



**APPROVED**

*By Olivia Yu at 9:49 am, Dec 22, 2017*

October 12, 2017

Mr. Dean Ericson  
ETC Field Services LLC  
600 N. Marienfeld  
Suite 700  
Midland, TX 79701

Dear Mr. Ericson:

**Re: Remediation Summary Report  
2C-14-3 Ten Inch (1 RP-4583)  
ETC Field Services LLC  
Site Location: Sec. 24, T 25-S, R 37-E  
(Lat 32.11776N°, Long -103.11039W°)  
Lea County, New Mexico**

NMOCD approves of the  
delineation and proposed  
remediation for 1RP-4583.  
See email correspondence  
for stipulations.

Reference No. 11135250-1

GHD Services, Inc. (GHD) is pleased to present this report for the above referenced site. The 2C-14-3 Ten Inch (hereafter referred to as the "Site") is located within Section 35, Township 21 South, Range 37 East, in Lea County, New Mexico (see Figure 1). The property is privately owned.

On January 18, 2017, a release of approximately 39 barrels (bbls) of natural gas/oil was reported to the State of New Mexico Oil Conservation Division (NMOCD) via Form C-141. A leaking 10-inch pipe was the cause of the release. Approximately 35 bbls were recovered utilizing a vacuum truck. Contaminated soils were excavated and stockpiled on site (see Figure 2). NMOCD release number 1RP 4583 was assigned.

## 1. Recommended Remediation Action Limits

Based on information available from the United States Geologic Survey National Water Information System, the depth to groundwater at the Site is approximately 70 ft. below ground surface (bgs). This is based on a water well that is located approximately 0.5 mile northwest of the Site (see Appendix A, Water Well Report for depth to water). Additionally, there are no well head protection areas or surface water bodies within 1000 feet of the Site (see Figure 1). Therefore, the preliminary total ranking score is 10 (see table below).

Based on this score, the applicable NMOCD Site specific Recommended Remediation Action Limits (RRALs) are 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total benzene, toluene, ethylbenzene, and xylenes (BTEX), 1,000 mg/kg for total petroleum hydrocarbons (TPH), and 600 mg/kg for chlorides.



New Mexico Oil Conservation Division Site Assessment	
Ranking Criteria	Score
Depth to Ground Water (50-99 ft. bgs)	10
Wellhead Protection Area (> 1000 ft. from water source, > 200 ft. from domestic source)	0
Distance to Surface Body Water (>1000 ft.)	0
<b>Ranking Criteria Total Score</b>	<b>10*</b>
*Because the ranking criteria total score is 20, NMOCD established RRALs are 10 mg/kg for benzene, 50 mg/kg for total BTEX, 1,000 mg/kg for total TPH and 600 ppm for chlorides <sup>1</sup> .	

1. NMOCD Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993 and recent discussions with Mr. Jim Griswold with the NMOCD.

## 2. Assessment Activities

The impacted area had been previously excavated to a depth of approximately 4 to 6 ft. bgs and 53 soil samples were collected by ETC Field Services LLC personnel for laboratory analysis. The samples were submitted to Cardinal Laboratories in Hobbs, New Mexico for BTEX by EPA Method 8260B, TPH by EPA Method 8015B, and chloride by EPA Method 300. The samples contained benzene concentrations ranging from below the reporting limit to 19.8 mg/kg, total BTEX concentrations ranging from below the reporting limit to 788.1 mg/kg, total TPH concentrations ranging from below the reporting limit to 36,960 mg/kg, and chloride concentrations ranging from 48 to 6,960 mg/kg (Table 1). The highest TPH and chloride concentrations were from samples collected from the north end of the excavation where the release occurred. The final dimensions of the initial excavation were measured at approximately 18 feet wide by 161 feet long by 4 to 6 feet deep.

Excavation activities to assess the horizontal and vertical extent of impacted soil from the release occurred on March 28 and 29, 2017 by GHD. Vertical and horizontal assessment was performed by collecting soil samples from 13 test pits (TPs-1, 2, 3, 5, 6, and 8 through 15) in the base of the excavation and in the four cardinal directions (Figure 2). Field screening of the soil was performed using the PetroFLAG Hydrocarbon Analysis System and a HACH chloride field kit. Excavation activities were performed by Diamondback Disposal Services, Inc. of Hobbs, New Mexico, and observed by GHD.

Once field screening indicated soil concentrations were near or below the RRALs, soil samples were collected for laboratory analysis. The soil samples were submitted to Cardinal Laboratories and analyzed for BTEX by EPA Method 8021, TPH by EPA Method 8015 full range, and chloride by EPA Method 300 (Table 1). Laboratory analytical data can be found in Appendix B and field screening data can be found in Table 1.

None of the samples submitted for BTEX analysis contained concentrations above the laboratory reporting level. One sample collected from test TP-10 at 4 ft. bgs contained a total TPH concentration of



50.4 mg/kg. Chloride concentrations ranged from less than the laboratory reporting limit to 537 mg/kg, all below the RRAL of 600 mg/kg.

GHD performed additional delineation on June 26 and 27, 2017 that included the collection of nine soil samples for laboratory analysis from 11 test pits. FS-1 and FS-2 were excavated within the trench on June 26 and FS-1 through FS-9 were excavated to the west of the excavation on June 27. The test pits within the excavation were excavated to depths of 8.5 and 17.5 ft. bgs and the test pits to the west were excavated to 4 ft. bgs. Soil samples were screened in the field utilizing a Hach chloride kit and select samples were submitted for laboratory analysis. The samples were submitted to Hall Environmental Analysis Laboratory (HEAL) for chloride analysis by EPA Method 300. Chloride concentrations ranged from below the laboratory reporting limit to 800 mg/kg. The only sample containing a chloride concentration above the RRAL was collected from test pit SP-3 (FS-7) at 4 ft. bgs. The laboratory report is included in Appendix B and the field screening data is included in Table 1.

In an email dated August 25, 2017, Ms. from Olivia Yu with the NMOCD requested additional background samples be collected north and south of FS-7 and FS-5 due to the presence of a flow line (not owned by ETC) located to the west of the ETC pipeline. The purpose of the additional sampling was to establish a border separating impacted soils between the two pipelines.

GHD performed additional delineation on September 7, 2017 that included three test pits, TP-16 through TP-18. TP-16 was advanced approximately 6 inches into the base of the excavation and one sample was collected and submitted to HEAL for chloride analysis by EPA Method 300. This sample did not contain a chloride concentration above the laboratory reporting limit.

The sample collected from TP-17 contained a chloride concentration of 100 mg/kg and the sample collected from TP-18 contained a chloride concentration of 40 mg/kg. See Figure 2 for test pit locations. Based on these results, it appears that there is an area of un-impacted soil between the ETC pipeline and the Chevron pipeline.

### 3. Summary and Recommendations

Chloride impacted soils above the RRAL at the Site were encountered at a depth of 4 ft. bgs in FS-7 and at a depth of 4.5 ft. bgs within the excavation (Sample Nos. 6, 9, 15, 21, and 24). Chloride impacted soils exceeding the RRAL were also encountered on the surface in four areas (Sample Nos. 44, 46, 47, and 50). Based on the assessment of the chloride concentrations, GHD recommends the following:

- Excavating the remaining petroleum hydrocarbon contaminated soil within the excavation. Scrape the areas where contamination was found at the surface and excavate the area around FS-7 to a depth of 4 ft. bgs.
- Placement of a 20-mil polyethylene liner in the bottom of the excavation at a depth of 4 ft. bgs.



- Backfilling of the excavation with clean fill material and wheel compacting to grade, once approval of delineation has been confirmed.
- Fertilizing and reseeding of the disturbed area with a seed mix that is approved by the land owner.

Following completion of liner placement and excavation backfill, revegetation of the Site will be performed. Disturbed areas associated with the remediation efforts will be reseeded.

Following completion of the above activities a request for no further action will be made for the Site. Should you have any questions, or require additional information regarding this submittal, please feel free to contact myself or Bernie Bockisch at (505) 884-0672 or [Bernard.Bockisch@ghd.com](mailto:Bernard.Bockisch@ghd.com).

Sincerely,

GHD

A handwritten signature in blue ink that reads "Alan Brandon". The signature is fluid and cursive, with the first and last names clearly legible.

Alan Brandon  
Senior Project Manager

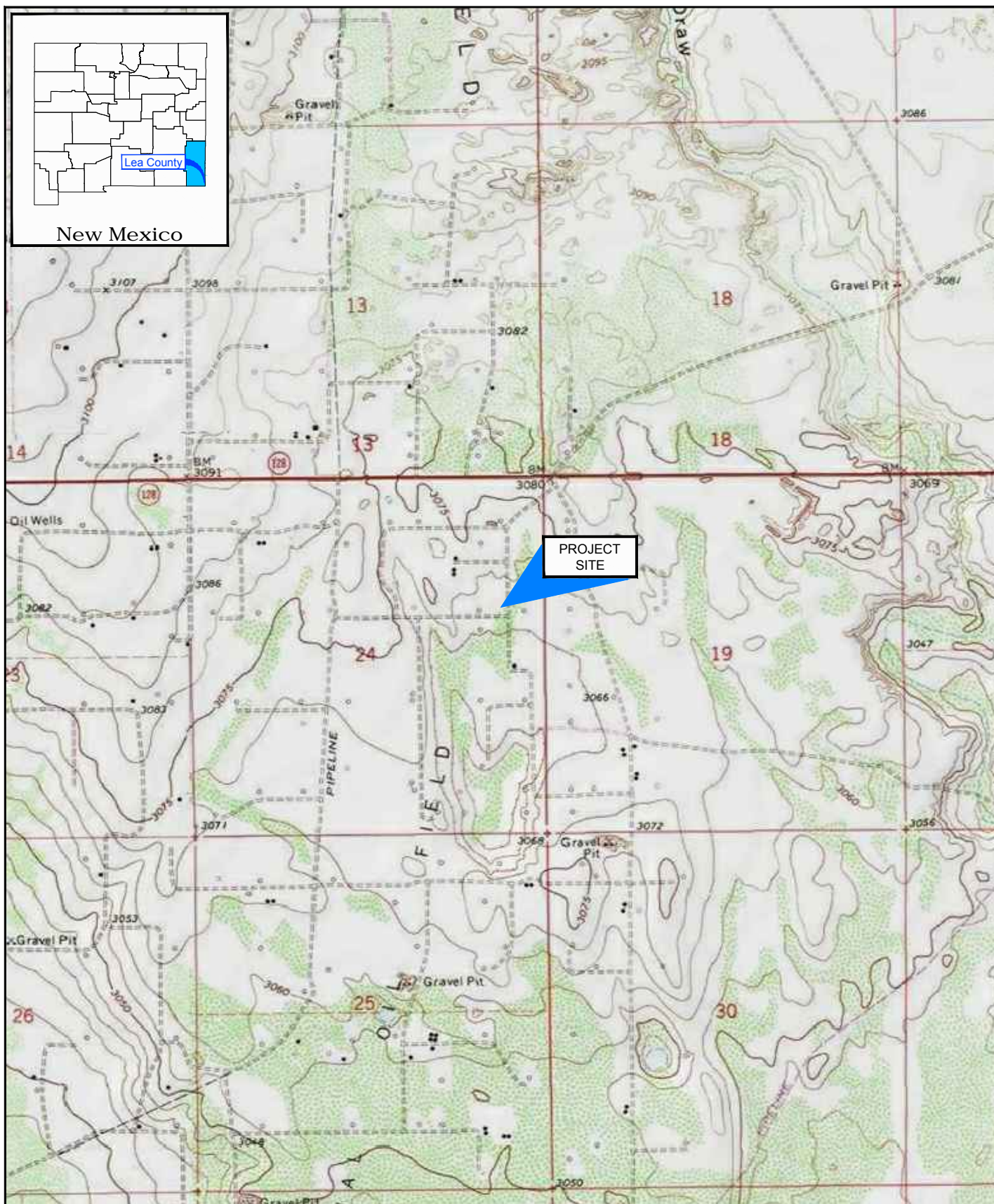
AB/mc/01

A handwritten signature in blue ink that reads "Bernard Bockisch". The signature is fluid and cursive, with the first and last names clearly legible.

Bernard Bockisch  
New Mexico Operations Manager

# Figures



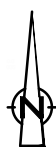


Source: USGS 7.5 Minute Quad "Jal SE, Jal, Jal NW, and Jal NE, New Mexico"

Lat/Long: 32.11776° North, 103.11039° West

0 1000 2000ft

Coordinate System:  
NAD 1983 (2011) StatePlane-  
New Mexico East (US Feet)



