



**APPROVED**

**By Olivia Yu at 3:37 pm, Jul 25, 2018**

NMOCD approves of the proposed remediation for 1RP-4583. See email correspondence for conditions.

June 4, 2018

Reference No. 11135250-1

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

Dear Mr. Ericson:

**Re: Updated 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**

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.

GHD submitted a Remediation Summary Report dated October 12, 2017 to NMOCD that described assessment activities performed at the Site. The following summary and recommendations were made in the report.

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 recommended 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.



In an email dated December 22, 2017 Ms. Olivia Yu with NMOCD indicated that the delineation was complete and authorized the proposed remediation.

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

## 2. Remediation Activities

Excavation of impacted soils was performed from February 13, 2018 through February 15, 2018 (see Figure 2 for excavation limits). Soil samples were collected from the sidewalls and base of the excavation and submitted to Hall Environmental Analysis Laboratory (HEAL) located in Albuquerque, New Mexico. Soils in the areas of surface samples 44, 46, 47, 50, and 53 were excavated to an approximate depth of 1.5 to 6 feet bgs and samples were collected for laboratory analysis. The samples were analyzed for TPH analysis by EPA Method 8015 and for chloride analysis by EPA Method 300.

Total TPH ranged from below the laboratory reporting limits (LRL) to 288 mg/kg and chloride concentrations ranged from 120 mg/kg to 2,000 mg/kg. Three samples exceeding the chloride RRAL were collected from the west side of the excavation near the north end (SP-3, TP-28, and TP-29). The excavation could not be extended farther west due to the presence of a Chevron flow line. Lab reports are summarized in Appendix B.



### 3. Recommendations

The assessment of the horizontal and vertical extent of impacted soils has been performed. In addition, the excavation of impacted soils has been completed. GHD recommends the following activities.

- 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 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 us at 505-884-0672.

Sincerely,

GHD

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

Alan Brandon  
Senior Project Manager

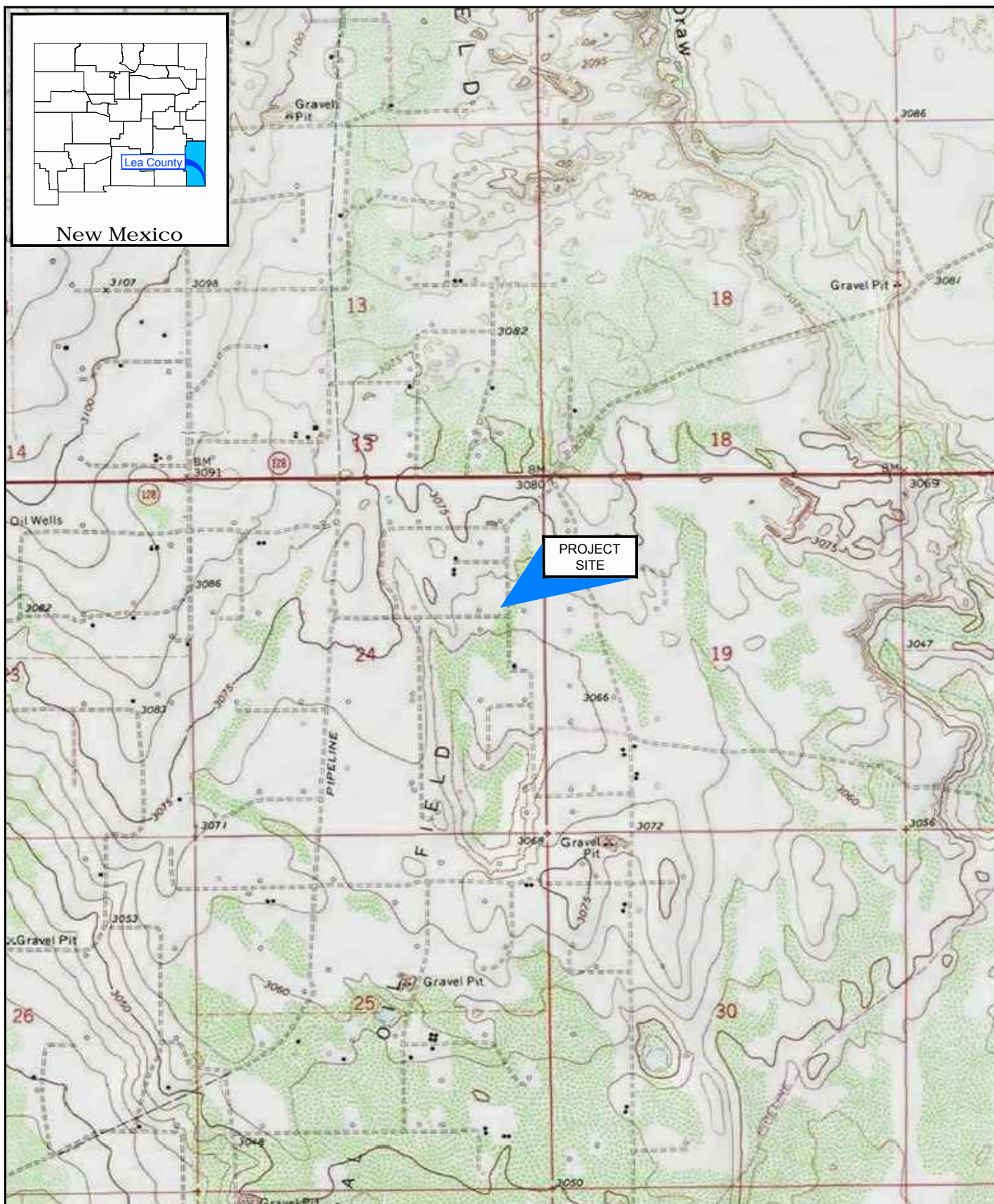
AB/ji/3

Encl.

