



APPROVED

By Olivia Yu at 11:59 am, Aug 25, 2017

July 18, 2017

Reference No. 11135250-02

Ms. Olivia Yu
New Mexico Oil Conservation Division
Energy, Minerals and Natural Resources Department
1625 N. French Dr.
Hobbs, NM 88240

**NMOCD grants closure
to 1RP-4499.**

Dear Ms. Yu:

**Re: Closure Request
Fullerton 16 Inch (1RP-4499)
ETC Field Services LLC
Site Location: Sec. 35, T 21-S, R 37-E
(Lat 32.42832N°, Long -103.1396W°)
Lea County, New Mexico**

On behalf of ETC Field Services LLC (ETC), GHD Services, Inc. (GHD) is requesting that no further action status be granted for the Fullerton 16 Inch (hereafter referred to as the "Site").

In an Assessment Report dated May 4, 2017 (attached) GHD recommended the following scope items be completed following delineation of the soil impacts in order to achieve no further action;

- Backfilling of the excavation with clean fill material and wheel compacting to grade.
- Fertilizing and reseeding of the disturbed area with an appropriate seed mix. BLM #2 grass mix was used.

The work scope was approved by Ms. Yu with the New Mexico Oil Conservation Division on May 31, 2017. As of the date of this letter, the above scope items have been completed and are documented in the attached completion photos and final C-141 for the Site; therefore, No Further Action is being requested.



Your timely response to this requested is greatly appreciated. Should you have any questions, or require additional information regarding this submittal, please feel free to contact myself or Bernie Bockisch at (505) 884-0672 or Bernard.Bockisch@ghd.com.

Sincerely,

GHD

A handwritten signature in black ink that reads "Alan Brandon".

Alan Brandon
Senior Project Manager

AB/mc/03

A handwritten signature in blue ink that reads "Bernard Bockisch".

Bernard Bockisch
Albuquerque Operations Manager

District I
1625 N French Dr, Hobbs, NM 88240
District II
811 S First St, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St. Francis Dr, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Energy Transfer Partners	Contact: Dean D. Ericson
Address: 600 N. Marienfeld Street, Ste. 700	Telephone No.: 432-238-2142
Facility Name: Fullerton 16" (IRP-4499)	Facility Type: Pipeline

Surface Owner: Micheal Pilcher	Mineral Owner:	API No.:
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LOCATION OF RELEASE

Unit Letter M	Section 35	Township 21S	Range 37E	Feet from the 64.85	North/South Line South	Feet from the 840.46	East/West Line West	County Lea
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Latitude 32.42832N Longitude 103.1396W

NATURE OF RELEASE

Type of Release: Natural Gas/Oil	Volume of Release: 8 BBLs/236.697 Mscf	Volume Recovered: ~7.5 BBLs oil
Source of Release: Leaking pipeline	Date and Hour of Occurrence 10/27/2016 0800	Date and Hour of Discovery 10/27/2016 0800
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NA	
By Whom? NA	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

APPROVED

By Olivia Yu at 12:01 pm, Aug 25, 2017

If a Watercourse was Impacted, Describe Fully.*
NA

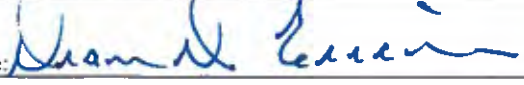

Describe Cause of Problem and Remedial Action Taken.*

Due to external corrosion a section of 16" gathering system pipeline developed a hole causing a release of natural gas and oil. Initially, this release was gas only. The pipeline was uncovered and a crew was dispatched to begin clamping the leak; however, as work was to begin a slug of liquid hit the leaking area of the pipeline. The clamping operation was suspended until the pipeline could be isolated. As a result, approximately 8 bbls of oil was released into the Bell Hole. When liquid was first observed, a Vacuum Truck was called to begin removing the spilled product. Due to the rapid response of the Vacuum Truck and the fact that a Bell Hole had already been dug, the liquid was contained.