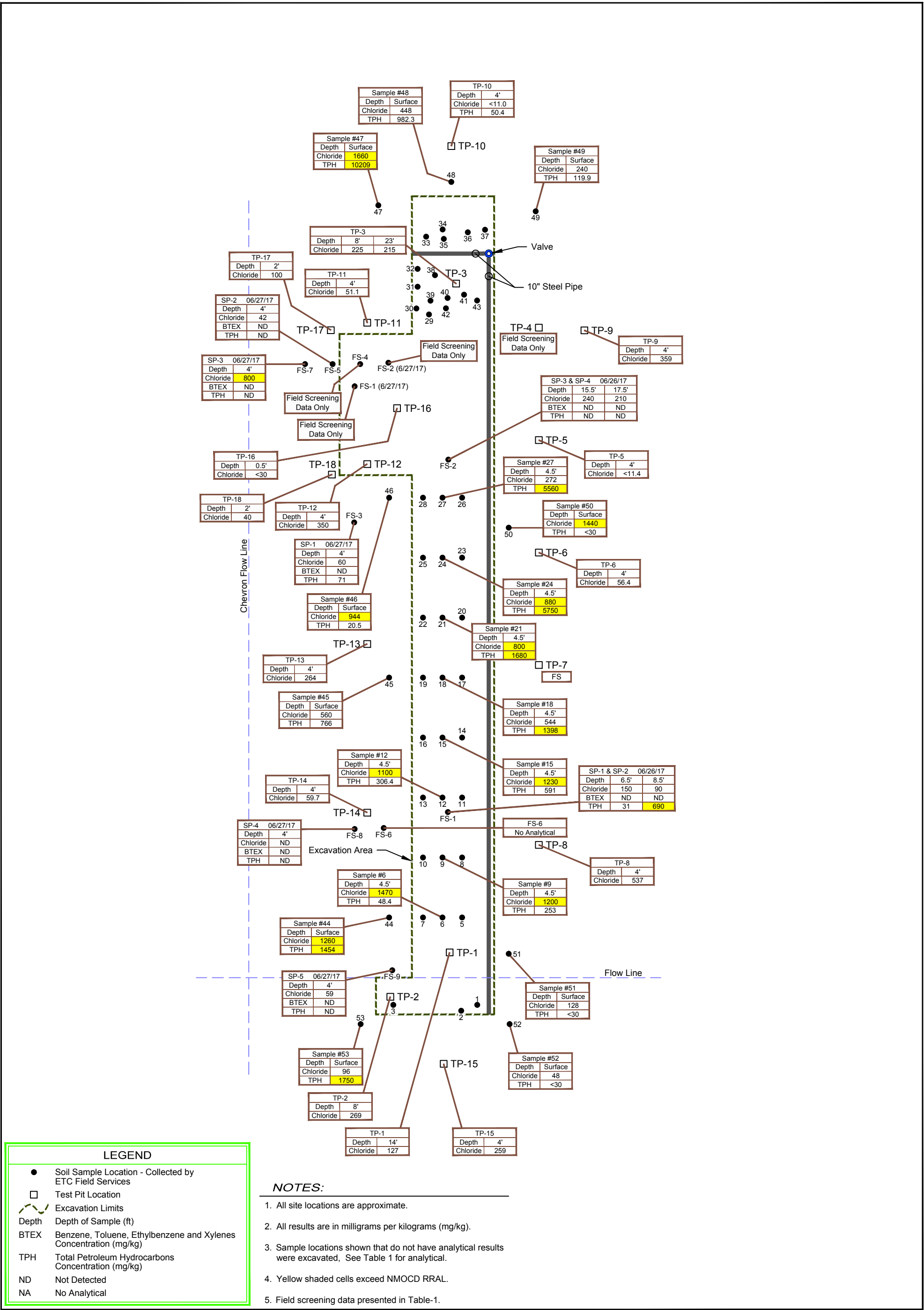
ETC FIELD SERVICES  
LEA COUNTY, NEW MEXICO  
2C-14-3 10"

SITE LOCATION MAP

11135250-01

Apr 5, 2017

FIGURE 1



# Tables



Table 1

ETC Field Services LLC - 2C-14-3 10" Block Valve  
 Section 24, Township 25 South, Range 37 East  
 Lea County, New Mexico  
 Soil Analytical Results Summary

Sample ID	Date	Sample Depth	Chlorides	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	TPH	TPH	TPH	Total TPH	Field Screen - Chloride	Field Screen - Hydrocarbons
		(ft.)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO (C6-C10)	DRO (C10-C28)	Ext DRO (28-C36)	GRO/DRO	(mg/kg)	(ppm)
									(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)		
NMOCD Remediation Action Levels			600	10	NE	NE	NE	50	NE	NE		1,000		
EXCAVATION SAMPLES														
*Sample #1	02/03/2017	1.5	784	<0.5	5.29	8.97	41.5	55.76	884	4,360	1,090	6,334.0	--	--
*Sample #2	02/03/2017	1.5	848	<0.05	<0.05	0.323	1.28	1,603	69.2	7,060	2,140	9,269.2	--	--
*Sample #3	02/03/2017	3.0	1,630	<0.5	5.25	5.49	20	30.74	909	2,130	526	3,565.0	--	--
*Sample #4	02/03/2017	1.5	5,330	<0.5	1.02	6.27	23	30.29	746	4,730	1,390	6,866.0	--	--
*Sample #5	02/03/2017	1.5	1,760	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0	--	--
*Sample #6	02/03/2017	4.5	1,470	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	32.2	16.2	48.4	--	--
*Sample #7	02/03/2017	1.5	1,060	<0.05	<0.05	<0.05	0.22	0.22	<50.0	1,180	474	1,654	--	--
*Sample #8	02/03/2017	1.5	2,280	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0	--	--
*Sample #9	02/03/2017	4.5	1,200	<0.05	<0.05	<0.05	0.312	0.312	<10.0	183	70.4	253	--	--
*Sample #10	02/03/2017	1.5	992	<0.05	0.38	0.204	0.593	1,177	19.8	413	<10.0	432.8	--	--
*Sample #11	02/03/2017	1.5	4,160	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	26	<10.0	26	--	--
*Sample #12	02/03/2017	4.5	1,100	<0.05	0.151	0.228	1.15	1,529	22.4	284	<10.0	306.4	--	--
*Sample #13	02/03/2017	1.5	1,390	0.921	7.12	1.75	6.25	16,041	213	811	<50.0	1024	--	--
*Sample #14	02/03/2017	1.5	1,490	<0.05	<0.05	<0.05	<0.15	<0.30	<50.0	77.6	<50.0	77.6	--	--
*Sample #15	02/03/2017	4.5	1,230	<0.05	<0.05	0.082	0.604	0,686	<50.0	591	<50.0	591	--	--
*Sample #16	02/03/2017	1.5	1,620	<0.05	<0.05	0.091	0.444	0,535	<50.0	1,630	<50.0	1,630.0	--	--
*Sample #17	02/03/2017	1.5	5,360	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0	--	--
*Sample #18	02/03/2017	4.5	544	<0.1	0.188	<0.1	5.52	5,708	208	1,190	<10.0	1,398.0	--	--
*Sample #19	02/03/2017	1.5	1,340	<0.05	<0.05	<0.05	0.291	0.291	12.3	1,080	<10.0	1,092.3	--	--
*Sample #20	02/03/2017	1.5	560.0	<0.05	<0.05	<0.05	0.841	0,841	60.1	1720	<50.0	1,780.1	--	--
*Sample #21	02/03/2017	4.5	800	<0.05	0.225	<0.05	2.39	2,615	110	1,570	<10.0	1,680.0	--	--
*Sample #22	02/03/2017	1.5	832	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	746	<10.0	746.0	--	--
*Sample #23	02/03/2017	1.5	976	<0.1	<0.1	<0.1	0.923	0,923	161	2,600	<10.0	2,761.0	--	--
*Sample #24	02/03/2017	4.5	880	<1.0	1.92	<1.0	57.8	59.72	1670	4,080	<10.0	5,750.0	--	--
*Sample #25	02/03/2017	1.5	832	0.088	3.4	3.45	11.9	18,838	91.2	1,220	<10.0	1,311.2	--	--
*Sample #26	02/03/2017	1.5	128	<0.20	4.76	5.46	33.2	43.42	483	1,930	<10.0	2,413.0	--	--
*Sample #27	02/03/2017	4.5	272	<1.0	12.6	22.1	97.1	131.8	1760	3,800	<10.0	5,560.0	--	--
*Sample #28	02/03/2017	1.5	4,560	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	13.7	<10.0	13.7	--	--
*Sample #29	02/03/2017	4.5	6,320	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0	--	--
*Sample #30	02/03/2017	4.5	4,160	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0	--	--
*Sample #31	02/03/2017	4.5	2,360	13.5	170	135	381	699.5	10,400	21,100	5,460	36,960	--	--
*Sample #32	02/03/2017	4.5	288	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0	--	--
*Sample #33	02/03/2017	6.0	816	<2.0	18.2	47.5	167	232.7	3,340	4,030	1,680	9,050	--	--
*Sample #34	02/03/2017	4.5	304	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	45.2	26.1	71.3	--	--
*Sample #35	02/03/2017	6.0	6,960	19.8	215	88.7	385	708.5	8,360	6,960	1,960	17,280	--	--
*Sample #36	02/03/2017	6.0	4,080	2.77	48	38	173	261.77	3,530	6,820	1,950	12,300	--	--
*Sample #37	02/03/2017	4.5	5,040	17.1	220	128	423	788.1	10,600	18,600	5,230	34,430	--	--
*Sample #38	02/03/2017	6.0	6,560	10.4	177	71.6	289	548	5,740	4,230	893	10,863	--	--
*Sample #39	02/03/2017	6.0	3,440	<1.0	11.1	16.2	70.1	97.4	1,460	4,570	1,350	7,380	--	--
*Sample #40	02/03/2017	6.0	5,440	<2.0	5.74	14.9	95	115.64	2,220	4,330	1,670	8,220	--	--
*Sample #41	02/03/2017	6.0	1,760	<1.0	1.42	5.21	36.9	43.53	1,000	3,670	1,530	6,200	--	--
*Sample #42	02/03/2017	6.0	3,160	<1.0	5.58	30.1	123	158.68	1,730	5,500	1,910	9,140	--	--
*Sample #43	02/03/2017	4.5	4,400	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	21.8	14.3	36.1	--	--
*Sample #44	02/03/2017	Surface	1,260	<0.05	0.364	0.122	0.517	1,003	<50.0	1,100	354	1,454	--	--
*Sample #45	02/03/2017	Surface	560	<0.05	0.131	<0.05	<0.15	<0.30	<10.0	478	288	766	--	--
*Sample #46	02/03/2017	Surface	944	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	10.3	10.2	20.5	--	--
*Sample #47	02/03/2017	Surface	1,660	<0.5	<0.5	<0.5	14.1	14.1	659	7,090	2,460	10,209	--	--
*Sample #48	02/03/2017	Surface	448	<0.05	<0.05	<0.05	0.194	<0.30	11.3	720	251	982.3	--	--
*Sample #49	02/03/2017	Surface	240	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	77.9	42.0	119.9	--	--
*Sample #50	02/03/2017	Surface	1,440	<0.05	0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0	--	--
*Sample #51	02/03/2017	Surface	128	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0	--	--
*Sample #52	02/03/2017	Surface	48	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0	--	--
*Sample #53	02/03/2017	Surface	96	<0.05	0.287	<0.05	6.27	6,557	123	1,180	447	1,750	--	--

Table 1

ETC Field Services LLC - 2C-14-3 10" Block Valve  
 Section 24, Township 25 South, Range 37 East  
 Lea County, New Mexico  
 Soil Analytical Results Summary

Sample ID	Date	Sample Depth	Chlorides	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	TPH	TPH	TPH	Total TPH	Field Screen - Chloride	Field Screen - Hydrocarbons
		(ft.)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO (C6-C10)	DRO (C10-C28)	Ext DRO (28-C36)	GRO/DRO	(mg/kg)	(ppm)
									(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)		
<b>NMOC Remediation Action Levels</b>			<b>600</b>	<b>10</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>50</b>	<b>NE</b>	<b>NE</b>		<b>1,000</b>		
TP-1	03/28/2017	8.0											396	--
TP-1	03/28/2017	10.0											196	--
TP-1	03/28/2017	12.0											360	--
S-1113520-1-032817-TP-1-14'	3/28/2017	14.0	127	NA	NA	NA	NA	NA	NA	NA	NA	NA	<116	--
S-1113520-1-032817-TP-2-8'	3/28/2017	8.0	269	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30	197	--
S-1113520-1-032817-TP-3-8'	3/28/2017	8.0	225	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30	852	6
TP-3	3/29/2017	14.0											432	142
TP-3	3/29/2017	16.0											840	50
TP-3	3/29/2017	18.0											432	--
TP-3	3/29/2017	20.0											616	--
S-1113520-1-032917-TP-3-23'	3/29/2017	23.0	215	NA	NA	NA	NA	NA	NA	NA	NA	NA	108	--
TP-4	3/28/2017	4.0											568	20
S-1113520-1-032817-TP-5-4'	3/28/2017	4.0	<11.4	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30	<108	9
S-1113520-1-032817-TP-6-4'	3/28/2017	4.0	56.4	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30	248	345
TP-7	3/28/2017	4.0											284	582
S-1113520-1-032817-TP-8-4'	3/28/2017	4.0	537	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30	136	51
S-1113520-1-032817-TP-9-4'	3/28/2017	4.0	359	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30	188	448
S-1113520-1-032917-TP-10-4'	3/29/2017	4.0	<11.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10	40.4	10	50.4	<108	45
S-1113520-1-032917-TP-11-4'	3/29/2017	4.0	51.1	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30	188	42
S-1113520-1-032917-TP-12-4'	3/29/2017	4.0	350	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30	136	2
S-1113520-1-032917-TP-13-4'	3/29/2017	4.0	264	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30	136	10
S-1113520-1-032917-TP-14-4'	3/29/2017	4.0	59.7	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30	<108	32
S-1113520-1-032917-TP-15-4'	3/29/2017	4.0	259	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30	160	5
S-11135250-062617-SP-01 (FS-1)	6/26/2017	6.5	150	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	31	<48.0	31.0	100	--
S-11135250-062617-SP-02 (FS-1)	6/26/2017	8.5	90	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	340	350	690	100	--
FS-2	6/26/2017	5.5											1764	--
FS-2	6/26/2017	7.5											1216	--
FS-2	6/26/2017	9.5											460	--
FS-2	6/26/2017	11.5											1120	--
FS-2	6/26/2017	13.5											240	--
S-11135250-062617-SP-03 (FS-2)	6/26/2017	15.5	240	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.9	<49.0	<63.6	136	--
S-11135250-062617-SP-04 (FS-2)	6/26/2017	17.5	210	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.8	<49.0	<63.7	136	--
FS-1	6/27/2017	4.0											272	--
FS-2	6/27/2017	4.0											968	--
S-11135250-062717-SP-01 (FS-3)	6/27/2017	4.0	60	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	23.0	48.0	71.0	<100	--
FS-4	6/27/2017	4.0											460	--
S-11135250-062717-SP-02 (FS-5)	6/27/2017	4.0	42	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.6	<48.0	<62.5	240	--
FS-6	6/27/2017	4.0											340	--
S-11135250-062717-SP-03 (FS-7)	6/27/2017	4.0	800	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.4	<47.0	<61.2	504	--
S-11135250-062717-SP-04 (FS-8)	6/27/2017	4.0	<30.0	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.8	<49.0	<63.7	<100	--
S-11135250-062717-SP-05 (FS-9)	6/27/2017	4.0	59	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.8	<49.0	<63.7	<100	--
S-11135250-01-090717-MG-TP-16-6"	9/7/2017	0.5	<30	NA	NA	NA	NA	NA	NA	NA	NA	NA	<100	21
S-11135250-01-090717-MG-TP-17-2	9/7/2017	2.0	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	<100	93
TP-17	9/7/2016	4.0											208	78
S-11135250-01-090717-MG-TP-18-2	9/7/2017	2.0	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	<100	89
TP-18	9/7/2017	4.0											<100	96

Note: Concentrations that are bold exceed the NMOC Remediation Action Level

\* Samples taken by ETC Field Services

NE = Not Established

mg/Kg = milligrams per Kilogram

ppm = parts per million

Chloride field screening performed with a Hach field test kit

Hydrocarbons field screening performed with a Petroflag analyzer.