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

Bernard Bockisch  
New Mexico Operations Manager

## Figures

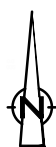


Source: USGS 7.5 Minute Quad "Jal SE, Jal, Jal NW, and Jal NE, New Mexico"

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"

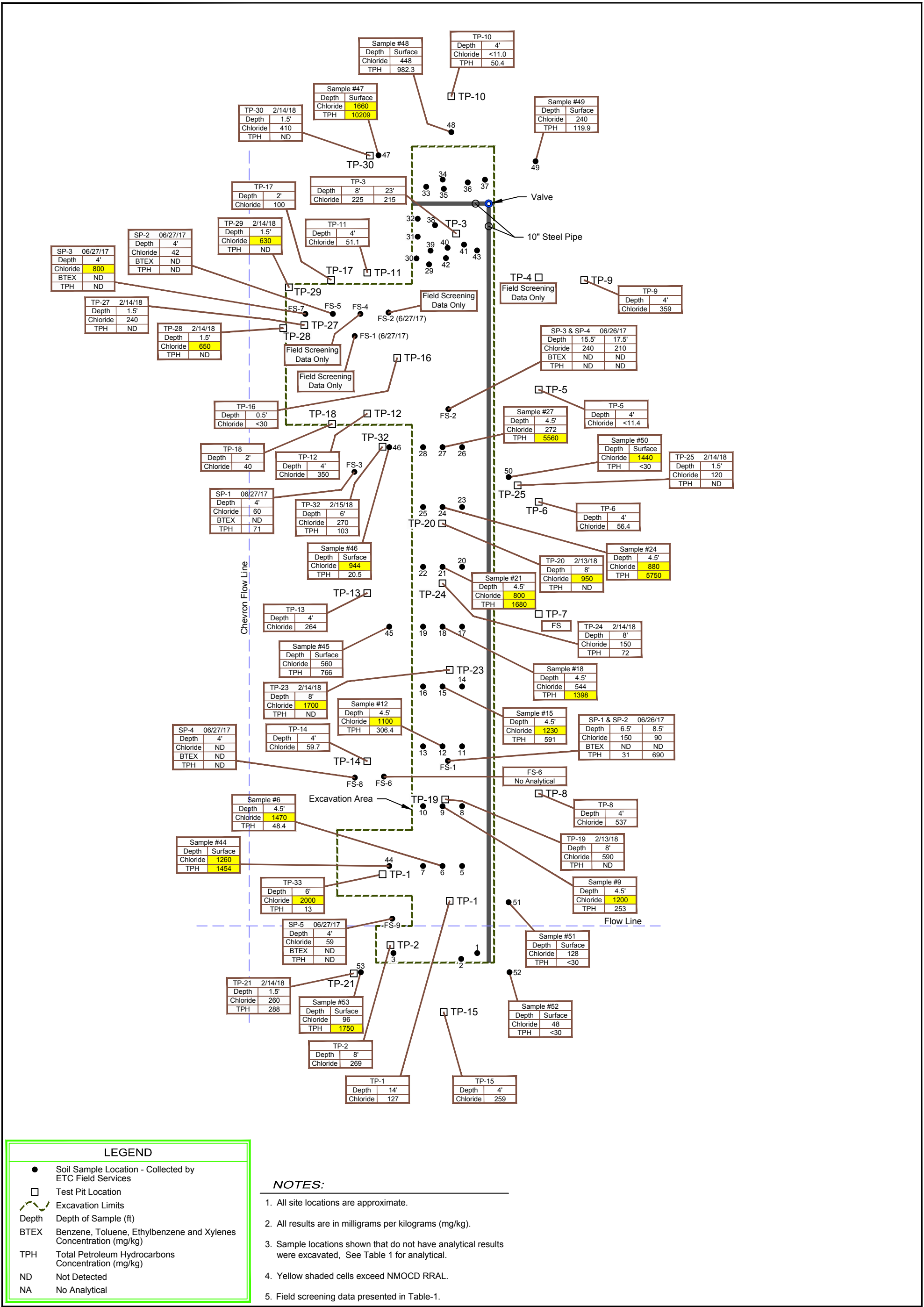
SITE LOCATION MAP

11135250-01

Apr 5, 2017

FIGURE 1





# 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	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

UTMNA83 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.

