzed: 07/02/2016 00:32 Dat	te Prepar	ed: 07/01/2016	Ana	lyst: MNR		
QC- Sample ID: 532595-002 D	Batch	#: 1	Ma	trix: Soil		
Reporting Units: mg/kg		SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Inorganic Anions by EPA 300/300. Analyte	1	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 Dat	te Prepar	ed: 07/01/2016	ana Ana	lyst: MNR		
QC- Sample ID: 532690-002 D	Batch	#: 1	Ma	trix: Soil		
Reporting Units: mg/kg		SAMPLE	SAMPLE	DUPLIC	ATE REC	OVERY
Inorganic Anions by EPA 300/300. Analyte	1	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 Dat	te Prepar	ed: 07/06/2016	5 Ana	lyst: MNR		
QC- Sample ID: 532769-001 D	Batch	#: 1	Ma	trix: Soil		
Reporting Units: mg/kg		SAMPLE	SAMPLE	DUPLIC	ATE REC	OVERY
Inorganic Anions by EPA 300/300. Analyte	.1	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	te Prepar	ed: 07/06/2016	5 Ana	lyst:MNR		
QC- Sample ID: 532769-011 D	Batch	#: 1	Ma	trix: Soil		
Reporting Units: mg/kg		SAMPLE	SAMPLE	DUPLIC	ATE REC	OVERY
Inorganic Anions by EPA 300/300. Analyte	.1	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



Work Order #: 532437

Sample Duplicate Recovery



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

			-		
Lab Batch #: 997612			Project I	D:	
Date Analyzed: 07/07/2016 07:37 D	ate Prepared: 07/06/201	6 Ana	lyst: MNR		
QC- Sample ID: 532368-009 D	Batch #: 1	Mat	trix: Soil		
Reporting Units: mg/kg	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY
Inorganic Anions by EPA 300/300	0.1 Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag
Analyte		[10]			
Chloride	441	440	0	20	
Lab Batch #: 997612					
Date Analyzed: 07/06/2016 18:51 D	ate Prepared: 07/06/201	6 Ana	lyst: MNR		
QC- Sample ID: 532437-015 D	Batch #: 1	Mat	trix: Soil		
Reporting Units: mg/kg	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY
Inorganic Anions by EPA 300/300 Analyte	0.1 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

12600 West I-20 East Odessa, Texas 79765 Phone: 432-563-1800 Fax: 432-563-1713 lof Z

Page 22 of 24

	Project Manager:	Nikki Green							_				-			- P	rojec	t Na	me:	Er	nerg	gy T	rans	sfer	Boy	'd 4'	' His	toric	al (we	est)
	Company Name	TRC Solutions, Inc		_							-					_	P	roje	ct #:							_				
	Company Address:	2057 Commerce														_	Proj	ect	Loc:					Lea	Cou	unty,	NM			
	City/State/Zip:	Midland, TX 79703														_		P	0 #:											
	Telephone No:	432.520.7720	A			Fax No	:	432	2.52	0.770	01					Repo	rt Fo	orma	t:		Sta	ndar	d	Γ	Т	RRP	•		NPDE	S
	Sampler Signature:	full	L	ee	N	e-mail	:		<u>_</u>	igre	en@	tro	solu	tions	.cor	n	-	_			-	A	aha	- Fai		_			_	-
(lab use	only)							Ī	ose	a.sia	aea	en	ergy	/tran	ster	.com	F		_	TC	LP:	An	alyze	3 FOI	Ť	Т	T		- 2	
ORDE	** 532	437								Prese	rvation	n & 1	# of C	ontain	ers	Matrix	0	T	Γ	TOT	AL:	e	-	-	_				48, 72 h	
LAB # (lab use only)	FIEI	-D CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO ₃	HCI	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃ None	Other (Specify)	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid	TPH: 418.1 (8015M) 8015	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 S	Volatiles	Semivolatiles	BTEX 80215/9030 01 51 EA 9200	N.O.R.M.	Chlorides E 300.1		RUSH TAT (Pre-Schedule) 24, 4	Standard TAT
	West Excava	tion Floor-1 @ 20'			6/27/2016	1300		1	x							Soil	×										X			X
	West Excava	tion SSW-1 @ 19'			6/27/2016	1305		1	x							Soil	×										x			x
	West Excava	tion NSW-1 @ 19'			6/27/2016	1310		1	x							Soil	X										X			x
	West Excava	tion ESW-1 @ 19'			6/27/2016	1315		1	x							Soil	X										×			X
	West Excava	tion Floor-2 @ 20'			6/27/2016	1320		1	x							Soil	×										X			x
	West Excava	tion SSW-2 @ 19'			6/27/2016	1325		1	x							Soil	×										x			x
	West Excava	tion NSW-2 @ 19'			6/27/2016	1330		1	x							Soil	×										X			X
	West Excava	tion Floor-3 @ 20'			6/27/2016	1335		1	x							Soil	×	1									×			x
	West Excava	tion SSW-3 @ 19'			6/27/2016	1340		1	x							Soil	×	1									X			x
	West Excava	tion NSW-3 @ 19'			6/27/2016	1345		1	x							Soil	×	1									×			X
	West Excavat	tion WSW-3 @ 19'			6/27/2016	1350		1	x							Soil	×										X			x
Special Bill to R Relinguis Relinguis	Instructions: lose Slade at Energy Tr shed by: Multiple shed by:	The function of the second se	5	me ISprv me	Received by:	'n	X	er	LC	0				6	D D D	ate 8/16 ate	Tir 3 4 5 Tir	ne Pr.M.	Lat Sar VO Lab Cus Sar	nple Cs F els o stody stody by S	tory Con ree on c y sea y sea Han Samp	of H ontain of H ontai als o als o als o bler/C	ers I eads iner(n co elive	nts: ntact space s) ntain oler(ered t Rep	t? er(s) s))		* * * * * * *	2 2 2 2 2 2 2	
Relinguis	shed by:	Date	Т	ime	Received by ELC	DT: Femp: C/F:0 - 3	3.°L	R IC	D:R-	8			L		D	ate	Tir	ne	Ter	by C	Couri	ier? e Up	on F	JPS Recei	Di ipt:	HL	Fee	dEx 13	_one SI	tar