NA=Not Analyzed

Field screening only

-- = Field screening not performed

# Appendices

# Appendix A

## Water Well Report

2 C -14-3 10--



## New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	Sub-basin	County	Q	Q	Q	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
<a href="#">CP 00260 POD1</a>		CP	LE	2	2	4	24	25S	37E	678390	3554728*	366	135	68	67
<a href="#">CP 00261 POD1</a>	R	CP	LE	2	2	4	24	25S	37E	678390	3554728*	366		68	
<a href="#">CP 00258 POD1</a>		CP	LE	3	3	4	13	25S	37E	677767	3555728*	815	120	73	47
<a href="#">CP 00363 POD1</a>		CP	LE	3	4	1	24	25S	37E	677379	3554917*	865		901	
<a href="#">CP 00783 POD1</a>		CP	LE	1	2	1	24	25S	37E	677372	3555519*	976	4500	728	3772
<a href="#">CP 00261 POD2</a>		CP	LE	1	3	4	13	25S	37E	677767	3555928*	985	95	50	45

Average Depth to Water: 314 feet

Minimum Depth: 50 feet

Maximum Depth: 901 feet

Record Count:6

UTMNAD83 Radius Search (in meters):

Easting (X): 678233

Northing (Y): 3555059.23

Radius: 1000

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/27/17 9:34 AM

WATER COLUMN/ AVERAGE DEPTH TO  
WATER



USGS Home  
Contact USGS  
Search USGS

## National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category:  Geographic Area:

Click to hide News Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for the Nation

### Search Results -- 1 sites found

Agency code = usgs

site\_no list =

- 320714103065701

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

### USGS 320714103065701 25S.37E.13.43113

Lea County, New Mexico

Latitude 32°07'14", Longitude 103°06'57" NAD27

Land-surface elevation 3,077 feet above NAVD88

The depth of the well is 120 feet below land surface.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

#### Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

Date	Time	? Water- level date- time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water- level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement
1965-10-19		D	73.23			2		U		
1966-06-02		D	72.77			2		U		
1968-02-19		D	71.55			2		U		
1970-12-11		D	70.02			2		U		
1976-01-08		D	68.96			2		U		
1978-01-17		D	68.82			2		U		
1981-03-30		D	71.06			2		U		
1981-04-30		D	71.43			2		U		

#### Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.



[Questions about sites/data?](#)  
[Feedback on this web site](#)  
[Automated retrievals](#)  
[Help](#)  
[Data Tips](#)  
[Explanation of terms](#)  
[Subscribe for system changes](#)  
[News](#)

[Accessibility](#)   [Plug-Ins](#)   [FOIA](#)   [Privacy](#)   [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2017-03-06 18:05:46 EST

0.53 0.48 nadww02

# Appendix B

## Laboratory Analytical Report



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

---

February 10, 2017

DEAN ERICSON  
ENERGY TRANSFER  
P. O. BOX 1226  
JAL, NM 88252

RE: 10" BLOCK VALVE (BLOCKER)

Enclosed are the results of analyses for samples received by the laboratory on 02/03/17 11:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene  
Lab Director/Quality Manager

**Analytical Results For:**

 ENERGY TRANSFER  
 DEAN ERICSON  
 P. O. BOX 1226  
 JAL NM, 88252  
 Fax To:

 Received: 02/03/2017  
 Reported: 02/10/2017  
 Project Name: 10" BLOCK VALVE (BLOCKER)  
 Project Number: 2C - 14-13  
 Project Location: NONE GIVEN

 Sampling Date: 02/03/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SAMPLE #1 1.5' (H700273-01)**

BTX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/05/2017	ND	2.19	110	2.00	0.345	
Toluene*	5.29	0.500	02/05/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	8.97	0.500	02/05/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	41.5	1.50	02/05/2017	ND	6.13	102	6.00	0.335	
Total BTX	55.8	3.00	02/05/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 117 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	02/07/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	884	50.0	02/04/2017	ND	195	97.4	200	10.3		
DRO >C10-C28	4360	50.0	02/04/2017	ND	209	105	200	13.9		
EXT DRO >C28-C36	1090	50.0	02/04/2017	ND						

Surrogate: 1-Chlorooctane 196 % 35-147

Surrogate: 1-Chlorooctadecane 141 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 ENERGY TRANSFER  
 DEAN ERICSON  
 P. O. BOX 1226  
 JAL NM, 88252  
 Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #2 1.5' (H700273-02)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/05/2017	ND	2.19	110	2.00	0.345	
Toluene*	<0.050	0.050	02/05/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<b>0.323</b>	0.050	02/05/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	<b>1.28</b>	0.150	02/05/2017	ND	6.13	102	6.00	0.335	
Total BTEX	<b>1.60</b>	0.300	02/05/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 120 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>848</b>	16.0	02/07/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<b>69.2</b>	50.0	02/04/2017	ND	195	97.4	200	10.3		
DRO >C10-C28	<b>7060</b>	50.0	02/04/2017	ND	209	105	200	13.9		
EXT DRO >C28-C36	<b>2140</b>	50.0	02/04/2017	ND						

Surrogate: 1-Chlorooctane 102 % 35-147

Surrogate: 1-Chlorooctadecane 195 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

 ENERGY TRANSFER  
 DEAN ERICSON  
 P. O. BOX 1226  
 JAL NM, 88252  
 Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #3 3' (H700273-03)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/05/2017	ND	2.19	110	2.00	0.345	
Toluene*	<b>5.25</b>	0.500	02/05/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<b>5.49</b>	0.500	02/05/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	<b>20.0</b>	1.50	02/05/2017	ND	6.13	102	6.00	0.335	
Total BTEX	<b>30.7</b>	3.00	02/05/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 107 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>1630</b>	16.0	02/07/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<b>909</b>	50.0	02/04/2017	ND	195	97.4	200	10.3	
DRO >C10-C28	<b>2130</b>	50.0	02/04/2017	ND	209	105	200	13.9	
EXT DRO >C28-C36	<b>526</b>	50.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 141 % 35-147

Surrogate: 1-Chlorooctadecane 117 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #4 1.5' (H700273-04)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/05/2017	ND	2.19	110	2.00	0.345	
Toluene*	1.02	0.500	02/05/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	6.27	0.500	02/05/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	23.0	1.50	02/05/2017	ND	6.13	102	6.00	0.335	
Total BTEX	30.3	3.00	02/05/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 115 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5330	16.0	02/07/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	746	50.0	02/04/2017	ND	195	97.4	200	10.3		
DRO >C10-C28	4730	50.0	02/04/2017	ND	209	105	200	13.9		
EXT DRO >C28-C36	1390	50.0	02/04/2017	ND						

Surrogate: 1-Chlorooctane 162 % 35-147

Surrogate: 1-Chlorooctadecane 153 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #5 1.5' (H700273-05)**

BTX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/05/2017	ND	2.19	110	2.00	0.345		
Toluene*	<0.050	0.050	02/05/2017	ND	2.16	108	2.00	0.631		
Ethylbenzene*	<0.050	0.050	02/05/2017	ND	2.17	108	2.00	0.194		
Total Xylenes*	<0.150	0.150	02/05/2017	ND	6.13	102	6.00	0.335		
Total BTX	<0.300	0.300	02/05/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 105 % 73.6-140

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	1760	16.0	02/07/2017	ND	416	104	400	0.00			

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	02/04/2017	ND	195	97.4	200	10.3		
DRO >C10-C28	<10.0	10.0	02/04/2017	ND	209	105	200	13.9		
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND						

Surrogate: 1-Chlorooctane 84.8 % 35-147

Surrogate: 1-Chlorooctadecane 92.0 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #6 4.5' (H700273-06)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/05/2017	ND	2.19	110	2.00	0.345	
Toluene*	<0.050	0.050	02/05/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<0.050	0.050	02/05/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	<0.150	0.150	02/05/2017	ND	6.13	102	6.00	0.335	
Total BTEX	<0.300	0.300	02/05/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1470	16.0	02/07/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/04/2017	ND	195	97.4	200	10.3	
DRO >C10-C28	32.2	10.0	02/04/2017	ND	209	105	200	13.9	
EXT DRO >C28-C36	16.2	10.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 84.9 % 35-147

Surrogate: 1-Chlorooctadecane 93.8 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #7 1.5' (H700273-07)**

BTX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/05/2017	ND	2.19	110	2.00	0.345	
Toluene*	<0.050	0.050	02/05/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<0.050	0.050	02/05/2017	ND	2.17	108	2.00	0.194	
<b>Total Xylenes*</b>	<b>0.220</b>	0.150	02/05/2017	ND	6.13	102	6.00	0.335	
Total BTX	<0.300	0.300	02/05/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 116 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1060</b>	16.0	02/07/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	02/04/2017	ND	195	97.4	200	10.3	
<b>DRO &gt;C10-C28</b>	<b>1180</b>	50.0	02/04/2017	ND	209	105	200	13.9	
<b>EXT DRO &gt;C28-C36</b>	<b>474</b>	50.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 82.6 % 35-147

Surrogate: 1-Chlorooctadecane 95.4 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #8 1.5' (H700273-08)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/05/2017	ND	2.19	110	2.00	0.345	
Toluene*	<0.050	0.050	02/05/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<0.050	0.050	02/05/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	<0.150	0.150	02/05/2017	ND	6.13	102	6.00	0.335	
Total BTX	<0.300	0.300	02/05/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 104 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2280	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/04/2017	ND	195	97.4	200	10.3	
DRO >C10-C28	<10.0	10.0	02/04/2017	ND	209	105	200	13.9	
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 82.5 % 35-147

Surrogate: 1-Chlorooctadecane 90.2 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #9 4.5' (H700273-09)**

BTEX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/05/2017	ND	2.19	110	2.00	0.345	
Toluene*	<0.050	0.050	02/05/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<0.050	0.050	02/05/2017	ND	2.17	108	2.00	0.194	
<b>Total Xylenes*</b>	<b>0.312</b>	0.150	02/05/2017	ND	6.13	102	6.00	0.335	
<b>Total BTEX</b>	<b>0.312</b>	0.300	02/05/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 105 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1200</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/04/2017	ND	195	97.4	200	10.3	
<b>DRO &gt;C10-C28</b>	<b>183</b>	10.0	02/04/2017	ND	209	105	200	13.9	
<b>EXT DRO &gt;C28-C36</b>	<b>70.4</b>	10.0	02/04/2017	ND					


Surrogate: 1-Chlorooctane 85.3 % 35-147

Surrogate: 1-Chlorooctadecane 94.6 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #10 1.5' (H700273-10)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/05/2017	ND	2.19	110	2.00	0.345	
Toluene*	<b>0.380</b>	0.050	02/05/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<b>0.204</b>	0.050	02/05/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	<b>0.593</b>	0.150	02/05/2017	ND	6.13	102	6.00	0.335	
Total BTEX	<b>1.18</b>	0.300	02/05/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 109 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>992</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<b>19.8</b>	10.0	02/04/2017	ND	191	95.6	200	4.89	
DRO >C10-C28	<b>413</b>	10.0	02/04/2017	ND	205	103	200	9.93	QM-07, QR-03
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 88.7 % 35-147

Surrogate: 1-Chlorooctadecane 116 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #11 1.5' (H700273-11)**

BTX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/05/2017	ND	2.19	110	2.00	0.345	
Toluene*	<0.050	0.050	02/05/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<0.050	0.050	02/05/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	<0.150	0.150	02/05/2017	ND	6.13	102	6.00	0.335	
Total BTX	<0.300	0.300	02/05/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 104 % 73.6-140

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4160	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/04/2017	ND	191	95.6	200	4.89	
DRO >C10-C28	26.0	10.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 80.3 % 35-147

Surrogate: 1-Chlorooctadecane 95.7 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #12 4.5' (H700273-12)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/05/2017	ND	2.19	110	2.00	0.345	
Toluene*	<b>0.151</b>	0.050	02/05/2017	ND	2.16	108	2.00	0.631	
Ethylbenzene*	<b>0.228</b>	0.050	02/05/2017	ND	2.17	108	2.00	0.194	
Total Xylenes*	<b>1.15</b>	0.150	02/05/2017	ND	6.13	102	6.00	0.335	
Total BTEX	<b>1.53</b>	0.300	02/05/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 113 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>1100</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<b>22.4</b>	10.0	02/04/2017	ND	191	95.6	200	4.89	
DRO >C10-C28	<b>284</b>	10.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 85.8 % 35-147

Surrogate: 1-Chlorooctadecane 109 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #13 1.5' (H700273-13)**

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	0.921	0.100	02/07/2017	ND	2.18	109	2.00	0.505	QM-07	
Toluene*	7.12	0.100	02/07/2017	ND	2.15	108	2.00	0.763	QM-07	
Ethylbenzene*	1.75	0.100	02/07/2017	ND	2.15	108	2.00	0.169	QM-07	
Total Xylenes*	6.25	0.300	02/07/2017	ND	6.07	101	6.00	0.0884	QM-07	
Total BTEX	16.0	0.600	02/07/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 114 % 73.6-140

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1390	16.0	02/08/2017	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	213	50.0	02/04/2017	ND	191	95.6	200	4.89	
DRO >C10-C28	811	50.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<50.0	50.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 92.8 % 35-147

Surrogate: 1-Chlorooctadecane 142 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #14 1.5' (H700273-14)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.169	
Total Xylenes*	<0.150	0.150	02/07/2017	ND	6.07	101	6.00	0.0884	
Total BTX	<0.300	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 102 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1490	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	02/04/2017	ND	191	95.6	200	4.89	
DRO >C10-C28	77.6	50.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<50.0	50.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 71.2 % 35-147

Surrogate: 1-Chlorooctadecane 106 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #15 4.5' (H700273-15)**