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[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

### Lab Reports

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 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*	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 (PIL) 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

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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	
<b>Total Xylenes*</b>	<b>1.28</b>	0.150	02/05/2017	ND	6.13	102	6.00	0.335	
<b>Total BTEX</b>	<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
<b>Chloride</b>	<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	
<b>GRO C6-C10</b>	<b>69.2</b>	50.0	02/04/2017	ND	195	97.4	200	10.3		
<b>DRO &gt;C10-C28</b>	<b>7060</b>	50.0	02/04/2017	ND	209	105	200	13.9		
<b>EXT DRO &gt;C28-C36</b>	<b>2140</b>	50.0	02/04/2017	ND						

Surrogate: 1-Chlorooctane 102 % 35-147

Surrogate: 1-Chlorooctadecane 195 % 28-171

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\*=Accredited Analyte

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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

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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

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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)**

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) 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

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\*=Accredited Analyte

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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 #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 (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	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

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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 #7 1.5' (H700273-07)**

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>0.220</b>	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 (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

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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 #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

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**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)**

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>0.312</b>	0.150	02/05/2017	ND	6.13	102	6.00	0.335	
<b>Total BTX</b>	<b>0.312</b>	0.300	02/05/2017	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
<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

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**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 #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 (PIE) 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

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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

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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*	0.151	0.050	02/05/2017	ND	2.16	108	2.00	0.631		
Ethylbenzene*	0.228	0.050	02/05/2017	ND	2.17	108	2.00	0.194		
Total Xylenes*	1.15	0.150	02/05/2017	ND	6.13	102	6.00	0.335		
Total BTEX	1.53	0.300	02/05/2017	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	
Chloride	1100	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	22.4	10.0	02/04/2017	ND	191	95.6	200	4.89	
DRO >C10-C28	284	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

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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)**

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>0.921</b>	0.100	02/07/2017	ND	2.18	109	2.00	0.505	QM-07
<b>Toluene*</b>	<b>7.12</b>	0.100	02/07/2017	ND	2.15	108	2.00	0.763	QM-07
<b>Ethylbenzene*</b>	<b>1.75</b>	0.100	02/07/2017	ND	2.15	108	2.00	0.169	QM-07
<b>Total Xylenes*</b>	<b>6.25</b>	0.300	02/07/2017	ND	6.07	101	6.00	0.0884	QM-07
<b>Total BTX</b>	<b>16.0</b>	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
<b>Chloride</b>	<b>1390</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>213</b>	50.0	02/04/2017	ND	191	95.6	200	4.89	
<b>DRO &gt;C10-C28</b>	<b>811</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 92.8 % 35-147

Surrogate: 1-Chlorooctadecane 142 % 28-171

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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 #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 (PIL) 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

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\*=Accredited Analyte

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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 (PIE) 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

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\*=Accredited Analyte

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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 #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	
Total Xylenes*	<b>0.444</b>	0.150	02/07/2017	ND	6.07	101	6.00	0.0884	
Total BTX	<b>0.535</b>	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 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>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	
DRO >C10-C28	<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

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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)**

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	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

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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 (PIC) 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

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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)**

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>0.291</b>	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) 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

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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

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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

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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 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) 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

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\*=Accredited Analyte

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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)**

BTEX 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 BTEX</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

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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 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*	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					
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

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Celey D. Keene, Lab Director/Quality Manager

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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)**

BTEX 8021B		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.088	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 BTEX	18.9	0.300	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 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

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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)**

BTX 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 BTX	43.4	1.20	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 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

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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)**

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	02/07/2017	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 BTX	132	6.00	02/07/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 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

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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 #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

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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 (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	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

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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

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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)**

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>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 BTX</b>	<b>700</b>	30.0	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 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					
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

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\*=Accredited Analyte

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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 #32 4.5' (H700273-32)**

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) 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

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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)**

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*	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 BTX	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

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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

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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)**

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>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 BTEX</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

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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 (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
<b>Chloride</b>	<b>4080</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>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

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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

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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

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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

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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, SM4500CI-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

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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 #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 (PIL) 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

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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

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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 (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	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

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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

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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 #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	
<b>Toluene*</b>	<b>0.131</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 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
<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
GRO C6-C10	<10.0	10.0	02/06/2017	ND	186	93.1	200	0.568	
<b>DRO &gt;C10-C28</b>	<b>478</b>	10.0	02/06/2017	ND	200	99.9	200	0.657	
<b>EXT DRO &gt;C28-C36</b>	<b>288</b>	10.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 70.0 % 35-147

Surrogate: 1-Chlorooctadecane 89.3 % 28-171

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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, SM4500Cl-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

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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)**

BTX 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 BTX</b>	<b>14.1</b>	3.00	02/08/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 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							S-06
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

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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 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	02/08/2017	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 (PIE) 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

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\*=Accredited Analyte

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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 (PIE) 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

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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)**

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	02/08/2017	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 BTX	<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

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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 (PIE) 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

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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 #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 (PIE) 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

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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)**

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

Surrogate: 4-Bromofluorobenzene (PIL) 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
Chloride	96.0	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	123	50.0	02/06/2017	ND	189	94.4	200	0.373	
DRO >C10-C28	1180	50.0	02/06/2017	ND	205	103	200	1.32	
EXT DRO >C28-C36	447	50.0	02/06/2017	ND					

Surrogate: 1-Chlorooctane 88.6 % 35-147

Surrogate: 1-Chlorooctadecane 107 % 28-171

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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