Describe Area Affected and Cleanup Action Taken.*

The area affected was approximately 15'x9'x6'. All of the liquid with the exception of that which had already been absorbed by the surrounding soil was removed. The remaining contaminated soil was removed immediately and stockpiled. A sample of the stockpile and the area directly under the pipeline was taken to determine disposal options and the need for additional remediation. The area was remediated to NMOCD RRALs by excavating the contaminated soil and the collection of confirmation samples that were analyzed by the laboratory.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Dean D. Ericson	Approved by Environmental Specialist: 	
Title: Sr. Environmental Specialist	Approval Date: 8/25/2017	Expiration Date: xx/xx/xxxx
E-mail Address: dean.ericson@energytransfer.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: July 13, 2017	Phone: 432-238-2142	

* Attach Additional Sheets If Necessary

1RP-4499



Photo 1 - Backfilled area



Photo 2 - Backfilled area



Site Photographs



Photo 3 - Re-seeding



Photo 4 - Re-seeded area



Site Photographs



May 4, 2017

Reference No. 11135250-2

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

Dear Mr. Ericson:

**Re: Remediation Summary Report
Fullerton 16 Inch (1 RP-4499)
ETC Field Services LLC
1RP 4499
Site Location: Sec. 35, T 21-S, R 37-E
(Lat 32.42832N°, Long -103.1396W°)
Lea County, New Mexico**

GHD Services, Inc. (GHD) is pleased to present this report for the above referenced site. The Fullerton 16 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).

Assessment and remediation activities were performed at the Site on March 27, 2017 by GHD. On November 2, 2016, a release of approximately eight barrels (bbls) of natural gas/oil was reported to the State of New Mexico Oil Conservation Division (NMOCD) via Form C-141. A leaking 16-inch pipe was the cause of the release. Approximately 7.5 bbls were recovered utilizing a vacuum truck. Contaminated soils were excavated and stockpiled on site (see Figure 2). NMOCD release number 1RP 4499 was assigned.

1. Introduction

The release at this site occurred on land owned by a private individual. Following the release, GHD's Site assessment activities began with initial background soil sampling and analysis and limited excavation on March 27, 2017. Additional assessment activities were performed by excavating test pits and field screening the soil utilizing the PetroFLAG Hydrocarbon Analysis System. The excavation was extended to a depth of 10 feet bgs and soil samples were collected from the four walls for laboratory analysis. Excavation activities were performed by Diamond Back of Hobbs, New Mexico and observed by GHD. Soil samples were collected by GHD and analyzed by Cardinal Laboratories of Hobbs, New Mexico.

Based on information available from the United States Geologic Survey National Water Information System, the depth to groundwater at the Site is approximately 55 ft below ground surface (bgs). This is based on a water well that is located approximately 1 mile southeast of the Site (see Appendix A, Water Well Reports for depth to water). However, NMOCD has recent data from a groundwater monitoring well (that is reported by the NMOCD to be closer to the Site) as well as from other incidents in the area which



demonstrate that groundwater is less than 50 ft. bgs Based on this, the shallower depth to water was used for the ranking. There are no well head protection areas or surface water bodies within 1000 feet of the Site. Therefore, the preliminary total ranking score is 20 (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), 100 mg/kg for total petroleum hydrocarbons (TPH), and 250 mg/kg for chlorides.

New Mexico Oil Conservation Division Site Assessment	
Ranking Criteria	Score
Depth to Ground Water (<50 ft bgs)	20
Wellhead Protection Area (> 1000 ft from water source, > 200 ft from domestic source)	0
Distance to Surface Body Water (>1000 ft)	0
Ranking Criteria Total Score	20*
*Because the ranking criteria total score is 20, NMOCD established RRALs are 10 mg/kg for benzene, 50 mg/kg for total BTEX, 100 mg/kg for total TPH and 250 ppm for chlorides ¹ .	