BTEX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	<b>0.082</b>	0.050	02/07/2017	ND	2.15	108	2.00	0.169	
<b>Total Xylenes*</b>	<b>0.604</b>	0.150	02/07/2017	ND	6.07	101	6.00	0.0884	
<b>Total BTEX</b>	<b>0.687</b>	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 109 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1230</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	02/04/2017	ND	191	95.6	200	4.89	
<b>DRO &gt;C10-C28</b>	<b>591</b>	50.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<50.0	50.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 84.8 % 35-147

Surrogate: 1-Chlorooctadecane 113 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #16 1.5' (H700273-16)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	<b>0.091</b>	0.050	02/07/2017	ND	2.15	108	2.00	0.169	
<b>Total Xylenes*</b>	<b>0.444</b>	0.150	02/07/2017	ND	6.07	101	6.00	0.0884	
<b>Total BTX</b>	<b>0.535</b>	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 113 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1620</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	02/04/2017	ND	191	95.6	200	4.89	
<b>DRO &gt;C10-C28</b>	<b>1630</b>	50.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<50.0	50.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 83.3 % 35-147

Surrogate: 1-Chlorooctadecane 166 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #17 1.5' (H700273-17)**

BTEx 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/07/2017	ND	2.18	109	2.00	0.505		
Toluene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.763		
Ethylbenzene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.169		
Total Xylenes*	<0.150	0.150	02/07/2017	ND	6.07	101	6.00	0.0884		
Total BTEX	<0.300	0.300	02/07/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 104 % 73.6-140

Chloride, SM4500Cl-B			mg/kg							Analyzed By: HM	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	5360	16.0	02/08/2017	ND	432	108	400	0.00			

TPH 8015M			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	02/04/2017	ND	191	95.6	200	4.89		
DRO >C10-C28	<10.0	10.0	02/04/2017	ND	205	103	200	9.93		
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND						

Surrogate: 1-Chlorooctane 79.5 % 35-147

Surrogate: 1-Chlorooctadecane 99.8 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #18 4.5' (H700273-18)**

BTX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	02/07/2017	ND	2.18	109	2.00	0.505	
<b>Toluene*</b>	<b>0.188</b>	0.100	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	<0.100	0.100	02/07/2017	ND	2.15	108	2.00	0.169	
<b>Total Xylenes*</b>	<b>5.52</b>	0.300	02/07/2017	ND	6.07	101	6.00	0.0884	
<b>Total BTX</b>	<b>5.71</b>	0.600	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 135 % 73.6-140

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>544</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>208</b>	10.0	02/04/2017	ND	191	95.6	200	4.89	
<b>DRO &gt;C10-C28</b>	<b>1190</b>	10.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 103 % 35-147

Surrogate: 1-Chlorooctadecane 136 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #19 1.5' (H700273-19)**

BTX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.169	
<b>Total Xylenes*</b>	<b>0.291</b>	0.150	02/07/2017	ND	6.07	101	6.00	0.0884	
Total BTX	<0.300	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 110 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1340</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>12.3</b>	10.0	02/04/2017	ND	191	95.6	200	4.89	
<b>DRO &gt;C10-C28</b>	<b>1080</b>	10.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 84.3 % 35-147

Surrogate: 1-Chlorooctadecane 117 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #20 1.5' (H700273-20)**

BTEX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.169	
<b>Total Xylenes*</b>	<b>0.841</b>	0.150	02/07/2017	ND	6.07	101	6.00	0.0884	
<b>Total BTEX</b>	<b>0.841</b>	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 136 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>560</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>60.1</b>	50.0	02/04/2017	ND	191	95.6	200	4.89	
<b>DRO &gt;C10-C28</b>	<b>1720</b>	50.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<50.0	50.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 86.1 % 35-147

Surrogate: 1-Chlorooctadecane 128 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #21 4.5' (H700273-21)**

BTX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	0.225	0.050	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.169	
Total Xylenes*	2.39	0.150	02/07/2017	ND	6.07	101	6.00	0.0884	
Total BTX	2.61	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 137 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	110	10.0	02/04/2017	ND	191	95.6	200	4.89	
DRO >C10-C28	1570	10.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 107 % 35-147

Surrogate: 1-Chlorooctadecane 123 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #22 1.5' (H700273-22)**

BTX 80218		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.169	
Total Xylenes*	<0.150	0.150	02/07/2017	ND	6.07	101	6.00	0.0884	
Total BTX	<0.300	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 121 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/04/2017	ND	191	95.6	200	4.89	
DRO >C10-C28	746	10.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 65.4 % 35-147

Surrogate: 1-Chlorooctadecane 103 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #23 1.5' (H700273-23)**

BTX 80218		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	<0.100	0.100	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	<0.100	0.100	02/07/2017	ND	2.15	108	2.00	0.169	
<b>Total Xylenes*</b>	<b>0.923</b>	0.300	02/07/2017	ND	6.07	101	6.00	0.0884	
<b>Total BTX</b>	<b>0.923</b>	0.600	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 144 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>976</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>161</b>	10.0	02/04/2017	ND	191	95.6	200	4.89	
<b>DRO &gt;C10-C28</b>	<b>2600</b>	10.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 122 % 35-147

Surrogate: 1-Chlorooctadecane 143 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #24 4.5' (H700273-24)**

BTX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	1.92	1.00	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	<1.00	1.00	02/07/2017	ND	2.15	108	2.00	0.169	
Total Xylenes*	57.8	3.00	02/07/2017	ND	6.07	101	6.00	0.0884	
Total BTX	59.7	6.00	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 114 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	880	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	1670	10.0	02/04/2017	ND	191	95.6	200	4.89		
DRO >C10-C28	4080	10.0	02/04/2017	ND	205	103	200	9.93		
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND						

Surrogate: 1-Chlorooctane 197 % 35-147

Surrogate: 1-Chlorooctadecane 165 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #25 1.5' (H700273-25)**

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.088	0.050	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	3.40	0.050	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	3.45	0.050	02/07/2017	ND	2.15	108	2.00	0.169	
Total Xylenes*	11.9	0.150	02/07/2017	ND	6.07	101	6.00	0.0884	
Total BTX	18.9	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 173 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	91.2	10.0	02/04/2017	ND	191	95.6	200	4.89	
DRO >C10-C28	1220	10.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND					

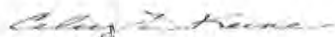
Surrogate: 1-Chlorooctane 92.9 % 35-147

Surrogate: 1-Chlorooctadecane 125 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #26 1.5' (H700273-26)**

BTEX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	4.76	0.200	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	5.46	0.200	02/07/2017	ND	2.15	108	2.00	0.169	
Total Xylenes*	33.2	0.600	02/07/2017	ND	6.07	101	6.00	0.0884	
Total BTEX	43.4	1.20	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 134 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	483	10.0	02/04/2017	ND	191	95.6	200	4.89	
DRO >C10-C28	1930	10.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 122 % 35-147

Surrogate: 1-Chlorooctadecane 123 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #27 4.5' (H700273-27)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	12.6	1.00	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	22.1	1.00	02/07/2017	ND	2.15	108	2.00	0.169	
Total Xylenes*	97.1	3.00	02/07/2017	ND	6.07	101	6.00	0.0884	
Total BTEX	132	6.00	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	1760	10.0	02/04/2017	ND	191	95.6	200	4.89		
DRO >C10-C28	3800	10.0	02/04/2017	ND	205	103	200	9.93		
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND						

Surrogate: 1-Chlorooctane 218 % 35-147

Surrogate: 1-Chlorooctadecane 164 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #28 1.5' (H700273-28)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/07/2017	ND	2.18	109	2.00	0.505		
Toluene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.763		
Ethylbenzene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.169		
Total Xylenes*	<0.150	0.150	02/07/2017	ND	6.07	101	6.00	0.0884		
Total BTEX	<0.300	0.300	02/07/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 105 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4560	16.0	02/08/2017	ND	432	108	400	0.00	QM-07	

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	02/04/2017	ND	191	95.6	200	4.89		
DRO >C10-C28	13.7	10.0	02/04/2017	ND	205	103	200	9.93		
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND						

Surrogate: 1-Chlorooctane 83.6 % 35-147

Surrogate: 1-Chlorooctadecane 101 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #29 4.5' (H700273-29)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.169	
Total Xylenes*	<0.150	0.150	02/07/2017	ND	6.07	101	6.00	0.0884	
Total BTX	<0.300	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 105 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6320	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/04/2017	ND	191	95.6	200	4.89	
DRO >C10-C28	<10.0	10.0	02/04/2017	ND	205	103	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	02/04/2017	ND					

Surrogate: 1-Chlorooctane 79.1 % 35-147

Surrogate: 1-Chlorooctadecane 95.0 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #30 4.5' (H700273-30)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/07/2017	ND	2.18	109	2.00	0.505	
Toluene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.763	
Ethylbenzene*	<0.050	0.050	02/07/2017	ND	2.15	108	2.00	0.169	
Total Xylenes*	<0.150	0.150	02/07/2017	ND	6.07	101	6.00	0.0884	
Total BTX	<0.300	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 104 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4160	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2017	ND	171	85.3	200	0.147	
DRO >C10-C28	<10.0	10.0	02/03/2017	ND	173	86.6	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	02/03/2017	ND					

Surrogate: 1-Chlorooctane 81.4 % 35-147

Surrogate: 1-Chlorooctadecane 98.6 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #31 4.5' (H700273-31)**

BTEX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>13.5</b>	5.00	02/08/2017	ND	2.18	109	2.00	0.505	
<b>Toluene*</b>	<b>170</b>	5.00	02/08/2017	ND	2.15	108	2.00	0.763	
<b>Ethylbenzene*</b>	<b>135</b>	5.00	02/08/2017	ND	2.15	108	2.00	0.169	
<b>Total Xylenes*</b>	<b>381</b>	15.0	02/08/2017	ND	6.07	101	6.00	0.0884	
<b>Total BTEX</b>	<b>700</b>	30.0	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 113 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2360</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS							S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>10400</b>	50.0	02/04/2017	ND	195	97.4	200	10.3		
<b>DRO &gt;C10-C28</b>	<b>21100</b>	50.0	02/04/2017	ND	209	105	200	13.9		
<b>EXT DRO &gt;C28-C36</b>	<b>5460</b>	50.0	02/04/2017	ND						

Surrogate: 1-Chlorooctane 326 % 35-147

Surrogate: 1-Chlorooctadecane 336 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #32 4.5' (H700273-32)**
**BTEX 8021B**

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	<0.050	0.050	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	<0.050	0.050	02/08/2017	ND	1.95	97.6	2.00	3.96	
Total Xylenes*	<0.150	0.150	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTEX	<0.300	0.300	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 105 % 73.6-140

**Chloride, SM4500Cl-B**

mg/kg

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	02/08/2017	ND	432	108	400	0.00	

**TPH 8015M**

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/06/2017	ND	186	93.1	200	0.568	
DRO >C10-C28	<10.0	10.0	02/06/2017	ND	200	99.9	200	0.657	
EXT DRO >C28-C36	<10.0	10.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 81.3 % 35-147

Surrogate: 1-Chlorooctadecane 93.2 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #33 6' (H700273-33)**

BTEX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	18.2	2.00	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	47.5	2.00	02/08/2017	ND	1.95	97.6	2.00	3.96	
Total Xylenes*	167	6.00	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTEX	233	12.0	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 114 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS							S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	3340	10.0	02/06/2017	ND	186	93.1	200	0.568		
DRO >C10-C28	4030	10.0	02/06/2017	ND	200	99.9	200	0.657		
EXT DRO >C28-C36	1680	10.0	02/06/2017	ND						

Surrogate: 1-Chlorooctane 155 % 35-147

Surrogate: 1-Chlorooctadecane 142 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #34 4.5' (H700273-34)**

BTX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	<0.050	0.050	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	<0.050	0.050	02/08/2017	ND	1.95	97.6	2.00	3.96	
Total Xylenes*	<0.150	0.150	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTX	<0.300	0.300	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 106 % 73.6-140

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/06/2017	ND	186	93.1	200	0.568	
DRO >C10-C28	45.2	10.0	02/06/2017	ND	200	99.9	200	0.657	
EXT DRO >C28-C36	26.1	10.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 79.3 % 35-147

Surrogate: 1-Chlorooctadecane 86.3 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #35 6' (H700273-35)**

BTX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>19.8</b>	5.00	02/08/2017	ND	2.00	99.9	2.00	3.84	
<b>Toluene*</b>	<b>215</b>	5.00	02/08/2017	ND	1.96	98.0	2.00	4.14	
<b>Ethylbenzene*</b>	<b>88.7</b>	5.00	02/08/2017	ND	1.95	97.6	2.00	3.96	
<b>Total Xylenes*</b>	<b>385</b>	15.0	02/08/2017	ND	5.53	92.2	6.00	3.64	
<b>Total BTX</b>	<b>708</b>	30.0	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 111 % 73,6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6960</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>8360</b>	50.0	02/06/2017	ND	186	93.1	200	0.568	
<b>DRO &gt;C10-C28</b>	<b>6960</b>	50.0	02/06/2017	ND	200	99.9	200	0.657	
<b>EXT DRO &gt;C28-C36</b>	<b>1960</b>	50.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 215 % 35-147

Surrogate: 1-Chlorooctadecane 153 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #36 6' (H700273-36)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>2.77</b>	2.00	02/08/2017	ND	2.00	99.9	2.00	3.84	
<b>Toluene*</b>	<b>48.0</b>	2.00	02/08/2017	ND	1.96	98.0	2.00	4.14	
<b>Ethylbenzene*</b>	<b>38.0</b>	2.00	02/08/2017	ND	1.95	97.6	2.00	3.96	
<b>Total Xylenes*</b>	<b>173</b>	6.00	02/08/2017	ND	5.53	92.2	6.00	3.64	
<b>Total BTX</b>	<b>262</b>	12.0	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 114 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>4080</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>3530</b>	50.0	02/06/2017	ND	186	93.1	200	0.568	
<b>DRO &gt;C10-C28</b>	<b>6820</b>	50.0	02/06/2017	ND	200	99.9	200	0.657	
<b>EXT DRO &gt;C28-C36</b>	<b>1950</b>	50.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 184 % 35-147