---

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---

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <b>ENERGY TRANSFER</b>		P.O. #:		BILL TO		ANALYSIS REQUEST	
Project Manager: <b>Devin Ericson</b>		Company:					
Address:		Attn:					
City:		Address:					
State:		City:					
Zip:		State:					
Phone #:		Fax #:					
Project #:		Project Owner:					
Project Name: <b>2C-14-13</b>		City:					
Project Location: <b>10" Black Valve (Blocker)</b>		State:					
Sampler Name: <b>Tyler R. Briones</b>		Zip:					
FOR LAB USE ONLY		Phone #:					
Fax #:							
Lab I.D. <b>H700273</b>		Sample I.D.					
Sample #1 <b>1 1/2'</b>		(G)RAB OR (C)OMP.					
Sample #2 <b>1 1/2'</b>		# CONTAINERS					
Sample #3 <b>3 1/2'</b>		GROUNDWATER					
Sample #4 <b>1 1/2'</b>		WASTEWATER					
Sample #5 <b>1 1/2'</b>		SOIL					
Sample #6 <b>4 1/2'</b>		OIL					
Sample #7 <b>1 1/2'</b>		SLUDGE					
Sample #8 <b>1 1/2'</b>		OTHER:					
Sample #9 <b>4 1/2'</b>		ACID/BASE					
Sample #10 <b>1 1/2'</b>		ICE / COOL					
		OTHER:					
DATE <b>2-3-17</b>		TIME <b>8:15 AM</b>					
TPH <b>8015 Ext. (6-C36)</b>		CL					
BTX <b>8021</b>							
REMARKS:							
Relinquished By: <b>[Signature]</b>		Received By: <b>[Signature]</b>					
Date: <b>2-3-17</b>		Time: <b>11:40</b>					
Relinquished By: <b>[Signature]</b>		Received By: <b>[Signature]</b>					
Date: <b>2-3-17</b>		Time: <b>11:40</b>					
Delivered By: (Circle One) <b>#75 1.7%</b>		Sample Condition					
Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Interact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
Sampler - UPS - Bus - Other: <b>#75 1.7%</b>		CHECKED BY: <b>[Signature]</b>					
		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No					
		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No					
		Add'l Phone #:					
		Add'l Fax #:					

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





CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>Energy Transfer</u>		P.O. #:		BILL TO												ANALYSIS REQUEST																															
Project Manager: <u>Deen Ericson</u>		Company:																																													
Address:		Attn:																																													
City:		Address:																																													
State:		City:																																													
Zip:		State:																																													
Phone #:		Phone #:																																													
Fax #:		Fax #:																																													
Project #:		Project Owner:																																													
Project Name: <u>10" Block Valve (Blocker)</u>		State:																																													
Project Location: <u>2C-14-3</u>		Zip:																																													
Sample Name: <u>Tier R. Brown</u>		Phone #:																																													
FOR LAB USE ONLY		Fax #:																																													
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		TPH		CL		BTX													
H100273		11		Sample #11		4' a'		1		1		1		1		1		1		1		1		1		2-3-17		8:15 AM																			
12		12		Sample #12		4' a'		1		1		1		1		1		1		1		1		1																							
13		13		Sample #13		1 1/2'		1		1		1		1		1		1		1		1		1																							
14		14		Sample #14		1 1/2'		1		1		1		1		1		1		1		1		1																							
15		15		Sample #15		4' a'		1		1		1		1		1		1		1		1		1																							
16		16		Sample #16		1 1/2'		1		1		1		1		1		1		1		1		1																							
17		17		Sample #17		1 1/2'		1		1		1		1		1		1		1		1		1																							
18		18		Sample #18		4 1/2'		1		1		1		1		1		1		1		1		1																							
19		19		Sample #19		1 1/2'		1		1		1		1		1		1		1		1		1																							
20		20		Sample #20		1 1/2'		1		1		1		1		1		1		1		1		1																							
PLEASE NOTE: Liability and Damages. Cardinal Laboratory and its clients assume liability for any claim arising whether caused or not, shall be limited to the amount paid by the client for the 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 30 days after completion of the applicable service. If 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 resulting and/or related to the performance of services rendered by Cardinal. Inspection of whether this claim is based upon any of the above stated reasons or otherwise.		Relinquished By: <u>Deen Ericson</u>		Date: <u>2-3-17</u>		Received By: <u>Deen Ericson</u>		Time: <u>11:40</u>		Sample Condition: <u>Intact</u>		CHECKED BY: <u>John Me</u>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #: <u>John Me</u>		Add'l Fax #:																											
Delivered By: (Circle One) <u>#75</u>		1.70		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>		REMARKS: <u>Deen</u>																																									
Sampler - UPS - Bus - Other:																																															





## Page 58 of 61

ANALYSIS REQUEST

[illegible]



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

[illegible]





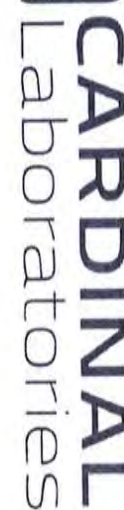
CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>Envy Transfer</u>		P.O. #:		BILL TO		ANALYSIS REQUEST	
Project Manager: <u>Devin E. N. Son</u>		Company:					
Address:		Attn:					
City:		Address:					
State:		City:					
Zip:		State:					
Phone #:		Fax #:					
Project #:		Project Owner:					
Project Name: <u>10" Block Valve (Blocker)</u>		State:					
Project Location: <u>22-14-3</u>		Phone #:					
Sample Name: <u>Tyler R. Brooks</u>		Fax #:					
FOR LAB USE ONLY		MATRIX		PRESERV		SAMPLING	
Lab I.D. <u>H7B0273</u>		Sample I.D.					
Sample #		(G)RAB OR (C)OMP		# CONTAINERS			
41		Sample # 41 6'					
42		# 42 6'					
43		# 43 4 1/2'					
44		# 44 Surface					
45		# 45 Surface					
46		# 46 Surface					
47		# 47 Surface					
48		# 48 Surface					
49		# 49 Surface					
50		# 50 Surface					
DATE		TIME					
2-3-17		9:34 AM					
TPT		CL					
BTx							
REMARKS:		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:			
		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:			
Relinquished By: <u>[Signature]</u>		Date: <u>2-3-17</u>		Received By: <u>[Signature]</u>			
Relinquished By: <u>[Signature]</u>		Date: <u>11:40</u>		Received By: <u>[Signature]</u>			
Delivered By: (Circle One)		Sample Condition		CHECKED BY: <u>[Signature]</u>			
Sampler - UPS - Bus - Other:		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>					
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