1. NMOCD Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993

2. Assessment Activities

The impacted area had initially been excavated to a depth of approximately 6 ft bgs and soil samples were collected by ETC Field Services LLC personnel for laboratory analysis. A sample (BtmHole) was collected from the bottom of the excavation at a depth of approximately 6 ft bgs on October 31, 2016 (see Figure 2). The sample was submitted to Xenco Laboratories (Xenco) in Midland, Texas and analyzed for BTEX by EPA Method 8260B, TPH by EPA Method 8015B, and chloride by EPA Method 300. The analytical results for this sample were:

- Benzene: <0.005 mg/kg
- Total BTEX: 0.0128 mg/kg
- TPH: 413 mg/kg
- Chloride: 12.2 mg/kg

Due to heavy rains, contaminated soil from the stockpile ran into the excavation. The stockpile soil was removed and the bottom of the excavation was cleaned out. Following the cleaning of the bottom of the excavation, another sample (BtmH) was collected from the bottom of the excavation at approximately 6 ft bgs on December 7, 2016. (see Figure 2). The sample was submitted to Xenco and analyzed for BTEX by EPA Method 8260B, TPH by EPA Method 8015B, and chloride by EPA Method 300. The analytical results for this sample were:



- Benzene: 0.273 mg/kg
- Total BTEX: 3.445 mg/kg
- TPH: 81.2 mg/kg
- Chloride: 13.7 mg/kg

Excavation activities to assess the horizontal and vertical extent of impacted soil from the release occurred on March 27, 2017 by GHD. Field screening of soil for petroleum hydrocarbons was performed to assess the horizontal and vertical extent of contaminated soil. The field screening indicated that impacted soil did not extend to a depth greater than 10 ft bgs. Due to this, the soil on either side of the pipeline was excavated to a depth of 10 ft bgs. Soil underneath the pipeline was left in place for support.

Confirmation soil samples were collected and submitted to Cardinal Laboratories for laboratory analysis. Samples were collected from the base of the excavation and the four walls (see Figure 2). The soil samples were analyzed for BTEX by EPA Method 8021 and TPH by EPA Method 8015 full range (Table 1). Laboratory analytical data can be found in Appendix B. Based on the low concentrations that were observed during the initial sampling (see above), the confirmation samples were not analyzed for chloride.

The final dimensions of the excavation were measured at 14 feet wide by 18 feet long by 10 feet deep. Only one sample (S-1113520-2-032717-S. Wall) contained a detectable Analyte above the laboratory reporting limit. This sample contained a TPH diesel range organics concentration of 11.5 mg/kg which is below the RRAL. Initial bottom of excavation soil samples did not contain chloride concentrations above the RRAL and thus, the confirmation samples were not analyzed for chloride.

3. Summary and Recommendations

Confirmatory soil samples collected from the base of the excavation at a depth of 10 ft bgs, and the four walls (see Figure 2) were submitted for laboratory analysis. The laboratory analytical results are below the RRALs for the constituents that were analyzed. Based on the laboratory results, GHD recommends the following:

- Backfilling of the excavation with clean fill material and wheel compacting to grade.
- Fertilizing and reseeded of the disturbed area with an appropriate seed mix.



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

Sincerely,

GHD

A handwritten signature in black ink that reads "Alan Brandon". The signature is written in a cursive, flowing style.