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							-						-	- Pr	ojec	t Nan	ne:	Ene	rgy	Trar	nsfer	Bo	yd 4'	' His	torica	al (we	est)
	Company Name	TRC Solutions, Inc											_			-	Pr	roject	#:		_	_		1	_				
	Company Address:	2057 Commerce														_	Proje	ect L	oc: _				Le	a Co	unty,	NM			
	City/State/Zip:	Midland, TX 79703														_		PO	#:										
	Telephone No:	432.520.7720	A				Fax No		432	2.520	0.7701					Repor	rt Fo	rmat	[] St	tanda	ard			TRRP			NPDE	S
	Complex Cignotures	Allit	M	0,			o moil				aroo	Otr	anal	utions	0.00	-								_			_		
	Sampier Signature:	nun	ar	LA			e-mail		r	ose	slad	@e	nerg	ytran	sfer.	com				-	A	nalyz	ze Fo	or:				Т	٦
lab use o	only)		1														F		7	TCLF	2		-	-		Τ		2 hrs	
ORDER	#: 5324	37								F	Preserv	ation 8	# of (Contain	ers	Matrix	B	П	T					0				48, 7,	
AB # (lab use only)	FIEL	D CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	fotal #. of Containers	lce	HNO ₃	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃ None	Other (Specify)	DW≐Drinking Water SL=Studge GW = Groundwater S=Soil/Solid NP=Non-Potable Soecify Other	TPH: 418.1 8015M 801	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg S	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 826	RCI N.O.R.M.	Chlorides E 300.1		RUSH TAT (Pre-Schedule) 24,	Standard TAT
	West Excavati	ion Floor-4 @ 20'			w	4/6/2016	1355	-	1	x					1	Soil	X		-		-	-				X		-	X
	West Excavati	on ESW-4 @ 19'				4/6/2016	1400		1	x					1	Soil	x			1						X		T	x
	West Excavation	on WSW-4 @ 19				4/6/2016	1405		1	x					T	Soil	×			T						x		T	x
	West Excavati	on NSW-4 @ 19'				4/6/2016	1410		1	x						Soil	x									x		T	x
	West Excavati	on Floor-5 @ 15'				4/6/2016	1415		1	x						Soil	x									x			x
														-										-				-	
												-					\vdash		-	+	+			-	-	\perp	\square	+	
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telinquish	d by Lele		ate 20	Tir 1:4	ne SpM	Received by:	th	Xe	n	lei	0			(01-	ate 20	Time { 10	e 45	VOCs Label Custo Custo	s Free s on ody se ody se	e of l conti eals eals	Head ainer on ci on ci	lspac (s) ontai ooler	ner(s	5)		Y Y Y Y	ZZZZ	
Relinquish	ed by:	D	ate	Tir	me	Received by:									D	ate	Time	e	Samp	y San	and [Deliv Clier	ered at Re	p. ?		Fre	Y	NN	Marc
Relinquish	ed by:	Da	ate	Tir	me	Received by ELC	DT:					Temp		10 IR	ID:R	-8			Temp	eratu	ure U	pon	Rece	eipt:	HL.	r-e0	2	°C	tar

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XENCO Laboratories XENCO Laboratories ABORATORIES Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc	Acceptable Temperature Range: 0 - 6 degC
Date/ Time Received: 06/28/2016 01:45:00 PM	Air and Metal samples Acceptable Range: Ambient
Work Order #: 532437	Temperature Measuring device used : R8
Sample Recei	pt 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 l	bubble)? N/A
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? E samples for the analysis of HEM or HEM-SGT which are verif analysts.	Except for N/A and by the
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnA	c+NaOH? N/A

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

Analyst:

PH Device/Lot#:

Date: 06/28/2016

Checklist completed by: Mary Alexis Plegron Mary Negron Checklist reviewed by: Mms Moah 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)



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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,

Huns Boah

Kelsey Brooks

Project Manager Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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



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



CASE NARRATIVE



Client Name: TRC Solutions, Inc Project Name: Energy Transfer Boyd 4" Historical (East)

Project ID: Work Order Number(s): 536452 Report Date: 13-SEP-16 Date Received: 09/08/2016

Sample receipt non conformances and comments:



CASE NARRATIVE



Client Name: TRC Solutions, Inc Project Name: Energy Transfer Boyd 4" Historical (East)

Project ID: Work Order Number(s): 536452
 Report Date:
 13-SEP-16

 Date Received:
 09/08/2016

Sample receipt non conformances and comments per sample:

None



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

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

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

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Kuns Boah

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
- PQL Practical Quantitation Limit MQL Method Quantitation Limit

LOD Limit of Detection

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

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	Phone	Fax
4147 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr Suite 102, Tempe AZ 85282	(602) 437-0330	



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

Work Orders : 5364 Lab Batch #: 1001528	52, Sample: 536452-001 / SMP	Batch:	Project ID 1 Matrix	: : Soil		
Units: mg/kg	Date Analyzed: 09/09/16 21:46	SUR	ROGATE R	RECOVERY	STUDY	
ТРН	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1 Chloroostana	Analytes	05.0	00.0	00	70.120	
a Temberul		95.9	99.8	96	70-130	
Leb Botch #: 1001528	Sample: 526452.002 / SMP	D2.0	49.9	105	70-135	
Lab batch #: 1001328	Sample: 550452-0027 SMP	baten:	1 Iviatrix	: 501		
Units: mg/kg	Date Analyzed: 09/09/16 22:11	SUR	ROGATE R	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 / BI	LK Batch:	1 Matrix	: Solid		
Units: mg/kg	Date Analyzed: 09/09/16 18:27	SUR	ROGATE R	ECOVERY	STUDY	
TPH	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1-Chlorooctane		103	100	103	70-130	
o-Terphenyl		55.6	50.0	111	70-135	
Lab Batch #: 1001528	Sample: 713615-1-BKS / BF	KS Batch:	1 Matrix	: Solid		
Units: mg/kg	Date Analyzed: 09/09/16 17:37	SUR	ROGATE R	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 / BS	SD Batch:	1 Matrix	: Solid		
Units: mg/kg	Date Analyzed: 09/09/16 18:03	SUR	ROGATE R	RECOVERY	STUDY	
ТРН	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		121	100	121	70-130	