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





## Page 61 of 61

ANALYSIS REQUEST

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-3326



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

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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

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

% Dry Solids	86.4			%	1	B704020	JDA	06-Apr-17	EPA160.3/16	84
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**Soluble (DI Water Extraction)**

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

\*=Accredited Analyte

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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
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**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	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>			106 %	25.1-158		7032911	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			116 %	26.8-170		7032911	MS	30-Mar-17	8015B	

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

% Dry Solids	86.4			%	1	B704020	JDA	06-Apr-17	EPA160.3/1684	
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**Soluble (DI Water Extraction)**

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

\*=Accredited Analyte

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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
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#### 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)			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	
Surrogate: 1-Chlorooctane			98.4 %	25.1-158		7032911	MS	30-Mar-17	8015B	
Surrogate: 1-Chlorooctadecane			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	
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#### Soluble (DI Water Extraction)

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

\*=Accredited Analyte

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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
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#### 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	
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##### Soluble (DI Water Extraction)

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

\*=Accredited Analyte

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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
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#### 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>			89.2 %	25.1-158		7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			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	
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#### Soluble (DI Water Extraction)

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

\*=Accredited Analyte

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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
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#### 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	
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#### Soluble (DI Water Extraction)

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

\*=Accredited Analyte

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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
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#### 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	
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##### Soluble (DI Water Extraction)

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

\*=Accredited Analyte

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

% Dry Solids	88.6			%	1	B704020	JDA	06-Apr-17	EPA160.3/16 84	
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**Soluble (DI Water Extraction)**

Chloride	215		11.3	mg/kg dry	10	B704016	JDA	05-Apr-17	EPA300.0	
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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
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#### 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	
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#### Soluble (DI Water Extraction)

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

\*=Accredited Analyte

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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
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#### 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	
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##### Soluble (DI Water Extraction)

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

\*=Accredited Analyte

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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
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#### 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	
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##### Soluble (DI Water Extraction)

Chloride	350		11.3	mg/kg dry	10	B704016	JDA	06-Apr-17	EPA300.0	
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\*=Accredited Analyte

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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
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#### 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>			89.4 %	25.1-158		7033002	MS	30-Mar-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			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	
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##### Soluble (DI Water Extraction)

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

\*=Accredited Analyte

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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
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#### 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	
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#### Soluble (DI Water Extraction)

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

\*=Accredited Analyte

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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
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#### 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	
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#### Soluble (DI Water Extraction)

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

\*=Accredited Analyte

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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	%REC Limits	RPD	RPD Limit	Notes
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#### 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

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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
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#### 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

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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
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#### Batch 7033002 - General Prep - Organics

##### LCS (7033002-BS1)

Prepared & 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 & 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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**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	
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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
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**Batch B704016 - General Prep - Wet Chem**
**Blank (B704016-BLK1)**

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

Chloride	ND	10.0	mg/kg wet							
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**LCS (B704016-BS1)**

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

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

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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>505-884-0672</u>	State: <u>NM</u> Zip: <u>87110</u>
Project #: <u>1113520-1</u>	Project Owner:
Project Name: <u>2C-14-3 10"</u>	State: <u>NM</u> Zip: <u>87110</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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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PLEASE NOTE: Liability and Damages. Cardinal's facility and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <u>AKK</u>	Date: <u>3/29/17</u>	Received By: <u>WJH</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: <u>bernard.beckisch@ghd.com</u>
Relinquished By: <u>AKK</u>	Date: <u>3/29/17</u>	Received By: <u>WJH</u>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: <u>2.0c</u>	Sample Condition <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initial) <u>cdh #75</u>		





2 of 2

**(575) 393-2326 FAX (575) 393-2476**

Page 24 of 24





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:	lcs	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: *ML 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 ☐
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: ☐ eMail ☐ Phone ☐ Fax ☐ 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			



# Chain-of-Custody Record

Client: GHD Services, Inc.

Mailing Address: 6121 Indian School Rd, Suite 200

NE Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Bernard.Backisch@ghd.com

QA/QC Package:

☐ Standard

☐ Level 4 (Full Validation)

Accreditation

☐ NELAP

☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

~~XXXXXX~~ 2C-14

Project #:

1135250-01

Project Manager:

Bernard Backisch

Sampler: Michael Grant

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.1

Container Type and #

Preservative Type

HEAL No.