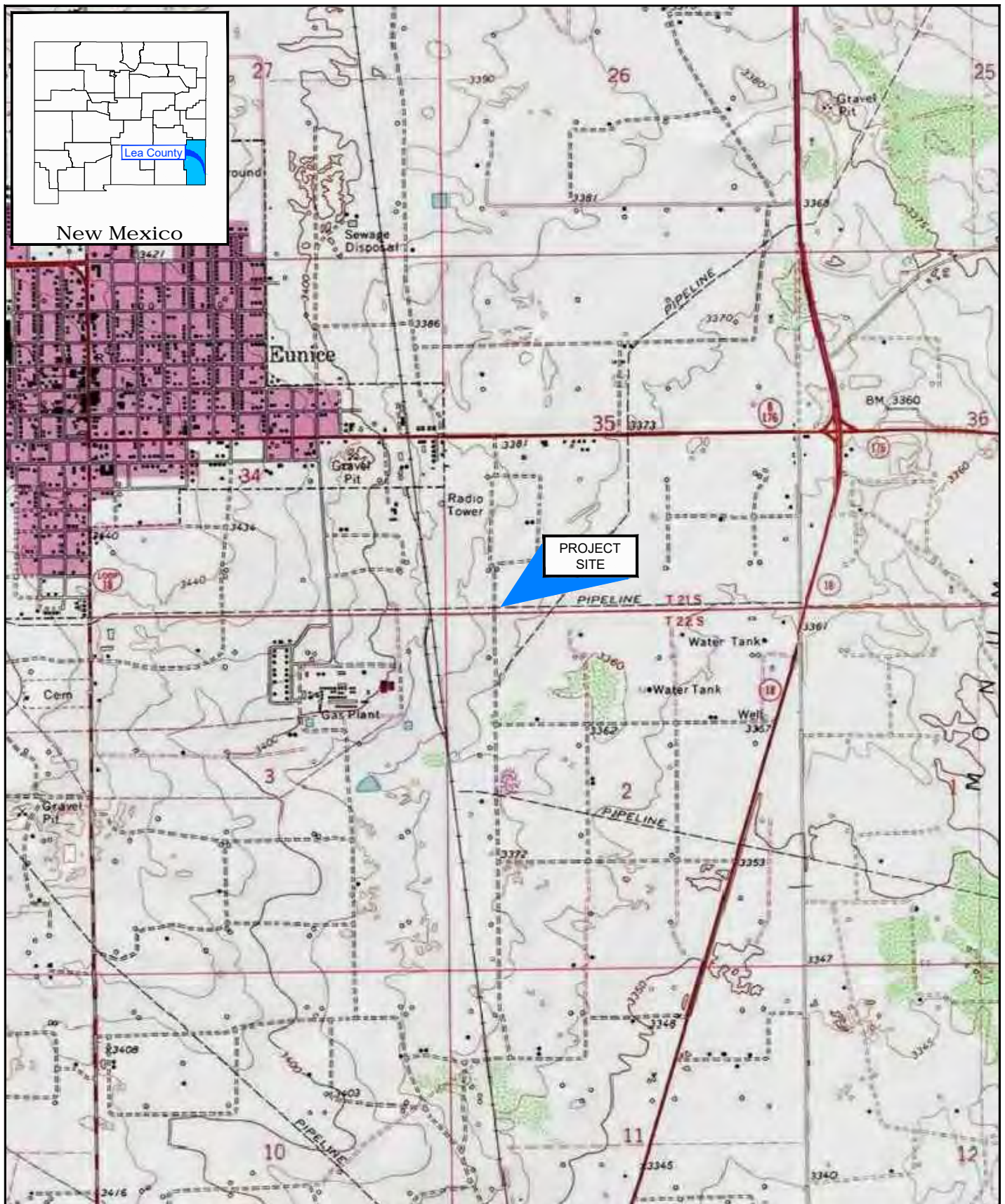
Alan Brandon
Senior Project Manager

AB/mc/01

A handwritten signature in blue ink that reads "Bernie Bockisch". The signature is written in a cursive, flowing style.