* 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



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

Work Orders : 536452, Lab Batch #: 1001528 Sample: 536364-001 S / MS	Bate	Project ID h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 09/09/16 19:16	St	JRROGATE R	ECOVERY	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 / N Units: mg/kg Date Analyzed: 09/09/16 19:42	ASD Bate	h: 1 Matrix	: Soil ECOVERY	STUDY	
TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes	110	100	110	70.120	
1-Chlorooctane	119	100	119	/0-130	
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							Proj	ect ID:			
Analyst: MNR	D	ate Prepar	ed: 09/12/20	16			Date A	nalyzed:	09/12/2016		
Lab Batch ID: 1001577 Sample: 713629-1-	BKS	Batch	n #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /	BLANK	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate Result (F)	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes	<10.0	250	222	[0]	250	224	[0]	0	00.110	20	
Chloride	<10.0	250	233	93	230	234	94	0	90-110	20	
Analyst: ARM	D	ate Prepar	ed: 09/09/20	016			Date A	nalyzed:	09/09/2016		
Lab Batch ID: 1001528 Sample: 713615-1-	BKS	Batch	n #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K/BLANK	SPIKE /	BLANK	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
TPH By SW8015B Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
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 II	D:				
Lab Batch ID:	1001577	QC- Sample ID:	536452	-002 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	09/12/2016	Date Prepared:	09/12/2	016	An	alyst: 1	MNR					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Inorga	nic Anions by EPA 300/300.1	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
	Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Chloride		293	250	533	96	250	532	96	0	90-110	20	
Lab Batch ID:	1001528	QC- Sample ID:	536364	-001 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	09/09/2016	Date Prepared:	09/09/2	016	An	alyst:	ARM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
1	TPH By SW8015B Mod	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]		[D]	[E]		[G]				
C6-C10 Gasolin	ne Range Hydrocarbons	<15.0	998	993	99	1000	999	100	1	75-125	25	
C10-C28 Diese	l Range Hydrocarbons	<15.0	998	943	94	1000	973	97	3	75-125	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/BRelative 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 ApplicableN = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

The En	vironmental Lab of Texas								12 00	600 less	We a, T	st I- 'exa	20 1	East 9765									Ph Fa	one: ax:	: 43: 43:	2-56 2-56	3-18 3-17	00 13		(ea	st
	Project Manager: Nikki G	reen	-					_	-	-		-	-		-	_	1	Proj	ect	Nan	1e: _	Ene	ergy	Tra	nsfe	er Bo	yd 4	4" Hi	stori	call	Wes	t
	Company Name TRC Se	olutions, Inc	- Internation	-			_				_				-	_			Pro	ject	#:		-						_	_	-	_
	Company Address: 2057 C	ommerce														-		Pr	roje	ct Lo	oc: _				U	ea C	ounty	, NM	<u> </u>			_
	City/State/Zip: Midland	I. TX 79703			Charles and a second second							_								PO	#:		_									_
	Telephone No: 432.520 Sampler Signature:	0.7720 Mille &	ter	M)	Fax No: e-mail:		43	2.52	0.77	201	Qtro	csol	utio	ns.c	om	Rep	ort	For	nat:	I	¥s	tand	ard			TRR	P		NPE	DES	
/inh use								1	OSE	.sla	de	@er	nerg	rytra	insfe	er.c	om		_	_		TCL	/ P:	Analy	ze F	or:		Т	Т	Н	2	
OPDE	B# 53645	2							-	Pres	erval	ion &	# of	Conta	iners	-	Matri	x	0	-	1	OTA	L	F	F	F					18, 721	
LAB # (lab use only)	FIELD CODE	Ē	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	lte	HNOs	HCI	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	TPH: 418.1 8015M 8015	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	CAD / EQD / CEC	Metals: As An Ba Cd Cr Ph Hn Si	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Cligitues E JUU.		RUSH TAT (Pre-Schedule) 24, 4	Standard TAT
	SB-1 @ 10) [*]			9/8/2016	935		1	x								Soil		X	2	4	-		-	-			4	-	\square		X
	SB-1 @ 15	;'	-		9/8/2016	945		1	x							+	Soil		N	4	4	+	+	+	╞		-+	-Ľ		\vdash		X
	SB-1 @ 20)'			9/8/2016	1015		1	x						-	+	Sol			-	+				t		_	ť				X
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Snecial	Instructions:								_						_	_		_		-	abo	rato	ry C	omr	nent	s:	_	_	_		_	
Bill to J Relinqui	Rose Slade at Energy Transfer.	a/Date	<u>т</u>	me	Received by:	1 0 100 0	0		1	1	1	V	1			Dat	e	-	Time		Samp VOCa Label	s Fre	e of	Hea	s Inta idspa er(s)	act? ace?	(s)		YYYY		2222	
Relinqui	shed by:	7/8/14 Date	110	<u>80</u> me	Received by:	MINE	K	/	1	le	16			-		Dat	e	1	Time	-	Samp	idy sole H	and	Deli r/Clie	vere ent R	d ep. ?	OUT		YYY	1.00	NNN	
Relinqui	shed by:	Date	Π	me	Received by ELC	DT:									1	Dat	e	1	Time	-	Temp	erat	uner	Upor	n Rei	ceipt:	15	3	O	LONG		3

Final 1.000

Page 13 of 14



XENCO Laboratories **XENCO** Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc	Acceptable Temperature Range: 0 - 6 degC	
Date/ Time Received: 09/08/2016 04:00:00 PM	Air and Metal samples Acceptable Range: Ambien	t
Work Order #: 536452	Temperature Measuring device used : r8	
Sample Recei	ipt 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 i	bubble)? N/A	
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? If samples for the analysis of HEM or HEM-SGT which are verifinallysts.	Except for N/A ified by the	
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnA	Ac+NaOH? N/A	

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

Analyst:

PH Device/Lot#:

Date: 09/09/2016

Checklist completed by: Jessica Kramer Checklist reviewed by: 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)





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:

11-OCT-16

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,

Kms Boah

Kelsey Brooks Project Manager Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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



Sample 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' Confirmation Floor-5 @ 20' Confirmation EW-1 @ 19' Confirmation EW-2 @ 19' Confirmation EW-3 @ 19' Confirmation NW-1 @ 19' Confirmation Floor-7 @ 20' Confirmation Floor-6 @ 20' Confirmation NW-2 @ 19' Confirmation WW-1 @ 19' Confirmation WW-2 @ 19' Confirmation NW-3 @ 7.5' Confirmation NW-4 @ 10' Confirmation NW-5 @ 12' Confirmation WW-3 @ 19'

Sample Cross Reference 538137



TRC Solutions, Inc, Midland, TX

Energy Transfer Boyd 4" Historical (West)