Surrogate: 1-Chlorooctadecane 164 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #37 4.5' (H700273-37)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>17.1</b>	10.0	02/08/2017	ND	2.00	99.9	2.00	3.84	
<b>Toluene*</b>	<b>220</b>	10.0	02/08/2017	ND	1.96	98.0	2.00	4.14	
<b>Ethylbenzene*</b>	<b>128</b>	10.0	02/08/2017	ND	1.95	97.6	2.00	3.96	
<b>Total Xylenes*</b>	<b>423</b>	30.0	02/08/2017	ND	5.53	92.2	6.00	3.64	
<b>Total BTX</b>	<b>789</b>	60.0	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 110 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5040</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>10600</b>	50.0	02/06/2017	ND	186	93.1	200	0.568		
<b>DRO &gt;C10-C28</b>	<b>18600</b>	50.0	02/06/2017	ND	200	99.9	200	0.657		
<b>EXT DRO &gt;C28-C36</b>	<b>5230</b>	50.0	02/06/2017	ND						

Surrogate: 1-Chlorooctane 312 % 35-147

Surrogate: 1-Chlorooctadecane 305 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #38 6' (H700273-38)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>10.4</b>	5.00	02/08/2017	ND	2.00	99.9	2.00	3.84	
<b>Toluene*</b>	<b>177</b>	5.00	02/08/2017	ND	1.96	98.0	2.00	4.14	
<b>Ethylbenzene*</b>	<b>71.6</b>	5.00	02/08/2017	ND	1.95	97.6	2.00	3.96	
<b>Total Xylenes*</b>	<b>289</b>	15.0	02/08/2017	ND	5.53	92.2	6.00	3.64	
<b>Total BTX</b>	<b>548</b>	30.0	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 110 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6560</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>5740</b>	50.0	02/06/2017	ND	186	93.1	200	0.568		
<b>DRO &gt;C10-C28</b>	<b>4230</b>	50.0	02/06/2017	ND	200	99.9	200	0.657		
<b>EXT DRO &gt;C28-C36</b>	<b>893</b>	50.0	02/06/2017	ND						

Surrogate: 1-Chlorooctane 161 % 35-147

Surrogate: 1-Chlorooctadecane 128 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #39 6' (H700273-39)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	11.1	1.00	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	16.2	1.00	02/08/2017	ND	1.95	97.6	2.00	3.96	
Total Xylenes*	70.1	3.00	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTEX	97.4	6.00	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 114 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3440	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	1460	50.0	02/06/2017	ND	186	93.1	200	0.568		
DRO >C10-C28	4570	50.0	02/06/2017	ND	200	99.9	200	0.657		
EXT DRO >C28-C36	1350	50.0	02/06/2017	ND						

Surrogate: 1-Chlorooctane 160 % 35-147

Surrogate: 1-Chlorooctadecane 151 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #40 6' (H700273-40)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	5.74	2.00	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	14.9	2.00	02/08/2017	ND	1.95	97.6	2.00	3.96	
Total Xylenes*	95.0	6.00	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTX	116	12.0	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 112 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5440	16.0	02/08/2017	ND	432	108	400	0.00	
TPH 8015M									S-06

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	2220	50.0	02/06/2017	ND	186	93.1	200	0.568	
DRO >C10-C28	4330	50.0	02/06/2017	ND	200	99.9	200	0.657	
EXT DRO >C28-C36	1670	50.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 161 % 35-147

Surrogate: 1-Chlorooctadecane 130 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celestine D. Keene  
Celestine D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #41 6' (H700273-41)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	1.42	1.00	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	5.21	1.00	02/08/2017	ND	1.95	97.6	2.00	3.96	
Total Xylenes*	36.9	3.00	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTX	43.5	6.00	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 116 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1760	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1000	50.0	02/06/2017	ND	186	93.1	200	0.568	
DRO >C10-C28	3670	50.0	02/06/2017	ND	200	99.9	200	0.657	
EXT DRO >C28-C36	1530	50.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 144 % 35-147

Surrogate: 1-Chlorooctadecane 140 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #42 6' (H700273-42)**

BTEX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	5.58	1.00	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	30.1	1.00	02/08/2017	ND	1.95	97.6	2.00	3.96	
Total Xylenes*	123	3.00	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTEX	159	6.00	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3160	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	1730	50.0	02/06/2017	ND	186	93.1	200	0.568		
DRO >C10-C28	5500	50.0	02/06/2017	ND	200	99.9	200	0.657		
EXT DRO >C28-C36	1910	50.0	02/06/2017	ND						

Surrogate: 1-Chlorooctane 158 % 35-147

Surrogate: 1-Chlorooctadecane 171 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #43 4.5' (H700273-43)**

BTX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	<0.050	0.050	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	<0.050	0.050	02/08/2017	ND	1.95	97.6	2.00	3.96	
Total Xylenes*	<0.150	0.150	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTX	<0.300	0.300	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 106 % 73.6-140

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/06/2017	ND	186	93.1	200	0.568	
DRO >C10-C28	21.8	10.0	02/06/2017	ND	200	99.9	200	0.657	
EXT DRO >C28-C36	14.3	10.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 78.3 % 35-147

Surrogate: 1-Chlorooctadecane 86.1 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #44 SURFACE (H700273-44)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	0.364	0.050	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	0.122	0.050	02/08/2017	ND	1.95	97.6	2.00	3.96	
Total Xylenes*	0.517	0.150	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTX	1.04	0.300	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 110 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1260	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	02/06/2017	ND	186	93.1	200	0.568	
DRO >C10-C28	1100	50.0	02/06/2017	ND	200	99.9	200	0.657	
EXT DRO >C28-C36	354	50.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 75.3 % 35-147

Surrogate: 1-Chlorooctadecane 103 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #45 SURFACE (H700273-45)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/08/2017	ND	2.00	99.9	2.00	3.84		
Toluene*	0.131	0.050	02/08/2017	ND	1.96	98.0	2.00	4.14		
Ethylbenzene*	<0.050	0.050	02/08/2017	ND	1.95	97.6	2.00	3.96		
Total Xylenes*	<0.150	0.150	02/08/2017	ND	5.53	92.2	6.00	3.64		
Total BTX	<0.300	0.300	02/08/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 105 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	560	16.0	02/08/2017	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/06/2017	ND	186	93.1	200	0.568	
DRO >C10-C28	478	10.0	02/06/2017	ND	200	99.9	200	0.657	
EXT DRO >C28-C36	288	10.0	02/06/2017	ND					

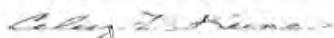
Surrogate: 1-Chlorooctane 70.0 % 35-147

Surrogate: 1-Chlorooctadecane 89.3 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #46 SURFACE (H700273-46)**

BTX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	<0.050	0.050	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	<0.050	0.050	02/08/2017	ND	1.95	97.6	2.00	3.96	
Total Xylenes*	<0.150	0.150	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTX	<0.300	0.300	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 107 % 73.6-140

Chloride, SM4500CI-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/06/2017	ND	186	93.1	200	0.568	
DRO >C10-C28	10.3	10.0	02/06/2017	ND	200	99.9	200	0.657	
EXT DRO >C28-C36	10.2	10.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 82.4 % 35-147

Surrogate: 1-Chlorooctadecane 88.4 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #47 SURFACE (H700273-47)**

BTEX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	<0.500	0.500	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	<0.500	0.500	02/08/2017	ND	1.95	97.6	2.00	3.96	
<b>Total Xylenes*</b>	<b>14.1</b>	1.50	02/08/2017	ND	5.53	92.2	6.00	3.64	
<b>Total BTEX</b>	<b>14.1</b>	3.00	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 117 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1660</b>	16.0	02/08/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>659</b>	50.0	02/06/2017	ND	186	93.1	200	0.568	
<b>DRO &gt;C10-C28</b>	<b>7090</b>	50.0	02/06/2017	ND	200	99.9	200	0.657	
<b>EXT DRO &gt;C28-C36</b>	<b>2460</b>	50.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 133 % 35-147

Surrogate: 1-Chlorooctadecane 185 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #48 SURFACE (H700273-48)**

BTX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	<0.050	0.050	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	<0.050	0.050	02/08/2017	ND	1.95	97.6	2.00	3.96	
<b>Total Xylenes*</b>	<b>0.194</b>	0.150	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTX	<0.300	0.300	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 110 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>448</b>	16.0	02/09/2017	ND	432	108	400	3.64	QM-07, QR-03

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>11.3</b>	10.0	02/06/2017	ND	186	93.1	200	0.568	
<b>DRO &gt;C10-C28</b>	<b>720</b>	10.0	02/06/2017	ND	200	99.9	200	0.657	
<b>EXT DRO &gt;C28-C36</b>	<b>251</b>	10.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 88.3 % 35-147

Surrogate: 1-Chlorooctadecane 98.9 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #49 SURFACE (H700273-49)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/08/2017	ND	2.00	99.9	2.00	3.84	
Toluene*	<0.050	0.050	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	<0.050	0.050	02/08/2017	ND	1.95	97.6	2.00	3.96	
Total Xylenes*	<0.150	0.150	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTX	<0.300	0.300	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 104 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	02/09/2017	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/06/2017	ND	186	93.1	200	0.568	
DRO >C10-C28	77.9	10.0	02/06/2017	ND	200	99.9	200	0.657	
EXT DRO >C28-C36	42.0	10.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 79.6 % 35-147

Surrogate: 1-Chlorooctadecane 84.3 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #50 SURFACE (H700273-50)**
**BTEX 8021B**

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/08/2017	ND	2.00	99.9	2.00	3.84	
<b>Toluene*</b>	<b>0.050</b>	0.050	02/08/2017	ND	1.96	98.0	2.00	4.14	
Ethylbenzene*	<0.050	0.050	02/08/2017	ND	1.95	97.6	2.00	3.96	
Total Xylenes*	<0.150	0.150	02/08/2017	ND	5.53	92.2	6.00	3.64	
Total BTEX	<0.300	0.300	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 106 % 73.6-140

**Chloride, SM4500Cl-B**

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1440</b>	16.0	02/09/2017	ND	432	108	400	3.64	

**TPH 8015M**

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/06/2017	ND	186	93.1	200	0.568	
DRO >C10-C28	<10.0	10.0	02/06/2017	ND	200	99.9	200	0.657	
EXT DRO >C28-C36	<10.0	10.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 83.4 % 35-147

Surrogate: 1-Chlorooctadecane 92.6 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 02/03/2017  
Reported: 02/10/2017  
Project Name: 10" BLOCK VALVE (BLOCKER)  
Project Number: 2C - 14-13  
Project Location: NONE GIVEN

Sampling Date: 02/03/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SAMPLE #51 SURFACE (H700273-51)**

BTX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/09/2017	ND	2.11	106	2.00	0.803	
Toluene*	<0.050	0.050	02/09/2017	ND	2.08	104	2.00	1.10	
Ethylbenzene*	<0.050	0.050	02/09/2017	ND	2.10	105	2.00	1.11	
Total Xylenes*	<0.150	0.150	02/09/2017	ND	5.94	99.0	6.00	1.22	
Total BTX	<0.300	0.300	02/09/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 103 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	02/09/2017	ND	432	108	400	3.64	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/06/2017	ND	186	93.1	200	0.568	
DRO >C10-C28	<10.0	10.0	02/06/2017	ND	200	99.9	200	0.657	
EXT DRO >C28-C36	<10.0	10.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 79.2 % 35-147

Surrogate: 1-Chlorooctadecane 88.6 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #52 SURFACE (H700273-52)**

BTX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/07/2017	ND	2.22	111	2.00	1.91	
Toluene*	<0.050	0.050	02/07/2017	ND	2.20	110	2.00	1.57	
Ethylbenzene*	<0.050	0.050	02/07/2017	ND	2.19	109	2.00	1.31	
Total Xylenes*	<0.150	0.150	02/07/2017	ND	6.18	103	6.00	1.32	
Total BTX	<0.300	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 73.6-140

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/09/2017	ND	432	108	400	3.64	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/06/2017	ND	189	94.4	200	0.373	
DRO >C10-C28	<10.0	10.0	02/06/2017	ND	205	103	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 85.0 % 35-147

Surrogate: 1-Chlorooctadecane 92.4 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

ENERGY TRANSFER  
DEAN ERICSON  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received:	02/03/2017	Sampling Date:	02/03/2017
Reported:	02/10/2017	Sampling Type:	Soil
Project Name:	10" BLOCK VALVE (BLOCKER)	Sampling Condition:	Cool & Intact
Project Number:	2C - 14-13	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: SAMPLE #53 SURFACE (H700273-53)**

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/07/2017	ND	2.22	111	2.00	1.91	
<b>Toluene*</b>	<b>0.287</b>	0.050	02/07/2017	ND	2.20	110	2.00	1.57	
Ethylbenzene*	<0.050	0.050	02/07/2017	ND	2.19	109	2.00	1.31	
<b>Total Xylenes*</b>	<b>6.27</b>	0.150	02/07/2017	ND	6.18	103	6.00	1.32	
<b>Total BTEX</b>	<b>6.56</b>	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 157 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>96.0</b>	16.0	02/09/2017	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>123</b>	50.0	02/06/2017	ND	189	94.4	200	0.373	
<b>DRO &gt;C10-C28</b>	<b>1180</b>	50.0	02/06/2017	ND	205	103	200	1.32	
<b>EXT DRO &gt;C28-C36</b>	<b>447</b>	50.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 88.6 % 35-147

Surrogate: 1-Chlorooctadecane 107 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



---

Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

April 11, 2017

BERNARD BUCKISCH

GHD SERVICES, INC.