Bernard Bockisch
New Mexico Operations Manager

Figures



Source: USGS 7.5 Minute Quad "Eunice and Eunice NE, New Mexico"

Lat/Long: 32.42832° North, 103.13960° West

0 1000 2000ft

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



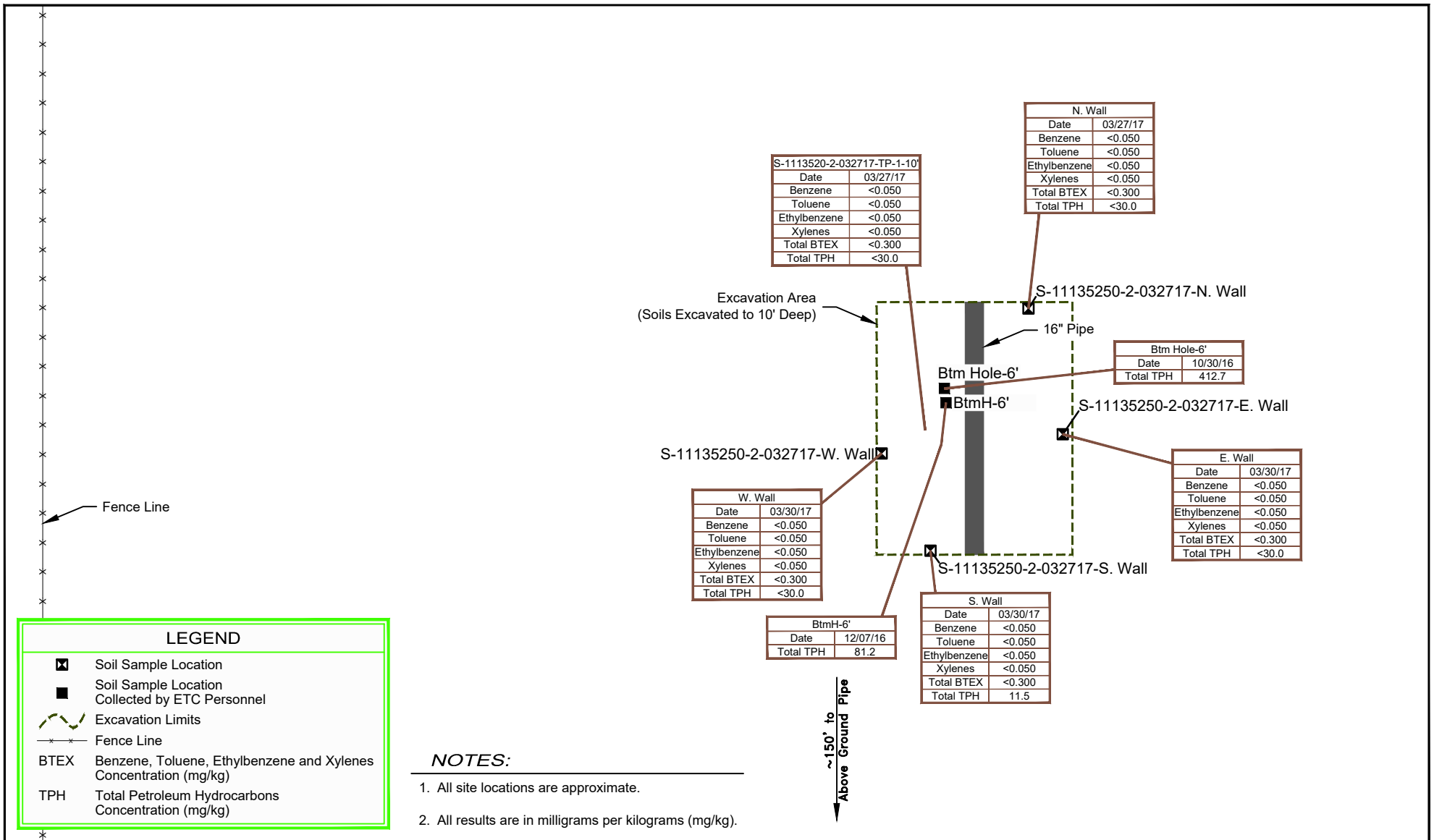
ETC FIELD SERVICES
LEA COUNTY, NEW MEXICO
FULLERTON 16"