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	10-05-16 08:35	- 32 ft	538137-001
S	10-05-16 08:36	- 28 ft	538137-002
S	10-05-16 08:52	- 20 ft	538137-003
S	10-05-16 08:58	- 19 ft	538137-004
S	10-05-16 09:01	- 19 ft	538137-005
S	10-05-16 09:04	- 20 ft	538137-006
S	10-05-16 09:06	- 20 ft	538137-007
S	10-05-16 09:08	- 19 ft	538137-008
S	10-05-16 09:11	- 19 ft	538137-009
S	10-05-16 09:14	- 19 ft	538137-010
S	10-05-16 09:18	- 19 ft	538137-011
S	10-05-16 09:19	- 20 ft	538137-012
S	10-05-16 09:21	- 20 ft	538137-013
S	10-05-16 09:24	- 19 ft	538137-014
S	10-05-16 09:27	- 19 ft	538137-015
S	10-05-16 09:34	- 19 ft	538137-016
S	10-05-16 09:45	- 7.5 ft	538137-017
S	10-05-16 09:46	- 10 ft	538137-018
S	10-05-16 09:48	- 12 ft	538137-019
S	10-05-16 09:55	- 19 ft	538137-020



CASE NARRATIVE



Client Name: TRC Solutions, Inc Project Name: Energy Transfer Boyd 4" Historical (West)

Project ID: Work Order Number(s): 538137 Report Date: 11-OCT-16 Date Received: 10/05/2016

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.



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

	Lab Id:	538137-0	001	538137-	002	538137-	003	538137-	004	538137-	005	538137-	-006
An alusia Democrated	Field Id:	Confirmation Flo	or-1 @ 32	Confirmation Fl	oor-2 @ 28	Confirmation Flo	oor-3 @ 20	Confirmation S	W-1 @ 19'	Confirmation S	W-2 @ 19'	Confirmation Fl	oor-4 @ 20
Anaiysis Kequestea	Depth:	32 ft		28 ft		20 ft		19 ft		19 ft		20 ft	t
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOII	L
	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

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

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

Kuns Boah

Kelsey Brooks Project Manager



TRC Solutions, Inc, Midland, TX

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



Project Id: Contact:

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

	Lab Id:	538137-0	007	538137-	008	538137-	009	538137-	010	538137-	011	538137-	012
Analysis Pagyastad	Field Id:	Confirmation Flo	oor-5 @ 20	Confirmation E	W-1 @ 19'	Confirmation E	W-2 @ 19'	Confirmation E	W-3 @ 19'	Confirmation N	W-1 @ 19'	Confirmation Fl	oor-7 @ 20
Analysis Requested	Depth:	20 ft		19 ft		19 ft		19 ft		19 ft		20 ft	
	Matrix:	SOIL		SOIL	-	SOIL	-	SOIL		SOIL		SOII	-
	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

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

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Kunskoah

Kelsey Brooks Project Manager



TRC Solutions, Inc, Midland, TX

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



Project Id: Contact: Project Location:

Nikki Green Lea County, NM Date Received in Lab: Wed Oct-05-16 01:56 pm Report Date: 11-OCT-16 Project Manager: Kelsey Brooks

				1		1		-		1		1	
	Lab Id:	538137-0	013	538137-	014	538137-	015	538137-	016	538137-	017	538137-	-018
Analysis Paguastad	Field Id:	Confirmation Flo	oor-6 @ 20	Confirmation N	W-2 @ 19'	Confirmation W	W-1 @ 19'	Confirmation W	W-2 @ 19	Confirmation N	W-3 @ 7.5	Confirmation N	IW-4 @ 10'
Anulysis Requested	Depth:	20 ft		19 ft		19 ft		19 ft		7.5 f	t	10 ft	t
	Matrix:	SOIL		SOII		SOIL		SOII		SOIL		SOIL	L
	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	1.1	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

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

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Huns Roah

Kelsey Brooks Project Manager



TRC Solutions, Inc, Midland, TX

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



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

Date Received in Lab: Wed Oct-05-16 01:56 pm Report Date: 11-OCT-16 Project Manager: Kelsey Brooks