1709709

-001

-002

-003

Sample Request ID

51135250-01-C0017-AUG-TP16-E

51135250-01-C0017-AUG-TP17-2

51135250-01-C0017-AUG-TP18-3

Date

Time

9/7

1010

9/7

1045

9/7

1115

Date

Time

9/17/08

0840

Date

Time

9/17/08

1900

Relinquished by:

Michael Grant

Relinquished by:

Michael Grant

Relinquished by:

Michael Grant

Relinquished by:

Michael Grant

Received by:

Michael Grant

Received by:

Michael Grant

Received by:

Michael Grant

Received by:

Michael Grant

Date

Time

9/17/08

0840

Date

Time

9/17/08

1905

Remarks:

## Analysis Request

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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)

February 26, 2018

Bernie Bockisch

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: 2C14

OrderNo.: 1802935

Dear Bernie Bockisch:

Hall Environmental Analysis Laboratory received 11 sample(s) on 2/16/2018 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: 1802935

Date Reported: 2/26/2018

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD  
Project: 2C14

Lab Order: 1802935

Lab ID: 1802935-001

Collection Date: 2/13/2018 12:55:00 PM

Client Sample ID: S1135250-01-021318-JP-TP-19-8

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CJS
Chloride	590	30		mg/Kg	20	2/22/2018 11:31:00 AM	36659
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/20/2018 12:43:31 PM	36598
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	2/20/2018 12:43:31 PM	36598
Surr: DNOP	99.9	70-130		%Rec	1	2/20/2018 12:43:31 PM	36598
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/19/2018 1:17:45 PM	36571
Surr: BFB	86.9	15-316		%Rec	1	2/19/2018 1:17:45 PM	36571

Lab ID: 1802935-002

Collection Date: 2/13/2018 1:50:00 PM

Client Sample ID: S1135250-01-021318-JP-TP-20-8

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CJS
Chloride	950	30		mg/Kg	20	2/22/2018 12:08:13 PM	36659
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/20/2018 1:08:01 PM	36598
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/20/2018 1:08:01 PM	36598
Surr: DNOP	91.5	70-130		%Rec	1	2/20/2018 1:08:01 PM	36598
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/19/2018 1:41:24 PM	36571
Surr: BFB	86.2	15-316		%Rec	1	2/19/2018 1:41:24 PM	36571

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

**Analytical Report**Lab Order: **1802935**Date Reported: **2/26/2018****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** GHD  
**Project:** 2C14**Lab Order:** 1802935**Lab ID:** 1802935-003**Collection Date:** 2/14/2018 1:45:00 PM**Client Sample ID:** S1135250-01-021418-MG-TP-21**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	260	30		mg/Kg	20	2/22/2018 12:20:37 PM	36659
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	98	10		mg/Kg	1	2/20/2018 4:48:28 PM	36598
Motor Oil Range Organics (MRO)	190	51		mg/Kg	1	2/20/2018 4:48:28 PM	36598
Surr: DNOP	85.6	70-130		%Rec	1	2/20/2018 4:48:28 PM	36598
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/19/2018 2:05:08 PM	36571
Surr: BFB	83.7	15-316		%Rec	1	2/19/2018 2:05:08 PM	36571

**Lab ID:** 1802935-004**Collection Date:** 2/14/2018 1:48:00 PM**Client Sample ID:** S1135250-01-021418-MG-TP-23**Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1700	75		mg/Kg	50	2/16/2018 12:27:40 PM	36567
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/16/2018 1:02:36 PM	s49191
Surr: BFB	122	70-130		%Rec	1	2/16/2018 1:02:36 PM	s49191
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/16/2018 11:13:56 AM	36561
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/16/2018 11:13:56 AM	36561
Surr: DNOP	97.6	70-130		%Rec	1	2/16/2018 11:13:56 AM	36561

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



# Analytical Report

Lab Order: 1802935

Date Reported: 2/26/2018

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD  
**Project:** 2C14

**Lab Order:** 1802935

**Lab ID:** 1802935-005

**Collection Date:** 2/14/2018 1:50:00 PM

**Client Sample ID:** S1135250-01-021418-MG-TP-24

**Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	150	30		mg/Kg	20	2/16/2018 11:50:27 AM	36567
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/16/2018 1:25:26 PM	s49191
Surr: BFB	123	70-130		%Rec	1	2/16/2018 1:25:26 PM	s49191
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	18	9.9		mg/Kg	1	2/16/2018 11:36:03 AM	36561
Motor Oil Range Organics (MRO)	54	49		mg/Kg	1	2/16/2018 11:36:03 AM	36561
Surr: DNOP	102	70-130		%Rec	1	2/16/2018 11:36:03 AM	36561

**Lab ID:** 1802935-006

**Collection Date:** 2/14/2018 1:52:00 PM

**Client Sample ID:** S1135250-01-021418-MG-TP-25

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	120	30		mg/Kg	20	2/22/2018 12:33:02 PM	36659
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	2/20/2018 5:37:14 PM	36598
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/20/2018 5:37:14 PM	36598
Surr: DNOP	88.4	70-130		%Rec	1	2/20/2018 5:37:14 PM	36598
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/19/2018 2:28:55 PM	36571
Surr: BFB	85.4	15-316		%Rec	1	2/19/2018 2:28:55 PM	36571

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

# Analytical Report

Lab Order: 1802935

Date Reported: 2/26/2018

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD  
Project: 2C14

Lab Order: 1802935

Lab ID: 1802935-007

Collection Date: 2/14/2018 1:55:00 PM

Client Sample ID: S1135250-01-021418-MG-TP-27

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CJS
Chloride	240	30		mg/Kg	20	2/22/2018 12:45:27 PM	36659
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	2/20/2018 2:45:53 PM	36598
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/20/2018 2:45:53 PM	36598
Surr: DNOP	89.0	70-130		%Rec	1	2/20/2018 2:45:53 PM	36598
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/19/2018 2:52:40 PM	36571
Surr: BFB	86.4	15-316		%Rec	1	2/19/2018 2:52:40 PM	36571