6121 INDIAN SCHOOL RD, NE STE. 200

ALBUQUERQUE, NM 87110

RE: 2C - 14 - 3 10"

Enclosed are the results of analyses for samples received by the laboratory on 03/29/17 14:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-1113520-1-032817-TP-1-14'	H700827-01	Soil	28-Mar-17 11:40	29-Mar-17 14:15
S-1113520-1-032817-TP-2-8'	H700827-02	Soil	28-Mar-17 10:55	29-Mar-17 14:15
S-1113520-1-032817-TP-3-8'	H700827-03	Soil	28-Mar-17 12:10	29-Mar-17 14:15
S-1113520-1-032817-TP-5-4'	H700827-04	Soil	28-Mar-17 13:00	29-Mar-17 14:15
S-1113520-1-032817-TP-6-4'	H700827-05	Soil	28-Mar-17 13:20	29-Mar-17 14:15
S-1113520-1-032817-TP-8-4'	H700827-06	Soil	28-Mar-17 13:50	29-Mar-17 14:15
S-1113520-1-032817-TP-9-4'	H700827-07	Soil	28-Mar-17 14:15	29-Mar-17 14:15
S-1113520-1-032917-TP-3-23'	H700827-08	Soil	29-Mar-17 09:55	29-Mar-17 14:15
S-1113520-1-032917-TP-10-4'	H700827-09	Soil	29-Mar-17 10:20	29-Mar-17 14:15
S-1113520-1-032917-TP-11-4'	H700827-10	Soil	29-Mar-17 10:35	29-Mar-17 14:15
S-1113520-1-032917-TP-12-4'	H700827-11	Soil	29-Mar-17 10:45	29-Mar-17 14:15
S-1113520-1-032917-TP-13-4'	H700827-12	Soil	29-Mar-17 11:05	29-Mar-17 14:15
S-1113520-1-032917-TP-14-4'	H700827-13	Soil	29-Mar-17 11:20	29-Mar-17 14:15
S-1113520-1-032917-TP-15-4'	H700827-14	Soil	29-Mar-17 12:05	29-Mar-17 14:15

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:Reported:  
11-Apr-17 11:57**S-1113520-1-032817-TP-1-14'**  
**H700827-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	--------------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories****General Chemistry**

% Dry Solids	86.4			%	1	B704020	JDA	06-Apr-17	EPA160.3/16 84	
--------------	------	--	--	---	---	---------	-----	-----------	-------------------	--

**Soluble (DI Water Extraction)**

Chloride	127		11.6	mg/kg dry	10	B704016	JDA	05-Apr-17	EPA300.0	
----------	-----	--	------	-----------	----	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

**S-1113520-1-032817-TP-2-8'**  
**H700827-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories**
**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7033101	MS	31-Mar-17	8021B	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			<i>96.5 %</i>	<i>72-148</i>		<i>7033101</i>	<i>MS</i>	<i>31-Mar-17</i>	<i>8021B</i>	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10	<10.0		10.0	mg/kg	1	7032911	MS	30-Mar-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7032911	MS	30-Mar-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7032911	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctane</i>			<i>106 %</i>	<i>25.1-158</i>		<i>7032911</i>	<i>MS</i>	<i>30-Mar-17</i>	<i>8015B</i>	
<i>Surrogate: 1-Chlorooctadecane</i>			<i>116 %</i>	<i>26.8-170</i>		<i>7032911</i>	<i>MS</i>	<i>30-Mar-17</i>	<i>8015B</i>	

**Green Analytical Laboratories**
**General Chemistry**

% Dry Solids	86.4			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
--------------	------	--	--	---	---	---------	-----	-----------	---------------	--

**Soluble (DI Water Extraction)**

Chloride	269		11.6	mg/kg dry	10	B704016	JDA	05-Apr-17	EPA300.0	
----------	-----	--	------	-----------	----	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

**S-1113520-1-032817-TP-3-8'**  
**H700827-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories**
**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7033101	MS	31-Mar-17	8021B	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			96.4 %	72-148		7033101	MS	31-Mar-17	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10	<10.0		10.0	mg/kg	1	7032911	MS	30-Mar-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7032911	MS	30-Mar-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7032911	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctane</i>			98.4 %	25.1-158		7032911	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			107 %	26.8-170		7032911	MS	30-Mar-17	8015B	

**Green Analytical Laboratories**
**General Chemistry**

% Dry Solids	83.8			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
--------------	------	--	--	---	---	---------	-----	-----------	---------------	--

**Soluble (DI Water Extraction)**

Chloride	225		11.9	mg/kg dry	10	B704016	JDA	06-Apr-17	EPA300.0	
----------	-----	--	------	-----------	----	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

### Analytical Results For:

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

**S-1113520-1-032817-TP-5-4'**

**H700827-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

#### Cardinal Laboratories

##### Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7033101	MS	31-Mar-17	8021B	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			97.8 %	72-148		7033101	MS	31-Mar-17	8021B	

##### Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctane</i>			75.3 %	25.1-158		7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			84.0 %	26.8-170		7033002	MS	30-Mar-17	8015B	

#### Green Analytical Laboratories

##### General Chemistry

% Dry Solids	87.7			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
--------------	------	--	--	---	---	---------	-----	-----------	---------------	--

##### Soluble (DI Water Extraction)

Chloride	<11.4		11.4	mg/kg dry	10	B704016	JDA	05-Apr-17	EPA300.0	
----------	-------	--	------	-----------	----	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

### S-1113520-1-032817-TP-6-4' H700827-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

#### Cardinal Laboratories

#### Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.2 %	72-148		7033101	MS	31-Mar-17	8021B	

#### Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
Surrogate: 1-Chlorooctane			89.2 %	25.1-158		7033002	MS	30-Mar-17	8015B	
Surrogate: 1-Chlorooctadecane			97.6 %	26.8-170		7033002	MS	30-Mar-17	8015B	

#### Green Analytical Laboratories

#### General Chemistry

% Dry Solids	92.1			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
--------------	------	--	--	---	---	---------	-----	-----------	---------------	--

#### Soluble (DI Water Extraction)

Chloride	56.4		2.17	mg/kg dry	2	B704016	JDA	06-Apr-17	EPA300.0	
----------	------	--	------	-----------	---	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

### Analytical Results For:

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

**S-1113520-1-032817-TP-8-4'**

**H700827-06 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

#### Cardinal Laboratories

##### Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7033101	MS	31-Mar-17	8021B	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			97.4 %	72-148		7033101	MS	31-Mar-17	8021B	

##### Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctane</i>			82.1 %	25.1-158		7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			87.6 %	26.8-170		7033002	MS	30-Mar-17	8015B	

#### Green Analytical Laboratories

##### General Chemistry

% Dry Solids	87.0			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
--------------	------	--	--	---	---	---------	-----	-----------	---------------	--

##### Soluble (DI Water Extraction)

Chloride	537		11.5	mg/kg dry	10	B704016	JDA	05-Apr-17	EPA300.0	
----------	-----	--	------	-----------	----	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

### Analytical Results For:

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

### S-1113520-1-032817-TP-9-4' H700827-07 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

#### Cardinal Laboratories

#### Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7033101	MS	31-Mar-17	8021B	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			96.0 %	72-148		7033101	MS	31-Mar-17	8021B	

#### Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctane</i>			87.7 %	25.1-158		7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			87.6 %	26.8-170		7033002	MS	30-Mar-17	8015B	

#### Green Analytical Laboratories

#### General Chemistry

% Dry Solids	90.8			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
--------------	------	--	--	---	---	---------	-----	-----------	---------------	--

#### Soluble (DI Water Extraction)

Chloride	359		11.0	mg/kg dry	10	B704016	JDA	05-Apr-17	EPA300.0	
----------	-----	--	------	-----------	----	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

**S-1113520-1-032917-TP-3-23'****H700827-08 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	--------------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories****General Chemistry**

% Dry Solids	88.6			%	1	B704020	JDA	06-Apr-17	EPA160.3/16 84	
--------------	------	--	--	---	---	---------	-----	-----------	-------------------	--

**Soluble (DI Water Extraction)**

Chloride	215		11.3	mg/kg dry	10	B704016	JDA	05-Apr-17	EPA300.0	
----------	-----	--	------	-----------	----	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

**S-1113520-1-032917-TP-10-4'**

**H700827-09 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

#### Cardinal Laboratories

##### Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7033101	MS	31-Mar-17	8021B	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			96.6 %	72-148		7033101	MS	31-Mar-17	8021B	

##### Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
<b>DRO &gt;C10-C28</b>	<b>40.4</b>		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>10.0</b>		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctane</i>			85.5 %	25.1-158		7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			93.5 %	26.8-170		7033002	MS	30-Mar-17	8015B	

#### Green Analytical Laboratories

##### General Chemistry

% Dry Solids	91.1			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
--------------	------	--	--	---	---	---------	-----	-----------	---------------	--

##### Soluble (DI Water Extraction)

Chloride	<11.0		11.0	mg/kg dry	10	B704016	JDA	05-Apr-17	EPA300.0	
----------	-------	--	------	-----------	----	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

### Analytical Results For:

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

**S-1113520-1-032917-TP-11-4'**

**H700827-10 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

#### Cardinal Laboratories

##### Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7033101	MS	31-Mar-17	8021B	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			96.7 %	72-148		7033101	MS	31-Mar-17	8021B	

##### Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctane</i>			92.2 %	25.1-158		7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			99.0 %	26.8-170		7033002	MS	30-Mar-17	8015B	

#### Green Analytical Laboratories

##### General Chemistry

% Dry Solids	91.9			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
--------------	------	--	--	---	---	---------	-----	-----------	---------------	--

##### Soluble (DI Water Extraction)

Chloride	51.1		2.18	mg/kg dry	2	B704016	JDA	06-Apr-17	EPA300.0	M5
----------	------	--	------	-----------	---	---------	-----	-----------	----------	----

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

### Analytical Results For:

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

**S-1113520-1-032917-TP-12-4'**

**H700827-11 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

#### Cardinal Laboratories

##### Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7033101	MS	31-Mar-17	8021B	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			97.2 %	72-148		7033101	MS	31-Mar-17	8021B	

##### Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctane</i>			83.9 %	25.1-158		7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			86.5 %	26.8-170		7033002	MS	30-Mar-17	8015B	

#### Green Analytical Laboratories

##### General Chemistry

% Dry Solids	88.4			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
--------------	------	--	--	---	---	---------	-----	-----------	---------------	--

##### Soluble (DI Water Extraction)

Chloride	350		11.3	mg/kg dry	10	B704016	JDA	06-Apr-17	EPA300.0	
----------	-----	--	------	-----------	----	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

### Analytical Results For:

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

**S-1113520-1-032917-TP-13-4'**

**H700827-12 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

#### Cardinal Laboratories

##### Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.2 %		72-148	7033101	MS	31-Mar-17	8021B	

##### Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
Surrogate: 1-Chlorooctane			89.4 %		25.1-158	7033002	MS	30-Mar-17	8015B	
Surrogate: 1-Chlorooctadecane			90.1 %		26.8-170	7033002	MS	30-Mar-17	8015B	

#### Green Analytical Laboratories

##### General Chemistry

% Dry Solids	89.2			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
--------------	------	--	--	---	---	---------	-----	-----------	---------------	--

##### Soluble (DI Water Extraction)

Chloride	264		11.2	mg/kg dry	10	B704016	JDA	06-Apr-17	EPA300.0	
----------	-----	--	------	-----------	----	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

**S-1113520-1-032917-TP-14-4'**

**H700827-13 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

#### Cardinal Laboratories

##### Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7033101	MS	31-Mar-17	8021B	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			96.4 %	72-148		7033101	MS	31-Mar-17	8021B	

##### Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctane</i>			87.4 %	25.1-158		7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			87.7 %	26.8-170		7033002	MS	30-Mar-17	8015B	

#### Green Analytical Laboratories

##### General Chemistry

% Dry Solids	91.3			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
--------------	------	--	--	---	---	---------	-----	-----------	---------------	--

##### Soluble (DI Water Extraction)

Chloride	59.7		11.0	mg/kg dry	10	B704016	JDA	06-Apr-17	EPA300.0	
----------	------	--	------	-----------	----	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

### Analytical Results For:

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

**S-1113520-1-032917-TP-15-4'**

**H700827-14 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

#### Cardinal Laboratories

##### Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7033101	MS	31-Mar-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7033101	MS	31-Mar-17	8021B	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			96.5 %	72-148		7033101	MS	31-Mar-17	8021B	

##### Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctane</i>			87.6 %	25.1-158		7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			90.9 %	26.8-170		7033002	MS	30-Mar-17	8015B	

#### Green Analytical Laboratories

##### General Chemistry

% Dry Solids	83.6			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
--------------	------	--	--	---	---	---------	-----	-----------	---------------	--

##### Soluble (DI Water Extraction)

Chloride	259		12.0	mg/kg dry	10	B704016	JDA	06-Apr-17	EPA300.0	
----------	-----	--	------	-----------	----	---------	-----	-----------	----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

### Analytical Results For:

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

### Volatile Organic Compounds by EPA Method 8021 - Quality Control

#### Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

#### Batch 7033101 - Volatiles

##### Blank (7033101-BLK1)

Prepared & Analyzed: 31-Mar-17

Benzene	ND	0.050	mg/kg						
Toluene	ND	0.050	mg/kg						
Ethylbenzene	ND	0.050	mg/kg						
Total Xylenes	ND	0.150	mg/kg						
Total BTEX	ND	0.300	mg/kg						
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		96.6	72-148		

##### LCS (7033101-BS1)

Prepared & Analyzed: 31-Mar-17

Benzene	1.91	0.050	mg/kg	2.00		95.7	79.5-124		
Toluene	1.79	0.050	mg/kg	2.00		89.4	75.5-127		
Ethylbenzene	1.79	0.050	mg/kg	2.00		89.3	77.7-125		
Total Xylenes	5.08	0.150	mg/kg	6.00		84.6	70.9-124		
Surrogate: 4-Bromofluorobenzene (PID)	0.0480		mg/kg	0.0500		95.9	72-148		

##### LCS Dup (7033101-BSD1)

Prepared & Analyzed: 31-Mar-17

Benzene	1.87	0.050	mg/kg	2.00		93.4	79.5-124	2.45	6.5
Toluene	1.75	0.050	mg/kg	2.00		87.3	75.5-127	2.38	7.02
Ethylbenzene	1.74	0.050	mg/kg	2.00		87.2	77.7-125	2.41	7.83
Total Xylenes	4.96	0.150	mg/kg	6.00		82.6	70.9-124	2.43	7.78
Surrogate: 4-Bromofluorobenzene (PID)	0.0491		mg/kg	0.0500		98.1	72-148		

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

### Analytical Results For:

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

### Petroleum Hydrocarbons by GC FID - Quality Control

#### Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

#### Batch 7032911 - General Prep - Organics

##### Blank (7032911-BLK1)

Prepared & Analyzed: 29-Mar-17

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	52.0		mg/kg	50.0		104	25.1-158			
Surrogate: 1-Chlorooctadecane	53.0		mg/kg	50.0		106	26.8-170			