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$								
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Lab Id:	538137-019	538137-020				and the
Analysis Requested Depti: Matrix: Soull 12 ft 19 ft Matrix: Sampled: SOIL SOIL SOIL Sampled: Oct-05-16 09:55 Oct-05-16 09:55 Image: Control of Contr	Anglusia Degeneradad	Field Id:	Confirmation NW-5 @ 12'	Confirmation WW-3 @ 19'				
$ \begin{array}{ c c c c c c c } Matrix: & SOIL & SOIL & SOIL & Oct-05-16 09:48 & Oct-05-16 09:58 & Oct-05-16 09:59 & Oct-05-16 09:59 & Oct-05-16 09:59 & Oct-05-16 18:30 & Oct-05-16 18:$	Analysis Kequestea	Depth:	12 ft	19 ft				
Sampled Oct-05-16 09:48 Oct-05-16 09:55 Image: Cot-05-16 18:30 Image: Cot-05-16 16:03 Image: Cot-0		Matrix:	SOIL	SOIL				
BTEX by EPA 8021B Extracted: Analyzed: Units/RL: Oct-05-16 18:30 Oct-06-16 16:03 Oct-05-16 18:30 Oct-06-16 16:03 Benzene ND 0.00149 ND 0.00150 Senzene ND 0.00149 ND 0.00200 Ethylbenzene ND 0.00198 ND 0.00200 n_p-Xylenes ND 0.00198 ND 0.00200 Stall Stenses ND 0.00198 ND 0.00200 Total Xylenes ND 0.00198 ND 0.00200 Total Sylenes ND 0.00198 ND 0.00200 Total Xylenes ND 0.00198 ND 0.00200 Total Sylenes ND 0.00198 ND 0.00200 Total Xylenes ND 0.00198 ND 0.00200 Inorganic Anions by EPA 300/300.1 Extracted: Oct-07-16 16:00 Oct-07-16 16:00 Oct-07-16 22:02 Units/RL: mg/kg RL mg/kg RL mg/kg RL Chloride Units/RL: mg/kg		Sampled:	Oct-05-16 09:48	Oct-05-16 09:55				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	BTEX by EPA 8021B	Extracted:	Oct-05-16 18:30	Oct-05-16 18:30				
Units/RL: mg/kg RL mg/kg RL Benzene ND 0.00149 ND 0.00150		Analyzed:	Oct-06-16 16:03	Oct-06-16 16:03				
Benzene ND 0.00149 ND 0.00150 Image: constraint of the state of th		Units/RL:	mg/kg RL	mg/kg RL				
Toluene ND 0.00198 ND 0.00200 Import Ethylbenzene ND 0.00198 ND 0.00200 Import	Benzene		ND 0.00149	ND 0.00150				
Ethylbenzene ND 0.00198 ND 0.00200 m_p-Xylenes ND 0.00198 ND 0.00200 o-Xylene ND 0.00298 ND 0.00299 Fotal Xylenes ND 0.00198 ND 0.00200 Fotal Xylenes ND 0.00198 ND 0.00200 Fotal Xylenes ND 0.00198 ND 0.00200 Fotal BTEX ND 0.00149 ND 0.00150 Inorganic Anions by EPA 300/300.1 Extracted: Oct-07-16 16:00 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-06-16 03:05 Analyzed: Oct-06-16 03:09 Oct-06-16 03:35 Img/kg RL Units/RL: mg/kg RL mg/kg RL	Toluene		ND 0.00198	ND 0.00200				
n_p-Xylenes ND 0.00198 ND 0.00200 Image: constraint of the strate of the strat	Ethylbenzene		ND 0.00198	ND 0.00200				
ND 0.00298 ND 0.00299 Import	m_p-Xylenes		ND 0.00198	ND 0.00200				
ND 0.00198 ND 0.00200 Inclusion	o-Xylene		ND 0.00298	ND 0.00299			The second	
ND 0.00149 ND 0.00150 Implementation Implementatio	Total Xylenes		ND 0.00198	ND 0.00200		and the second second	and the second second	
Inorganic Anions by EPA 300/300.1 Extracted: Oct-07-16 16:00 Oct-07-16 16:00 Oct-07-16 22:02 Analyzed: Oct-07-16 21:55 Oct-07-16 22:02 Oct-07-16 22:02 </th <th>Total BTEX</th> <th></th> <th>ND 0.00149</th> <th>ND 0.00150</th> <th></th> <th></th> <th>Sec. 1</th> <th></th>	Total BTEX		ND 0.00149	ND 0.00150			Sec. 1	
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 Oct-06-16 03:35 Units/RL: mg/kg RL mg/kg RL	Inorganic Anions by EPA 300/300.1	Extracted:	Oct-07-16 16:00	Oct-07-16 16:00			1	
Units/RL: mg/kg RL mg/kg RL Chloride 116 5.00 2670 25.0		Analyzed:	Oct-07-16 21:55	Oct-07-16 22:02		A 196		
Chloride 116 5.00 2670 25.0 Image: Chloride Image: Chloride Chloride Image: Chloride Chloride <thchloride< td=""><td></td><td>Units/RL:</td><td>mg/kg RL</td><td>mg/kg RL</td><td></td><td></td><td></td><td></td></thchloride<>		Units/RL:	mg/kg RL	mg/kg RL				
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	Chloride		116 5.00	2670 25.0	2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -			
Analyzed: Oct-06-16 03:09 Oct-06-16 03:35 Units/RL: mg/kg RL mg/kg RL	TPH By SW8015B Mod	Extracted:	Oct-05-16 15:00	Oct-05-16 15:00		10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		A-4 - 5 337
Units/RL: mg/kg RL mg/kg RL		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	C6-C10 Gasoline Range Hydrocarbons		ND 15.0	ND 14.9				
C10-C28 Diesel 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	Total TPH		ND 15.0	ND 14.9				

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

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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
- PQL Practical Quantitation Limit MQL Method Quantitation Limit

LOD Limit of Detection

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

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5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr Suite 102, Tempe AZ 85282	(602) 437-0330	



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

Work Orders : 538137, 538137 Lab Batch #: 3001470 Sample: 538137-001 / SMP	Project ID: P Batch: 1 Matrix: Soil SURROGATE RECOVERY STUDY					
Units: mg/kg Date Analyzed: 10/05/16 17:58						
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	Batc	h: 1 Matrix	: Soil		121.1	
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	Batc	h: 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	Batc	h: 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	1	
o-Terphenyl	59.7	49.9	120	70-135		
Lab Batch #: 3001470 Sample: 538137-005 / SMP	Batc	h: 1 Matrix	: Soil			
Units: mg/kg Date Analyzed: 10/05/16 20:45	SU	RROGATE R	ECOVERY	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



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

Work Orders : 538137, 538137 Lab Batch #: 3001470 Sample: 538137-006 / SMP	Project ID: 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	Batc	h: 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	1.1	
Lab Batch #: 3001470 Sample: 538137-008 / SMP	Batc	h: 1 Matrix	: Soil		3 X 300	
Units: mg/kg Date Analyzed: 10/05/16 22:01	SURROGATE RECOVERY STUDY					
TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes	100	100	[2]			
Tembraid	103	100	103	70-130		
0-1 erpnenyi	36.5 Dete	50.0	113	70-135	10.37	
Lab Batch #: 3001470 Sample: 538137-0097 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	1.22	
o-Terphenyl	56.2	50.0	112	70-135	12. 2010	
Lab Batch #: 3001470 Sample: 538137-010 / SMP	Batc	h: 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



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

Work Orders : 538137, 538137 Lab Batch #: 3001470 Sample: 538137-011 / SM	P Bate	Project ID h: 1 Matrix	: Soil				
Units: mg/kg Date Analyzed: 10/05/16 23:44	SU	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 / SM	P Bate	h: 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 / SM	P Batc	h: 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	39.00		
o-Terphenyl	57.3	49.9	115	70-135	2 10		
Lab Batch #: 3001470 Sample: 538137-014 / SM	P Bate	h: 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 / SM	P Batc	h: 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



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

Work Orders : 538137, 538137 Lab Batch #: 3001470 Sample: 538137-016 / SMP	Project ID: Batch: 1 Matrix: Soil SURROGATE RECOVERY STUDY					
Units: mg/kg Date Analyzed: 10/06/16 01:53						
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	1000	
Lab Batch #: 3001470 Sample: 538137-018 / SMP	Batch:	1 Matrix	: Soil		1	
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	2.3	
Lab Batch #: 3001470 Sample: 538137-019 / SMP	Batch:	1 Matrix	: Soil	18	- Andrew	
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	S. C. N.	
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 / BAll results are based on MDL and validated for QC purposes.


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

Work Orders : 538137, 538137 Lab Batch #: 3001510 Sample: 538137-001 / SMP	Batch	Project ID n: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	h: 1 Matrix	: Soil		10
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	1. A. A.
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	
Lab Batch #: 3001510 Sample: 538137-004 / SMP	Batch	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	STUDY	and the
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	h: 1 Matrix	: Soil	i forme i	1
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	STUDY	1 23
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.