Lab ID: 1802935-008

Collection Date: 2/14/2018 2:00:00 PM

Client Sample ID: S1135250-01-021418-MG-TP-28

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CJS
Chloride	650	30		mg/Kg	20	2/22/2018 12:57:51 PM	36659
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/20/2018 3:10:29 PM	36598
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/20/2018 3:10:29 PM	36598
Surr: DNOP	78.1	70-130		%Rec	1	2/20/2018 3:10:29 PM	36598
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/19/2018 4:50:57 PM	36571
Surr: BFB	86.2	15-316		%Rec	1	2/19/2018 4:50:57 PM	36571

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

# Analytical Report

Lab Order: 1802935

Date Reported: 2/26/2018

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD  
Project: 2C14

Lab Order: 1802935

Lab ID: 1802935-009

Collection Date: 2/14/2018 2:02:00 PM

Client Sample ID: S1135250-01-021418-MG-TP-29

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CJS
Chloride	630	30		mg/Kg	20	2/22/2018 1:10:16 PM	36659
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/20/2018 3:34:54 PM	36598
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/20/2018 3:34:54 PM	36598
Surr: DNOP	72.9	70-130		%Rec	1	2/20/2018 3:34:54 PM	36598
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/19/2018 5:14:21 PM	36571
Surr: BFB	89.4	15-316		%Rec	1	2/19/2018 5:14:21 PM	36571

Lab ID: 1802935-010

Collection Date: 2/14/2018 2:05:00 PM

Client Sample ID: S1135250-01-021418-MG-TP-30

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CJS
Chloride	410	30		mg/Kg	20	2/22/2018 1:22:40 PM	36659
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/20/2018 3:59:41 PM	36598
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/20/2018 3:59:41 PM	36598
Surr: DNOP	82.8	70-130		%Rec	1	2/20/2018 3:59:41 PM	36598
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/19/2018 5:37:56 PM	36571
Surr: BFB	89.7	15-316		%Rec	1	2/19/2018 5:37:56 PM	36571

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

**Analytical Report**Lab Order: **1802935**Date Reported: **2/26/2018****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** GHD  
**Project:** 2C14**Lab Order:** 1802935**Lab ID:** 1802935-011**Collection Date:** 2/15/2018 11:52:00 AM**Client Sample ID:** S1135250-01-021518-MG-TP-32**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	270	30		mg/Kg	20	2/22/2018 1:59:55 PM	36659
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	34	9.4		mg/Kg	1	2/20/2018 4:24:04 PM	36598
Motor Oil Range Organics (MRO)	69	47		mg/Kg	1	2/20/2018 4:24:04 PM	36598
Surr: DNOP	70.4	70-130		%Rec	1	2/20/2018 4:24:04 PM	36598
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/19/2018 6:01:28 PM	36571
Surr: BFB	88.3	15-316		%Rec	1	2/19/2018 6:01:28 PM	36571

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#: 1802935

26-Feb-18

Client: GHD

Project: 2C14

Sample ID	MB-36567		SampType: mblk		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 36567		RunNo: 49185					
Prep Date:	2/16/2018		Analysis Date: 2/16/2018		SeqNo: 1587341		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-36567		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 36567		RunNo: 49185					
Prep Date:	2/16/2018		Analysis Date: 2/16/2018		SeqNo: 1587342		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.2	90	110			

Sample ID	MB-36659		SampType:	mblk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	36659		RunNo:	49283				
Prep Date:	2/21/2018		Analysis Date:	2/22/2018		SeqNo:	1591817		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-36659		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 36659		RunNo: 49283					
Prep Date:	2/21/2018		Analysis Date: 2/22/2018		SeqNo: 1591818		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1802935

26-Feb-18

Client: GHD

Project: 2C14

Sample ID	LCS-36561		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 36561		RunNo: 49187					
Prep Date:	2/16/2018		Analysis Date: 2/16/2018		SeqNo: 1586297		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	88.1	70	130			
Surr: DNOP	4.2		5.000		84.3	70	130			

Sample ID	MB-36561		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 36561		RunNo: 49187					
Prep Date:	2/16/2018		Analysis Date: 2/16/2018		SeqNo: 1586298		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	9.8		10.00		98.5	70	130			

Sample ID	LCS-36598		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 36598		RunNo: 49233					
Prep Date:	2/19/2018		Analysis Date: 2/20/2018		SeqNo: 1588512		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.3	70	130			
Surr: DNOP	4.5		5.000		90.7	70	130			

Sample ID	MB-36598		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 36598		RunNo: 49233					
Prep Date:	2/19/2018		Analysis Date: 2/20/2018		SeqNo: 1588513		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	9.0		10.00		90.1	70	130			

### 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#: 1802935

26-Feb-18

Client: GHD

Project: 2C14

Sample ID	MB-36571		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 36571		RunNo: 49215					
Prep Date:	2/16/2018		Analysis Date: 2/19/2018		SeqNo: 1587995		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	870		1000		86.6	15	316			

Sample ID	LCS-36571		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 36571		RunNo: 49215					
Prep Date:	2/16/2018		Analysis Date: 2/19/2018		SeqNo: 1587996		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	75.9	131			
Surr: BFB	960		1000		95.5	15	316			

## 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#: 1802935

26-Feb-18

Client: GHD

Project: 2C14

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	s49191	RunNo:	49191					
Prep Date:		Analysis Date:	2/16/2018	SeqNo:	1586433	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	570		500.0		113	70	130			