SITE LOCATION MAP

11135250-02

Apr 5, 2017

FIGURE 1



0 5 10ft



ETC FIELD SERVICES
LEA COUNTY, NEW MEXICO
FULLERTON 16"

SOIL SAMPLE LOCATION

11135250-02
Apr 28, 2017

FIGURE 2

Tables

Table 1

ETC Field Services LLC - Fullerton 16" Pipeline
 Section 35, Township 21 South, Range 37 East
 Lea County, New Mexico
 Soil Analytical Results Summary

Sample ID	Date	Sample Depth	Chlorides	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	TPH	TPH	TPH	Total TPH
		(ft.)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO (C6-C10)	DRO (C10-C28)	EXT DRO (C28-C36)	GRO/DRO
									(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
NMOCD Remediation Action Levels			250	10	NE	NE	NE	50	NE	NE	NE	100
EXCAVATION SAMPLES												
*BtmHole	10/31/2016	6	12.2	<0.005	<0.005	<0.005	0.0128	0.0128	74.7	338	NA	412.7
*WstPile	10/31/2016	--	71.6	0.0461	0.58	0.333	0.814	1.7731	12,900.0	22,300.0	NA	35,200.0
*BtmH	12/07/2016	6	13.7	0.273	1.4	0.404	1.368	3.445	32.9	48.3	NA	81.2
*WstPil	12/07/2016	--	166.0	<0.005	<0.005	<0.005	0.026	0.026	2,450.0	11,100.0	NA	13,550.0
S-1113520-2-032717-TP-1 10'	03/27/2017	10	NA	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0
S-1113520-2-032717-N. Wall	03/27/2017	5	NA	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0
S-1113520-2-032717-S. Wall	03/27/2017	5	NA	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	11.5	<10.0	11.5
S-1113520-2-032717-E. Wall	03/27/2017	5	NA	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0
S-1113520-2-032717-W. Wall	03/27/2017	5	NA	<0.05	<0.05	<0.05	<0.15	<0.30	<10.0	<10.0	<10.0	<30.0

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

* Samples taken by ETC Field Services

NE = Not Established

mg/Kg = milligrams per Kilogram

-- = Not Applicable

NA = Not Analyzed

Appendix A

Water Well Reports

FULTON



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater Geographic Area: United States GO

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 =

- 322521103073601

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 322521103073601 22S.37E.02.222314

Lea County, New Mexico

Latitude 32°25'21", Longitude 103°07'36" NAD27

Land-surface elevation 3,356 feet above NAVD88

The depth of the well is 87 feet below land surface.

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

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

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
1965-11-18		D	63.82			2		U		
1986-02-26		D	55.12			2		U		

Explanation

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

Questions about sites/data?

Feedback on this web site

Automated retrievals

Help

Data Tips

Explanation of terms

[Subscribe for system changes](#)

[News](#)

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

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

Title: Groundwater for USA: Water Levels

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



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

Page Last Modified: 2017-03-06 18:02:17 EST

0.5 0.4 nadww01

Appendix B

Laboratory Analytical Reports

April 04, 2017

BERNARD BUCKISCH

GHD SERVICES, INC.

6121 INDIAN SCHOOL RD, NE STE. 200

ALBUQUERQUE, NM 87110

RE: FULLERTON 16"

Enclosed are the results of analyses for samples received by the laboratory on 03/29/17 14:12.

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.