##### LCS (7032911-BS1)

Prepared & Analyzed: 29-Mar-17

GRO C6-C10	222	10.0	mg/kg	200		111	78.6-112			
DRO >C10-C28	223	10.0	mg/kg	200		111	76.7-124			
Total TPH C6-C28	445	10.0	mg/kg	400		111	78.5-117			
Surrogate: 1-Chlorooctane	57.3		mg/kg	50.0		115	25.1-158			
Surrogate: 1-Chlorooctadecane	59.8		mg/kg	50.0		120	26.8-170			

##### LCS Dup (7032911-BSD1)

Prepared & Analyzed: 29-Mar-17

GRO C6-C10	221	10.0	mg/kg	200		110	78.6-112	0.749	13	
DRO >C10-C28	220	10.0	mg/kg	200		110	76.7-124	1.25	15.5	
Total TPH C6-C28	440	10.0	mg/kg	400		110	78.5-117	1.00	13.6	
Surrogate: 1-Chlorooctane	57.2		mg/kg	50.0		114	25.1-158			
Surrogate: 1-Chlorooctadecane	58.3		mg/kg	50.0		117	26.8-170			

#### Batch 7033002 - General Prep - Organics

##### Blank (7033002-BLK1)

Prepared & Analyzed: 30-Mar-17

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	50.0		mg/kg	50.0		100	25.1-158			
Surrogate: 1-Chlorooctadecane	52.8		mg/kg	50.0		106	26.8-170			

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

GHD SERVICES, INC.  
6121 INDIAN SCHOOL RD, NE STE. 200  
ALBUQUERQUE NM, 87110

Project: 2C - 14 - 3 10"  
Project Number: 1113520-1  
Project Manager: BERNARD BUCKISCH  
Fax To:

Reported:  
11-Apr-17 11:57

**Petroleum Hydrocarbons by GC FID - Quality Control**
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch 7033002 - General Prep - Organics**
**LCS (7033002-BS1)**

Prepared &amp; Analyzed: 30-Mar-17

GRO C6-C10	186	10.0	mg/kg	200		93.0	78.6-112			
DRO >C10-C28	194	10.0	mg/kg	200		97.0	76.7-124			
Total TPH C6-C28	380	10.0	mg/kg	400		95.0	78.5-117			
Surrogate: 1-Chlorooctane	53.2		mg/kg	50.0		106	25.1-158			
Surrogate: 1-Chlorooctadecane	53.6		mg/kg	50.0		107	26.8-170			

**LCS Dup (7033002-BS1)**

Prepared &amp; Analyzed: 30-Mar-17

GRO C6-C10	193	10.0	mg/kg	200		96.5	78.6-112	3.65	13	
DRO >C10-C28	201	10.0	mg/kg	200		101	76.7-124	3.73	15.5	
Total TPH C6-C28	394	10.0	mg/kg	400		98.6	78.5-117	3.69	13.6	
Surrogate: 1-Chlorooctane	55.4		mg/kg	50.0		111	25.1-158			
Surrogate: 1-Chlorooctadecane	55.6		mg/kg	50.0		111	26.8-170			

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 GHD SERVICES, INC.  
 6121 INDIAN SCHOOL RD, NE STE. 200  
 ALBUQUERQUE NM, 87110

 Project: 2C - 14 - 3 10"  
 Project Number: 1113520-1  
 Project Manager: BERNARD BUCKISCH  
 Fax To:

 Reported:  
 11-Apr-17 11:57

**General Chemistry - Quality Control**
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch B704020 - General Prep - Wet Chem**
**Duplicate (B704020-DUP1)**

Source: 1703196-01

Prepared: 04-Apr-17 Analyzed: 06-Apr-17

% Dry Solids	98.5		%		98.7			0.203	20	
--------------	------	--	---	--	------	--	--	-------	----	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 GHD SERVICES, INC.  
 6121 INDIAN SCHOOL RD, NE STE. 200  
 ALBUQUERQUE NM, 87110

 Project: 2C - 14 - 3 10"  
 Project Number: 1113520-1  
 Project Manager: BERNARD BUCKISCH  
 Fax To:

 Reported:  
 11-Apr-17 11:57

**Soluble (DI Water Extraction) - Quality Control**
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch B704016 - General Prep - Wet Chem**
**Blank (B704016-BLK1)**

Prepared: 04-Apr-17 Analyzed: 05-Apr-17

Chloride	ND	10.0	mg/kg wet							
----------	----	------	-----------	--	--	--	--	--	--	--

**LCS (B704016-BS1)**

Prepared: 04-Apr-17 Analyzed: 05-Apr-17

Chloride	235	10.0	mg/kg wet	250		94.1	85-115			
----------	-----	------	-----------	-----	--	------	--------	--	--	--

**LCS Dup (B704016-BSD1)**

Prepared: 04-Apr-17 Analyzed: 05-Apr-17

Chloride	235	10.0	mg/kg wet	250		93.9	85-115	0.251	20	
----------	-----	------	-----------	-----	--	------	--------	-------	----	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

M5	Sample was chosen for matrix spike. Spike recovery did not meet laboratory acceptance criteria, possible matrix interference in sample.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



---

Celey D. Keene, Lab Director/Quality Manager





CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Maryland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

BILL TO

ANALYSIS REQUEST

Company Name: <u>CHD Services Inc</u>	P.O. #:
Project Manager: <u>Bernard Beckisch</u>	Company: <u>ETC</u>
Address: <u>6121 Indian School Rd, NE STE 200</u>	Attn: <u>Dean Ersson</u>
City: <u>Albuquerque</u>	Address:
Phone #: <u>505-884-0672</u>	City:
Fax #: <u></u>	State: <u>Zip:</u>
Project #: <u>1113520-1</u>	Project Owner:
Project Name: <u>2C-14-3 10"</u>	State: <u>Zip:</u>
Project Location:	Phone #:
Sampler Name: <u>Alan Bracken</u>	Fax #:

FOR LAB USE ONLY		Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.			SAMPLING																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
						GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
H700927-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

Relinquished By: <u>AKK</u>	Date: <u>3/29/12</u>	Received By: <u>W. Ersson</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: <u>bernard.beckisch@ghd.com</u>
Relinquished By: <u></u>	Time: <u>1415</u>	Received By: <u></u>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #: <u></u>
Delivered By: (Circle One) Sampler - UPS - Bus - Other: <u>2.0c</u>	Time: <u></u>	Sample Condition <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initial) <u>CDK #75</u>	





2 of 2

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: <b>CHD Services</b>		P.O. #:		BILL TO												ANALYSIS REQUEST																													
Project Manager: <b>Bernard Bodisch</b>		Company: <b>ETC</b>																																											
Address: <b>6121 Indian School Rd NE STE 200</b>		Attn: <b>Dean Erisen</b>																																											
City: <b>Albuquerque</b>		Address:																																											
Phone #: <b>505-894-0672</b>		City:																																											
Fax #: <b>505-894-0672</b>		State:																																											
Project #: <b>1113520-1</b>		Zip:																																											
Project Name: <b>2C-14-3 10'</b>		Phone #:																																											
Project Location:		Fax #:																																											
Sampler Name: <b>Alan Brady</b>																																													
FOR LAB USE ONLY																																													
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME		BTEX 8021		TPH 8015 Full range		Chloride 300											
11		5-1113520-1-032917-TP-12-4"		G 2		2		X		X		X		X		X		X		X		X		X		3/29/17		1045		X		X		X											
12		5-1113520-1-032917-TP-13-4"		G 2		2		X		X		X		X		X		X		X		X		X		3/29/17		1105		X		X		X											
13		5-1113520-1-032917-TP-14-4"		G 2		2		X		X		X		X		X		X		X		X		X		3/29/17		1120		X		X		X											
14		5-1113520-1-032917-TP-15-4"		G 2		2		X		X		X		X		X		X		X		X		X		3/29/17		1205		X		X		X											
Relinquished By:		Date: <b>3/29/17</b>		Time: <b>14:15</b>		Received By: <b>[Signature]</b>		Date: <b>3/29/17</b>		Time: <b>14:15</b>		Sample Condition		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		CHECKED BY: <b>[Signature]</b>		REMARKS: <b>bernard.bodisch@ghd.com</b>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>		Add'l Phone #: <b>575-393-2326</b>		Add'l Fax #: <b>575-393-2476</b>															
Relinquished By:		Date:		Time:		Received By:		Date:		Time:		Sample Condition		Cool <input type="checkbox"/> Intact <input type="checkbox"/>		Yes <input type="checkbox"/> No <input type="checkbox"/>		Yes <input type="checkbox"/> No <input type="checkbox"/>		CHECKED BY:		REMARKS:		Phone Result:		Fax Result:		Add'l Phone #:		Add'l Fax #:															
Delivered By: (Circle One)		a.o.c.																																											
Sampler - UPS - Bus - Other:																																													

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

July 10, 2017

Bernie Bockish

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: 2C 14 3 10"

OrderNo.: 1706G41

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 9 sample(s) on 6/29/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1706G41**

Date Reported: **7/10/2017**

**CLIENT:** GHD

**Client Sample ID:** S-11135250-062617-SP-01

**Project:** 2C 14 3 10"

**Collection Date:** 6/26/2017 4:30:00 PM

**Lab ID:** 1706G41-001

**Matrix:** SOIL

**Received Date:** 6/29/2017 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	150	30		mg/Kg	20	7/5/2017 11:29:33 PM	32641
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	31	9.6		mg/Kg	1	7/5/2017 2:04:23 PM	32588
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/5/2017 2:04:23 PM	32588
Surr: DNOP	100	70-130		%Rec	1	7/5/2017 2:04:23 PM	32588
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/5/2017 12:07:50 PM	32610
Surr: BFB	106	54-150		%Rec	1	7/5/2017 12:07:50 PM	32610
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	7/5/2017 12:07:50 PM	32610
Toluene	ND	0.048		mg/Kg	1	7/5/2017 12:07:50 PM	32610
Ethylbenzene	ND	0.048		mg/Kg	1	7/5/2017 12:07:50 PM	32610
Xylenes, Total	ND	0.096		mg/Kg	1	7/5/2017 12:07:50 PM	32610
Surr: 4-Bromofluorobenzene	101	66.6-132		%Rec	1	7/5/2017 12:07:50 PM	32610

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1706G41**

Date Reported: **7/10/2017**

**CLIENT:** GHD

**Client Sample ID:** S-11135250-062617-SP-02

**Project:** 2C 14 3 10"

**Collection Date:** 6/26/2017 4:33:00 PM

**Lab ID:** 1706G41-002

**Matrix:** SOIL

**Received Date:** 6/29/2017 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	90	30		mg/Kg	20	7/5/2017 11:41:57 PM	32641
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	340	10		mg/Kg	1	7/5/2017 2:29:16 PM	32588
Motor Oil Range Organics (MRO)	350	50		mg/Kg	1	7/5/2017 2:29:16 PM	32588
Surr: DNOP	104	70-130		%Rec	1	7/5/2017 2:29:16 PM	32588
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/5/2017 1:18:44 PM	32610
Surr: BFB	112	54-150		%Rec	1	7/5/2017 1:18:44 PM	32610
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	7/5/2017 1:18:44 PM	32610
Toluene	ND	0.049		mg/Kg	1	7/5/2017 1:18:44 PM	32610
Ethylbenzene	ND	0.049		mg/Kg	1	7/5/2017 1:18:44 PM	32610
Xylenes, Total	ND	0.097		mg/Kg	1	7/5/2017 1:18:44 PM	32610
Surr: 4-Bromofluorobenzene	103	66.6-132		%Rec	1	7/5/2017 1:18:44 PM	32610

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1706G41**

Date Reported: **7/10/2017**

**CLIENT:** GHD

**Client Sample ID:** S-11135250-062617-SP-03

**Project:** 2C 14 3 10"

**Collection Date:** 6/26/2017 4:40:00 PM

**Lab ID:** 1706G41-003

**Matrix:** SOIL

**Received Date:** 6/29/2017 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	240	30		mg/Kg	20	7/5/2017 11:54:22 PM	32641
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/5/2017 3:19:11 PM	32588
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/5/2017 3:19:11 PM	32588
Surr: DNOP	81.3	70-130		%Rec	1	7/5/2017 3:19:11 PM	32588
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/5/2017 2:30:00 PM	32610
Surr: BFB	108	54-150		%Rec	1	7/5/2017 2:30:00 PM	32610
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	7/5/2017 2:30:00 PM	32610
Toluene	ND	0.047		mg/Kg	1	7/5/2017 2:30:00 PM	32610
Ethylbenzene	ND	0.047		mg/Kg	1	7/5/2017 2:30:00 PM	32610
Xylenes, Total	ND	0.093		mg/Kg	1	7/5/2017 2:30:00 PM	32610
Surr: 4-Bromofluorobenzene	103	66.6-132		%Rec	1	7/5/2017 2:30:00 PM	32610

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1706G41**

Date Reported: **7/10/2017**

**CLIENT:** GHD

**Client Sample ID:** S-11135250-062617-SP-04

**Project:** 2C 14 3 10"

**Collection Date:** 6/26/2017 4:43:00 PM

**Lab ID:** 1706G41-004

**Matrix:** SOIL

**Received Date:** 6/29/2017 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	210	30		mg/Kg	20	7/6/2017 12:54:43 PM	32655
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/5/2017 3:44:14 PM	32588
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/5/2017 3:44:14 PM	32588
Surr: DNOP	73.0	70-130		%Rec	1	7/5/2017 3:44:14 PM	32588
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/5/2017 2:53:44 PM	32610
Surr: BFB	107	54-150		%Rec	1	7/5/2017 2:53:44 PM	32610
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	7/5/2017 2:53:44 PM	32610
Toluene	ND	0.049		mg/Kg	1	7/5/2017 2:53:44 PM	32610
Ethylbenzene	ND	0.049		mg/Kg	1	7/5/2017 2:53:44 PM	32610
Xylenes, Total	ND	0.097		mg/Kg	1	7/5/2017 2:53:44 PM	32610
Surr: 4-Bromofluorobenzene	102	66.6-132		%Rec	1	7/5/2017 2:53:44 PM	32610