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

Work Orders : 538137, 538137 Lab Batch #: 3001510 Sample: 538137-006 / SMP	Batc	Project ID h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	Bate	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	Bate	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
14-Difluorobenzene	0.0207	0.0300	102	80.120	
4.Bromofluorobenzene	0.0354	0.0300	85	80-120	
Lab Batch #: 3001510 Sample: 538137-009 / SMP	Bate	h: 1 Matrix	• Soil	00-120	
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	Batc	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	00	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.



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

Work Orders : 538137, 538137 Lab Batch #: 3001510 Sample: 538137-011 / SMP	Batcl	Project ID h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	Batcl	h: 1 Matrix	: Soil	18.5	
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	Batcl	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	1
Lab Batch #: 3001510 Sample: 538137-014 / SMP	Batcl	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	Batcl	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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.



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

Work Orders : 538137, 538137 Lab Batch #: 3001510 Sample: 538137-016 / SMP	Bate	Project ID h: 1 Matrix	: Soil		
/ork Orders : 538137, 538137 ab Batch #: 3001510 Sample: 538137-016 / SMI nits: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes 4-Difluorobenzene -Bromofluorobenzene ab Batch #: 3001510 Sample: 538137-017 / SMI nits: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes 4-Difluorobenzene -Bromofluorobenzene ab Batch #: 3001510 Sample: 538137-018 / SMI nits: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes 4-Difluorobenzene -Bromofluorobenzene	SU	RROGATE R	ECOVERY S	STUDY	
Work Orders : 538137, 538137 Lab Batch #: 3001510 Sample: 538137-016 / SM Units: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes 1.4-Difluorobenzene Lab Batch #: 3001510 Sample: 538137-017 / SM Units: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes 1.4-Difluorobenzene Lab Batch #: 3001510 Sample: 538137-018 / SM Units: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes 1.4-Difluorobenzene Lab Batch #: 3001510 Sample: 538137-018 / SM Units: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes 1.4-Difluorobenzene Lab Batch #: 3001510 Sample: 538137-019 / SM Units: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes 1.4-Difluorobenzene Lab Batch #: 3001510 Sample: 538137-019 / SM Units: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes 1.4-Difluorobenzene Lab Batch #: 3001510 Sample: 538137-020 / SM Units: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes 1.4-Difluorobenzene Lab Batch #: 3001510 Sample: 538137-020 / SM Units: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes 1.4-Difluorobenzene	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	Bate	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	1.1.1.5
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	1.1
Lab Batch #: 3001510 Sample: 538137-018 / SMP	Bate	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes	0.0245	0.0200	116	00.100	
4 Brownellwersharene	0.0345	0.0300	115	80-120	
4-Bromonuorooenzene Lab Batab # 2001510 Sampla: 528127.010 / SMD	0.0298	0.0300	99	80-120	
Lab Batch #: 5001510 Sample: 550157-0197 SMP	Date	n: 1 Matrix	: 5011		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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	1.45
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	
Lab Batch #: 3001510 Sample: 538137-020 / SMP	Bate	h: 1 Matrix	: Soil		- 5.7
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	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 / BAll results are based on MDL and validated for QC purposes.



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

Units: mg/kg Date Analyzed: 10/05/1	6 16:23 SU	RROGATE R	ECOVERY	STUDY	
TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes	110	100	110	70.120	
1-Chlorooctane	110	100	110	70-130	19. L. L.
Leb Poteb # 2001510 Sempler 714644	1 DIV/DIV Data	50.0	123	/0-135	-
Lab Batch #: 5001510 Sample: /14044	-I-DLK/DLK DAICI	I: I Matrix	: 50110		
Units: mg/kg Date Analyzed: 10/06/1	6 16:03 SU	RROGATE R	ECOVERY	STUDY	
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	1
4-Bromofluorobenzene	0.0253	0.0300	84	80-120	1
Lab Batch #: 3001470 Sample: 714620	-1-BKS / BKS Batcl	n: 1 Matrix	: Solid		
Units: mg/kg Date Analyzed: 10/05/1	6 16:55 SU	RROGATE R	ECOVERY	STUDY	
TPH By SW8015B Mod Analytes	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 Batcl	n: 1 Matrix	: Solid		
Units: mg/kg Date Analyzed: 10/06/1	6 16:03 SU	RROGATE R	ECOVERY	STUDY	N 6
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	0.0289	0.0300	96	80-120	
Lab Batch #: 3001470 Sample: 714620	-1-BSD / BSD Batcl	h: 1 Matrix	: Solid		
Units: mg/kg Date Analyzed: 10/05/1	6 17:26 SU	RROGATE R	ECOVERY	STUDY	
TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	100	129	70-130	

* 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.



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

Work Orders : 538137, 538137 Lab Batch #: 3001510 Sample: 714644-1-BSD / BS	SD Bate	Project ID h: 1 Matrix	: Solid		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	STUDY	1
Vork Orders : 538137, 538137 ab Batch #: 3001510 Sample: 714644-1-BSE nits: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes -4-Difluorobenzene -Bromofluorobenzene -Bromofluorobenzene ab Batch #: 3001470 Sample: 538137-001 S nits: mg/kg Date Analyzed: 10/05/16 18:29 TPH By SW8015B Mod Analytes -Chlorooctane -Terphenyl ab Batch #: 3001510 Sample: 538137-002 S nits: mg/kg Date Analyzed: 10/06/16 16:03 BTEX by EPA 8021B Analytes -4-Difluorobenzene -Bromofluorobenzene -Bromofluorobenzene -Bromofluorobenzene ab Batch #: 3001470 Sample: 538137-001 SI nits: mg/kg Date Analyzed: 10/05/16 18:59 TPH By SW8015B Mod Analytes -Chlorooctane -Terphenyl ab Batch #: 3001470 Sample: 538137-001 SI nits: mg/kg Date Analyzed: 10/05/16 18:59 TPH By SW8015B Mod Analytes -Chlorooctane	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	100
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	
Lab Batch #: 3001470 Sample: 538137-001 S / MS	B Batc	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/05/16 18:29	SU	RROGATE R	ECOVERY	STUDY	
TPH By SW8015B Mod	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	Batc	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	STUDY	
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
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 / N	ASD Bate	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/05/16 18:59	SU	RROGATE R	ECOVERY	STUDY	
TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane	128	99.8	128	70-130	
o-Terphenyl	63.1	49.9	126	70-135	1
Lab Batch #: 3001510 Sample: 538137-002 SD / N	ASD Bate	h: 1 Matrix	: Soil		
Units: mg/kg Date Analyzed: 10/06/16 16:03	SU	RROGATE R	ECOVERY	STUDY	
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene	0.0342	0.0300	114	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