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	s49191	RunNo:	49191					
Prep Date:		Analysis Date:	2/16/2018	SeqNo:	1586436	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.6	70	130			
Surr: BFB	530		500.0		107	70	130			

## 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





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

## Sample Log-In Check List

Client Name: GHD

Work Order Number: 1802935

RcptNo: 1

Received By: Sophia Campuzano 2/16/2018 9:30:00 AM

Completed By: Anne Thorne 2/16/2018 9:50:28 AM

Reviewed By: DDS 2/16/18

*[Signature]*

*[Signature]*

*MW 2/16/18*  
**Chain of Custody**

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐  
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐  
5. Sample(s) in proper container(s)? Yes ☒ No ☐  
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐  
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐  
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐  
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒  
10. Were any sample containers received broken? Yes ☐ No ☒  
11. Does paperwork match bottle labels? Yes ☒ No ☐  
(Note discrepancies on chain of custody)  
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐  
13. Is it clear what analyses were requested? Yes ☒ No ☐  
14. Were all holding times able to be met? Yes ☒ No ☐  
(If no, notify customer for authorization.)

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: \_\_\_\_\_

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			





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May 02, 2018

Bernie Bockisch

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: 2C-14-3

OrderNo.: 1804D62

Dear Bernie Bockisch:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/27/2018 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: **1804D62**

Date Reported: **5/2/2018**

**CLIENT:** GHD

**Lab Order:** 1804D62

**Project:** 2C-14-3

**Lab ID:** 1804D62-001

**Collection Date:** 4/25/2018 1:32:00 PM

**Client Sample ID:** S-11135250-1-42518-BB-TP33

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	2000	75		mg/Kg	50	5/1/2018 11:54:58 AM	37867
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	13	10		mg/Kg	1	5/1/2018 10:50:37 AM	37865
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	5/1/2018 10:50:37 AM	37865
Surr: DNOP	71.6	70-130		%Rec	1	5/1/2018 10:50:37 AM	37865
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/30/2018 12:49:40 PM	37835
Surr: BFB	92.2	15-316		%Rec	1	4/30/2018 12:49:40 PM	37835

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

**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

- 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



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1804D62

02-May-18

Client: GHD  
Project: 2C-14-3

Sample ID	MB-37867		SampType: mblk		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 37867		RunNo: 50935					
Prep Date:	4/30/2018		Analysis Date: 5/1/2018		SeqNo: 1653639		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-37867		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 37867		RunNo: 50935					
Prep Date:	4/30/2018		Analysis Date: 5/1/2018		SeqNo: 1653640		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	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#: 1804D62

02-May-18

Client: GHD  
Project: 2C-14-3

Sample ID	LCS-37865		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 37865		RunNo: 50940					
Prep Date:	4/30/2018		Analysis Date: 5/1/2018		SeqNo: 1654117		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	87.6	70	130			
Surr: DNOP	3.9		5.000		78.0	70	130			

Sample ID	MB-37865		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 37865		RunNo: 50940					
Prep Date:	4/30/2018		Analysis Date: 5/1/2018		SeqNo: 1654118		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	8.2		10.00		82.1	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#: 1804D62

02-May-18

Client: GHD  
Project: 2C-14-3

Sample ID	MB-37835		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 37835		RunNo: 50929					
Prep Date:	4/27/2018		Analysis Date: 4/30/2018		SeqNo: 1653363		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	950		1000		94.9	15	316			

Sample ID	LCS-37835		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 37835		RunNo: 50929					
Prep Date:	4/27/2018		Analysis Date: 4/30/2018		SeqNo: 1653364		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	75.9	131			
Surr: BFB	1100		1000		107	15	316			

Sample ID	1804D62-001AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	S-11135250-1-42518		Batch ID: 37835		RunNo: 50929					
Prep Date:	4/27/2018		Analysis Date: 4/30/2018		SeqNo: 1653368		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	24.88	0	104	77.8	128			
Surr: BFB	1000		995.0		105	15	316			

Sample ID	1804D62-001AMSD		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	S-11135250-1-42518		Batch ID: 37835		RunNo: 50929					
Prep Date:	4/27/2018		Analysis Date: 4/30/2018		SeqNo: 1653369		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.41	0	98.5	77.8	128	6.94	20	
Surr: BFB	1000		976.6		104	15	316	0	0	

Sample ID	MB-37842		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 37842		RunNo: 50929					
Prep Date:	4/27/2018		Analysis Date: 4/30/2018		SeqNo: 1653372		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	880		1000		87.7	15	316			

Sample ID	LCS-37842		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 37842		RunNo: 50929					
Prep Date:	4/27/2018		Analysis Date: 4/30/2018		SeqNo: 1653373		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		106	15	316			

### 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: 1804D62

RcptNo: 1

Received By: Erin Melendrez

4/27/2018 9:00:00 AM

Completed By: Michelle Garcia

4/27/2018 9:23:08 AM

Reviewed By:

*MMW*

4/27/18

*MMW*

*Michelle Garcia*

*MMW 4/27/18*

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐

2. How was the sample delivered? Courier

## Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐

4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐

5. Sample(s) in proper container(s)? Yes ☒ No ☐

6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐

7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐

8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐

9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒

10. Were any sample containers received broken? Yes ☐ No ☒

11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐

13. Is it clear what analyses were requested? Yes ☒ No ☐

14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

# of preserved bottles checked for pH: *MMW 4/27/18*  
(≤ of >12 unless noted)

Checked by: \_\_\_\_\_

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Yes			