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1706G41**

Date Reported: **7/10/2017**

**CLIENT:** GHD

**Client Sample ID:** S-11135250-062717-SP-01

**Project:** 2C 14 3 10"

**Collection Date:** 6/27/2017 1:05:00 PM

**Lab ID:** 1706G41-005

**Matrix:** SOIL

**Received Date:** 6/29/2017 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	60	30		mg/Kg	20	7/6/2017 1:56:45 PM	32655
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	23	9.5		mg/Kg	1	7/6/2017 11:23:32 AM	32588
Motor Oil Range Organics (MRO)	48	48		mg/Kg	1	7/6/2017 11:23:32 AM	32588
Surr: DNOP	90.4	70-130		%Rec	1	7/6/2017 11:23:32 AM	32588
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/5/2017 3:17:28 PM	32610
Surr: BFB	107	54-150		%Rec	1	7/5/2017 3:17:28 PM	32610
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	7/5/2017 3:17:28 PM	32610
Toluene	ND	0.048		mg/Kg	1	7/5/2017 3:17:28 PM	32610
Ethylbenzene	ND	0.048		mg/Kg	1	7/5/2017 3:17:28 PM	32610
Xylenes, Total	ND	0.096		mg/Kg	1	7/5/2017 3:17:28 PM	32610
Surr: 4-Bromofluorobenzene	101	66.6-132		%Rec	1	7/5/2017 3:17:28 PM	32610

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1706G41**

Date Reported: **7/10/2017**

**CLIENT:** GHD

**Client Sample ID:** S-11135250-062717-SP-02

**Project:** 2C 14 3 10"

**Collection Date:** 6/27/2017 1:09:00 PM

**Lab ID:** 1706G41-006

**Matrix:** SOIL

**Received Date:** 6/29/2017 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	42	3.0		mg/Kg	2	7/6/2017 2:09:10 PM	32655
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/6/2017 12:39:16 PM	32588
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/6/2017 12:39:16 PM	32588
Surr: DNOP	83.7	70-130		%Rec	1	7/6/2017 12:39:16 PM	32588
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/5/2017 5:15:48 PM	32610
Surr: BFB	109	54-150		%Rec	1	7/5/2017 5:15:48 PM	32610
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	7/5/2017 5:15:48 PM	32610
Toluene	ND	0.049		mg/Kg	1	7/5/2017 5:15:48 PM	32610
Ethylbenzene	ND	0.049		mg/Kg	1	7/5/2017 5:15:48 PM	32610
Xylenes, Total	ND	0.097		mg/Kg	1	7/5/2017 5:15:48 PM	32610
Surr: 4-Bromofluorobenzene	103	66.6-132		%Rec	1	7/5/2017 5:15:48 PM	32610

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1706G41**

Date Reported: **7/10/2017**

**CLIENT:** GHD

**Client Sample ID:** S-11135250-062717-SP-03

**Project:** 2C 14 3 10"

**Collection Date:** 6/27/2017 1:15:00 PM

**Lab ID:** 1706G41-007

**Matrix:** SOIL

**Received Date:** 6/29/2017 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	800	30		mg/Kg	20	7/6/2017 2:21:35 PM	32655
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	7/6/2017 1:07:41 PM	32588
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/6/2017 1:07:41 PM	32588
Surr: DNOP	90.5	70-130		%Rec	1	7/6/2017 1:07:41 PM	32588
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/5/2017 5:39:31 PM	32610
Surr: BFB	107	54-150		%Rec	1	7/5/2017 5:39:31 PM	32610
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	7/5/2017 5:39:31 PM	32610
Toluene	ND	0.048		mg/Kg	1	7/5/2017 5:39:31 PM	32610
Ethylbenzene	ND	0.048		mg/Kg	1	7/5/2017 5:39:31 PM	32610
Xylenes, Total	ND	0.096		mg/Kg	1	7/5/2017 5:39:31 PM	32610
Surr: 4-Bromofluorobenzene	101	66.6-132		%Rec	1	7/5/2017 5:39:31 PM	32610

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1706G41**

Date Reported: **7/10/2017**

**CLIENT:** GHD

**Client Sample ID:** S-11135250-062717-SP-04

**Project:** 2C 14 3 10"

**Collection Date:** 6/27/2017 1:20:00 PM

**Lab ID:** 1706G41-008

**Matrix:** SOIL

**Received Date:** 6/29/2017 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	7/6/2017 2:33:59 PM	32655
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/7/2017 12:25:27 PM	32588
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/7/2017 12:25:27 PM	32588
Surr: DNOP	79.6	70-130		%Rec	1	7/7/2017 12:25:27 PM	32588
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/5/2017 6:03:13 PM	32610
Surr: BFB	107	54-150		%Rec	1	7/5/2017 6:03:13 PM	32610
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	7/5/2017 6:03:13 PM	32610
Toluene	ND	0.049		mg/Kg	1	7/5/2017 6:03:13 PM	32610
Ethylbenzene	ND	0.049		mg/Kg	1	7/5/2017 6:03:13 PM	32610
Xylenes, Total	ND	0.097		mg/Kg	1	7/5/2017 6:03:13 PM	32610
Surr: 4-Bromofluorobenzene	99.8	66.6-132		%Rec	1	7/5/2017 6:03:13 PM	32610

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1706G41**

Date Reported: **7/10/2017**

**CLIENT:** GHD

**Client Sample ID:** S-11135250-062717-SP-05

**Project:** 2C 14 3 10"

**Collection Date:** 6/27/2017 1:25:00 PM

**Lab ID:** 1706G41-009

**Matrix:** SOIL

**Received Date:** 6/29/2017 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	59	30		mg/Kg	20	7/6/2017 2:46:24 PM	32655
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/7/2017 12:54:02 PM	32588
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/7/2017 12:54:02 PM	32588
Surr: DNOP	75.2	70-130		%Rec	1	7/7/2017 12:54:02 PM	32588
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/5/2017 6:26:50 PM	32610
Surr: BFB	106	54-150		%Rec	1	7/5/2017 6:26:50 PM	32610
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	7/5/2017 6:26:50 PM	32610
Toluene	ND	0.049		mg/Kg	1	7/5/2017 6:26:50 PM	32610
Ethylbenzene	ND	0.049		mg/Kg	1	7/5/2017 6:26:50 PM	32610
Xylenes, Total	ND	0.097		mg/Kg	1	7/5/2017 6:26:50 PM	32610
Surr: 4-Bromofluorobenzene	99.6	66.6-132		%Rec	1	7/5/2017 6:26:50 PM	32610

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1706G41

10-Jul-17

Client: GHD  
Project: 2C 14 3 10"

Sample ID	MB-32655		SampType: mblk		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 32655		RunNo: 44023					
Prep Date:	7/6/2017		Analysis Date: 7/6/2017		SeqNo: 1389461		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-32655		SampType: Ics		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 32655		RunNo: 44023					
Prep Date:	7/6/2017		Analysis Date: 7/6/2017		SeqNo: 1389462		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.3	90	110			

### Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1706G41

10-Jul-17

Client: GHD  
Project: 2C 14 3 10"

Sample ID	LCS-32609			SampType:	LCS			TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS			Batch ID:	32609			RunNo:	43982					
Prep Date:	7/3/2017			Analysis Date:	7/5/2017			SeqNo:	1386463			Units:	%Rec	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Surr: DNOP	4.7		5.000		93.7	70	130							

Sample ID	MB-32609		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 32609		RunNo: 43982					
Prep Date:	7/3/2017		Analysis Date: 7/5/2017		SeqNo: 1386464		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		106	70	130			

Sample ID	MB-32588	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 32588			RunNo: 43983					
Prep Date:	6/30/2017	Analysis Date: 7/5/2017			SeqNo: 1387024		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		99.3	70	130			

Sample ID	LCS-32588		SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	32588		RunNo:	43983				
Prep Date:	6/30/2017		Analysis Date:	7/5/2017		SeqNo:	1387357		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	44	10	50.00	0	88.5	73.2	114				
Surr: DNOP	4.7		5.000		93.8	70	130				

### Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1706G41

10-Jul-17

Client: GHD  
Project: 2C 14 3 10"

Sample ID	MB-32610		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 32610		RunNo: 43996					
Prep Date:	7/3/2017		Analysis Date: 7/5/2017		SeqNo: 1387478		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	54	150			

Sample ID	LCS-32610			SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range			
Client ID:	LCSS			Batch ID:	32610		RunNo:	43996			
Prep Date:	7/3/2017			Analysis Date:	7/5/2017		SeqNo:	1387479		Units:	mg/Kg
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.4	76.4	125				
Surr: BFB	1200		1000		117	54	150				

Sample ID	1706G41-002AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	S-11135250-062617-		Batch ID: 32610		RunNo: 43996					
Prep Date:	7/3/2017		Analysis Date: 7/5/2017		SeqNo: 1387486		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.7	23.74	0	88.7	77.8	128			
Surr: BFB	1200		949.7		125	54	150			

Sample ID	1706G41-002AMSD		SampType:	MSD		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	S-11135250-062617-		Batch ID:	32610		RunNo:	43996				
Prep Date:	7/3/2017		Analysis Date:	7/5/2017		SeqNo:	1387487		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	20	4.7	23.58	0	86.3	77.8	128	3.41	20		
Surr: BFB	1200		943.4		124	54	150	0	0		

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1706G41

10-Jul-17

Client: GHD  
Project: 2C 14 3 10"

Sample ID	<b>MB-32610</b>		SampType:	<b>MBLK</b>		TestCode:	<b>EPA Method 8021B: Volatiles</b>			
Client ID:	<b>PBS</b>		Batch ID:	<b>32610</b>		RunNo:	<b>43996</b>			
Prep Date:	<b>7/3/2017</b>		Analysis Date:	<b>7/5/2017</b>		SeqNo:	<b>1387510</b>	Units:	<b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	66.6	132			

Sample ID	<b>LCS-32610</b>		SampType:	<b>LCS</b>		TestCode:	<b>EPA Method 8021B: Volatiles</b>			
Client ID:	<b>LCSS</b>		Batch ID:	<b>32610</b>		RunNo:	<b>43996</b>			
Prep Date:	<b>7/3/2017</b>		Analysis Date:	<b>7/5/2017</b>		SeqNo:	<b>1387511</b>	Units:	<b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	86.2	80	120			
Toluene	0.85	0.050	1.000	0	85.4	80	120			
Ethylbenzene	0.84	0.050	1.000	0	84.5	80	120			
Xylenes, Total	2.5	0.10	3.000	0	84.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	66.6	132			

Sample ID	<b>1706G41-001AMS</b>		SampType:	<b>MS</b>		TestCode:	<b>EPA Method 8021B: Volatiles</b>			
Client ID:	<b>S-11135250-062617-</b>		Batch ID:	<b>32610</b>		RunNo:	<b>43996</b>			
Prep Date:	<b>7/3/2017</b>		Analysis Date:	<b>7/5/2017</b>		SeqNo:	<b>1387517</b>	Units:	<b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.023	0.9390	0	87.4	80.9	132			
Toluene	0.82	0.047	0.9390	0	87.7	79.8	136			
Ethylbenzene	0.83	0.047	0.9390	0	88.6	79.4	140			
Xylenes, Total	2.5	0.094	2.817	0	88.5	78.5	142			
Surr: 4-Bromofluorobenzene	0.98		0.9390		105	66.6	132			

Sample ID	<b>1706G41-001AMSD</b>		SampType:	<b>MSD</b>		TestCode:	<b>EPA Method 8021B: Volatiles</b>			
Client ID:	<b>S-11135250-062617-</b>		Batch ID:	<b>32610</b>		RunNo:	<b>43996</b>			
Prep Date:	<b>7/3/2017</b>		Analysis Date:	<b>7/5/2017</b>		SeqNo:	<b>1387518</b>	Units:	<b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.024	0.9625	0	85.2	80.9	132	0.112	20	
Toluene	0.83	0.048	0.9625	0	85.9	79.8	136	0.379	20	
Ethylbenzene	0.83	0.048	0.9625	0	86.0	79.4	140	0.525	20	
Xylenes, Total	2.5	0.096	2.887	0	86.3	78.5	142	0.0435	20	
Surr: 4-Bromofluorobenzene	1.0		0.9625		104	66.6	132	0	0	

### Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



# Sample Log-In Check List

Client Name: GHD

Work Order Number: 1706G41

RcptNo: 1

Received By: Sophia Campuzano 6/29/2017 9:15:00 AM

Completed By: Sophia Campuzano 6/30/2017 2:11:59 PM

Reviewed By: *MC 6/30/17*
*Sophia Campuzano*
*Sophia Campuzano*

## Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

## Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐ # of preserved bottles checked for pH: \_\_\_\_\_  
(<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted? \_\_\_\_\_
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐ Checked by: \_\_\_\_\_

## Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

17. Additional remarks:

## 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

September 18, 2017

Bernie Bockisch

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: 2C 14

OrderNo.: 1709709

Dear Bernie Bockisch:

Hall Environmental Analysis Laboratory received 3 sample(s) on 9/12/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report**Lab Order: **1709709**Date Reported: **9/18/2017****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** GHD  
**Project:** 2C 14**Lab Order:** 1709709**Lab ID:** 1709709-001 **Collection Date:** 9/7/2017 10:10:00 AM**Client Sample ID:** S-11135250-01-090717-MG-TP-16-6" **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	9/15/2017 8:08:19 PM	33876

**Lab ID:** 1709709-002 **Collection Date:** 9/7/2017 10:45:00 AM**Client Sample ID:** S-11135250-01-090717-MG-TP-17-2' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	100	30		mg/Kg	20	9/15/2017 8:20:44 PM	33876

**Lab ID:** 1709709-003 **Collection Date:** 9/7/2017 11:15:00 AM**Client Sample ID:** S-11135250-01-090717-MG-TP-18-2' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	40	30		mg/Kg	20	9/15/2017 8:33:08 PM	33876

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1709709

18-Sep-17

Client: GHD

Project: 2C 14

Sample ID	MB-33876		SampType: mblk		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 33876		RunNo: 45653					
Prep Date:	9/14/2017		Analysis Date: 9/15/2017		SeqNo: 1450182		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-33876		SampType: Ics		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 33876		RunNo: 45653					
Prep Date:	9/14/2017		Analysis Date: 9/15/2017		SeqNo: 1450183		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.6	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

## Sample Log-In Check List

Client Name: GHD

Work Order Number: 1709709

RcptNo: 1

Received By: Erin Melendrez 9/12/2017 10:15:00 AM

Completed By: Ashley Gallegos 9/13/2017 3:23:05 PM

Reviewed By: SRE 09/14/17

*UAG*  
*AG*

### Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

### Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH: \_\_\_\_\_  
(<2 or >12 unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: \_\_\_\_\_

### Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.1	Good	Yes			