4-Bromofluorobenzene

Surrogate Recovery [D] = 100 * A / B

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

0.0312

0.0300

104

80-120



BS / BSD Recoveries

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



Work Order #: 538137, 538137							Proj	ject ID:			
Analyst: PJB	D	ate Prepar	ed: 10/05/20	16			Date A	nalyzed:	10/06/2016		
Lab Batch ID: 3001510 Sample: 714644-	1-BKS	Batch	n #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /	BLANK	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
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	D	ate Prepar	ed: 10/07/20	16			Date A	nalyzed:	10/07/2016		
Lab Batch ID: 3001661 Sample: 714720-	1-BKS	Batch	n #: 1					Matrix:	Solid		
Units: mg/kg	1	BLAN	K/BLANK	SPIKE /	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
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			Proj	ect ID:							
Analyst: MNR	D	ate Prepar	ed: 10/07/20	016			Date A	nalyzed:	10/07/2016		
Lab Batch ID: 3001666 Sample: 714722-	1-BKS	Batch	n #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /	BLANK	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
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	D	ate Prepar	ed: 10/05/20	016		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Date A	nalyzed:	10/05/2016		
Lab Batch ID: 3001470 Sample: 714620-	1-BKS	Batch	n #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /	BLANK	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
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	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed: 10/06/2016	Date Prepa	red: 10/05/2	2016	An	alyst: I	РJВ					
Reporting Units: mg/kg		N	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
BTEX by F	CPA 8021B Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analy	[A]	[B]		[D]	[E]		[G]				
Benzene	<0.0014	9 0.0994	0.0776	78	0.0998	0.0785	79	1	70-130	35	
Toluene	<0.0019	9 0.0994	0.0774	78	0.0998	0.0783	78	1	70-130	35	
Ethylbenzene	<0.0019	9 0.0994	0.0797	80	0.0998	0.0798	80	0	71-129	35	
m_p-Xylenes	<0.0019	9 0.199	0.168	84	0.200	0.168	84	0	70-135	35	
o-Xylene	<0.0029	8 0.0994	0.0777	78	0.0998	0.0780	78	0	71-133	35	5
Lab Batch ID:3001661Date Analyzed:10/07/2016Reporting Units:mg/kg	QC- Sample Date Prepa	ID: 538137 red: 10/07/2	2-003 S 2016 1ATRIX SPIK	Ba An E / MAT	tch #: alyst: N RIX SPI	1 Matrix MNR KE DUPLICA	: Soil	OVERY	STUDY		
Inorganic Anions Analy	by EPA 300/300.1 Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	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 Date Analyzed: 10/07/2016	QC- Sample Date Prepa	ID: 538139 red: 10/07/2	0-009 S 2016	Ba	tch #: alyst: N	1 Matrix	: Soil	OVEDV			
Reporting Units: mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA'	LE REC	UVERY	STUDY		
Reporting Units: mg/kg Inorganic Anions Analyt	by EPA 300/300.1 Parent Sample Result [A]	Spike Added [B]	IATRIX SPIK Spiked Sample Result [C]	E / MAT Spiked Sample %R [D]	Spike Added [E]	KE DUPLICAT Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	STUDY Control Limits %R	Control Limits %RPD	Flag

Matrix Spike Percent Recovery [D] = 100*(C-A)/BRelative 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 II):				
Lab Batch ID:	3001666	QC- Sample ID:	538137	-011 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	10/07/2016	Date Prepared:	10/07/2	016	An	alyst: 1	MNR					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Inorga	nic 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	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	10/05/2016	Date Prepared:	10/05/2	.016	An	alyst:	ARM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Т	PH 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 Gasolin	e 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

	Project Manager:	Nikki Green								_		-					-	Pro	oject	Nan	ne:	Ene	rgy '	Tran	sfer	Bo	yd 4	" H	istor	ical (wes	<u>f)</u>
	Company Name	TRC Solutions, I	nc				1 <u>1</u>			_							_		Pro	oject	#:		2				_					_
	Company Address:	2057 Commerce	,	1														F	Proje	ct La				1	Le	a Co	unty	, NM	Λ		_	_
	City/State/Zip:	Midland, TX 797	03										_				_			PO	#:					_	_					
	Telephone No:	432.520.7720	0	R		1	Fax No:		432	.520	0.770	1	htre	eolu	tion	5 001	_ Re	por	t For	mat		x3	DA	ard A			TRR	P	٦		DES	
	Sampler Signature:	runn	un 2	NO	en		e-mail.		r	ose	.sla	le@	Den	ergy	tran	sfer	com			-			A	naly	ze Fo	or:	_	_				
(lab use	only)							1	0	2	ar	n	e	11	QL	lind	strea	gen.	-			TCLI	2: _:	-		-					72 hrs	
ORDE	R#: 500	61							_	1	Prese	vatio	on & 1	# of C	ontain	ers	Ma	trix	8	Π	T	Τ	Se		Π	09					4	
LAB # (lab use onfy)	FIEL	D CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	lce	HNO	HCI	H ₂ SO4	NaOH	Na ₂ S ₂ O ₃	Other (Specify)	DW=Drinking Water SL=Sludge GW = Cronodwater S=ScillScild	NP=Non-Potable Specify Other	TPH: 418.1 (8015M) 801	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (CI, SU4, Alkalinity) SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg	Volatiles	Semivolatiles	< 8TEX 80218 8030 or BTEX 82	RCI	N.O.R.M.	Chlorides E 300.1		RUSH TAT (Pre-Schedule) 24	Standard TAT
	Confirmatio	n Floor-1 @ 32	2		10	10/5/2016	835		1	x							S	Dil	X		-	-	-			X	4	+	×	+		×
	Confirmatio	n Floor-2 @ 28	5			10/5/2016	846		1	x							S	oil	×		-	-	-		\square	~	+	-	×	+	\square	
	Confirmatio	n Floor-3 @ 20	r			10/5/2016	852		1	x							S	lic	X			-	-		\square	~	\rightarrow	4	×	+	\square	4
	Confirmatio	on SW-1 @ 19				10/5/2016	858		1	x							S	lic	X			-	1		Ц	×	+	+	×	+		4
	Confirmatio	on SW-2 @ 19				10/5/2016	901		1	x							S	lio	X							×	\rightarrow	4	×	+		4
	Confirmatio	n Floor-4 @ 20	r			10/5/2016	904		1	x							S	oil	X							X	\downarrow	\downarrow	×	_		4
	Confirmatio	n Floor-5 @ 20	r			10/5/2016	906		1	x							S	lio	X					-		×	-	4	×	-		4
	Confirmatio	on EW-1 @ 19				10/5/2016	908		1	x							S	oil	X			-				X	4	4	×	+		4
	Confirmatio	on EW-2 @ 19				10/5/2016	911		1	x							S	lio	X							X	-	4	×	-		4
	Confirmatio	on EW-3 @ 19				10/5/2016	914		1	x							S	lio	X					-		×	-	4	×	+		4
	Confirmatio	on NW-1 @ 19				10/5/2016	918		1	x							S	lio	X							X			×			X
Special Bill to R	Instructions: tose Slade at Energy Tr	ansfer.															ada.	_	Time		Sam VOC	ple C s Fre	ontai e of	iners Head	Inta Inta Ispa	ct? ce?			YYY		NNN	
Relinquis Relinquis	shed by: Matthew s	Szeen 1	Date C-S-H Date	140	me 20 me	Received by: Received by:	Ame	R							1	10.2	S·14		35 Time	6	Cust Cust Sam	ody s ody s ple H by Sa	eals eals and l mpler urier?	on c on c Deliv /Clie	ontai ooler ered nt Re UPS	iner(r(s) ip. ?	s) DHL	F	Y Y Y FedE	c Lor	N N N N N N N N N N N N N N N N N N N	Br ,
Relinguis	shed by:		Date	Ti	me	Received by ELO	T:								I	0	late		Time	•	Tem	perat	ure L	Jpon		C	emp :/F: (Corre	D 11 ecte	IR I	D:R-8 C mp:	6	

Final 1.000

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Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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Final 1.000

Page 25 of 26

The Environmental Lab of Texas

Phone:

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

	Project Manager:	ager: Nikki Green												_	_	F	Projec	t Na	me:	En	nerg	Tn	ansf	er E	Boyd	4"	Hist	orical	(we	st)
	Company Name	TRC Solutions, Inc				and the street					_			-	_		P	rojec	:t #:				-	2		-	-			
	Company Address	: 2057 Commerce		17.3	A Second										_		Proj	ect l	.oc:		-		L	.ea	Coun	ity, 1	MM			
	City/State/Zip:	Midland, TX 79703								1								P	0 #:			-								
	Telephone No:	422 520 7720				Fax No:	4	32 4	520 7	701						Rep	ort Fo	rma	t:	Q	Stan	dard		E		RP			PDE	s
	relephone No.	432.520.1120	20			T dix HU.	-	V6	020.1	101	~									~	3.1	24	+		3					
	Sampler Signature	Matthew	Dre	en		e-mail:	-	ros	ngi se.s	lade	@tr	ner	gytra	ns.c	er.co	m	Г					Ana	lyze	For:			-		T	1
(lab use	only)				-	POR	ano		,	-		1	19 100			3	F			TO	LP:	-	-	F	-		Π		2 hrs	
ORDE	R# 5001	31	roz	anr	1210W	dstram.	no	\mathbf{t}	Pre	serva	tion (# 0	Conta	liners	T	Matrix	× gg	Г			~	2	+	1	1				48, 7	L
LAB # (lab use only)	FIE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	I OLDI #. ON CONTRINETS	Ice HNO.	HCI	H ₂ SO ₄	NaOH	Na2S2O3	None	Other (Specify)	DW=Drinking Water Sustinge GW = Groundwater S=Soll/Solid	NP=Non-Potable Specily Other TPH: 418.1 (2015/h) 801	TPH: TX 1005 TX 1006	Cetions (Ca, Mg, Na, K)	Anions (CI, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg	Volaties	TEX 8021B/6030 or BTEX 826	RCI	N.O.R.M.	Chlorides E 300.1		RUSH TAT (Pre-Schedule) 24,	Standard TAT
	Confirmatio	on Floor-7 @ 20'			10/5/2016	919		1	x							Soil	X							×			x			x
	Confirmatio	on Floor-6 @ 20'	1.11		10/5/2016	921		1	x							Soil	X							X			×	_		×
	Confirmat	ion NW-2 @ 19'			10/5/2016	924		1	x							Soil	X							X			X			x
	Confirmati	ion WW-1 @ 19'			10/5/2016	927		1	x		1		-			Soil	X							X			×	-		x
	Confirmati	ion WW-2 @ 19'			10/5/2016	934		1	x							Soil	X							X	-		×			x
1000	Confirmati	ion NW-3 @ 7.5'		-	10/5/2016	945		1	x							Soil	X							X			×		-	×
	Confirmat	ion NW-4 @ 10'			10/5/2016	946		1	x							Soil	X							X	-		×		1	x
	Confirmat	ion NW-5 @ 12'			10/5/2016	948		1	x							Soil	X							×	-		X	_		x
	Confirmati	ion WW-3 @ 19'			10/5/2016	955		1	x	-	-			-	-	Soil	×				-	+	-	+×	-		X	-	+	×
			-					+	+	+	+	+		+	+	-	+	+	Η	-	+	+	+	+	+	-			+	\vdash
Special	Instructions:							-	-	-	-	-		-	-			-	Lab	orat	tory	Com	men	ts:						
Bill to R	tose Slade at Energy T	ransfer.																	San	nple Cs F	Con	taine of He	adso	act	?			Y	N	
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Relinquis	shed by:	Date	e Ti	me	Received by ELC	от:		-	1	X		1			Date	2	Tim	le	Ten	by S by C	ampl ourie ature	er/Cl r? Upo	lient F UF	lep.	? DH Tem	L :0	Fed	Y Ex Lo ID:R-	N 8	ba-

12600 West I-20 East

Odessa, Texas 79765



XENCO Laboratories KENCO ABORATORIES Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc	Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient
Date/ Time Received: 10/05/2016 01:56:00 PM	
Work Order #: 538137	Temperature Measuring device used : R8
Sample Red	ceipt 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 Custod	ly? 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 ind	ch bubble)? N/A
#22 <2 for all samples preserved with HNO3,HCL, H2SO4 samples for the analysis of HEM or HEM-SGT which are very analysts	4? Except for N/A erified by the
#23 >10 for all samples preserved with NaAsO2+NaOH, Z	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

Date: 10/05/2016

Checklist reviewed by: Mms Moah Kelsey Brooks

Date: 10/05/2016