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:

GHD SERVICES, INC.
BERNARD BUCKISCH
6121 INDIAN SCHOOL RD, NE STE. 200
ALBUQUERQUE NM, 87110
Fax To:

Received: 03/29/2017
Reported: 04/04/2017
Project Name: FULLERTON 16"
Project Number: 1113520-2
Project Location: NOT GIVEN

Sampling Date: 03/27/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S-1113520-2-032717-TT-1-10 (H700825-01)

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	03/31/2017	ND	1.97	98.4	2.00	4.94	
Toluene*	<0.050	0.050	03/31/2017	ND	1.82	91.1	2.00	5.44	
Ethylbenzene*	<0.050	0.050	03/31/2017	ND	1.80	89.8	2.00	6.04	
Total Xylenes*	<0.150	0.150	03/31/2017	ND	5.13	85.5	6.00	5.90	
Total BTEX	<0.300	0.300	03/31/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 72-148

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	03/29/2017	ND	222	111	200	0.749	
DRO >C10-C28	<10.0	10.0	03/29/2017	ND	223	111	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/29/2017	ND					

Surrogate: 1-Chlorooctane 96.9 % 25.1-158

Surrogate: 1-Chlorooctadecane 107 % 26.8-170

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

GHD SERVICES, INC.
BERNARD BUCKISCH
6121 INDIAN SCHOOL RD, NE STE. 200
ALBUQUERQUE NM, 87110
Fax To:

Received: 03/29/2017
Reported: 04/04/2017
Project Name: FULLERTON 16"
Project Number: 1113520-2
Project Location: NOT GIVEN

Sampling Date: 03/27/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S-1113520-2-032717- N. WALL (H700825-02)

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	03/31/2017	ND	1.97	98.4	2.00	4.94		
Toluene*	<0.050	0.050	03/31/2017	ND	1.82	91.1	2.00	5.44		
Ethylbenzene*	<0.050	0.050	03/31/2017	ND	1.80	89.8	2.00	6.04		
Total Xylenes*	<0.150	0.150	03/31/2017	ND	5.13	85.5	6.00	5.90		
Total BTEx	<0.300	0.300	03/31/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 72-148

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	03/29/2017	ND	222	111	200	0.749	
DRO >C10-C28	<10.0	10.0	03/29/2017	ND	223	111	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/29/2017	ND					

Surrogate: 1-Chlorooctane 94.6 % 25.1-158

Surrogate: 1-Chlorooctadecane 103 % 26.8-170

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

GHD SERVICES, INC.
BERNARD BUCKISCH
6121 INDIAN SCHOOL RD, NE STE. 200
ALBUQUERQUE NM, 87110
Fax To:

Received: 03/29/2017
Reported: 04/04/2017
Project Name: FULLERTON 16"
Project Number: 1113520-2
Project Location: NOT GIVEN

Sampling Date: 03/27/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S-1113520-2-032717- S. WALL (H700825-03)

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	03/31/2017	ND	1.97	98.4	2.00	4.94		
Toluene*	<0.050	0.050	03/31/2017	ND	1.82	91.1	2.00	5.44		
Ethylbenzene*	<0.050	0.050	03/31/2017	ND	1.80	89.8	2.00	6.04		
Total Xylenes*	<0.150	0.150	03/31/2017	ND	5.13	85.5	6.00	5.90		
Total BTEX	<0.300	0.300	03/31/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 72-148

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	03/29/2017	ND	222	111	200	0.749	
DRO >C10-C28	11.5	10.0	03/29/2017	ND	223	111	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/29/2017	ND					

Surrogate: 1-Chlorooctane 103 % 25.1-158

Surrogate: 1-Chlorooctadecane 112 % 26.8-170

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

GHD SERVICES, INC.
BERNARD BUCKISCH
6121 INDIAN SCHOOL RD, NE STE. 200
ALBUQUERQUE NM, 87110
Fax To:

Received: 03/29/2017
Reported: 04/04/2017
Project Name: FULLERTON 16"
Project Number: 1113520-2
Project Location: NOT GIVEN

Sampling Date: 03/27/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S-1113520-2-032717- E.WALL (H700825-04)

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	03/31/2017	ND	1.97	98.4	2.00	4.94		
Toluene*	<0.050	0.050	03/31/2017	ND	1.82	91.1	2.00	5.44		
Ethylbenzene*	<0.050	0.050	03/31/2017	ND	1.80	89.8	2.00	6.04		
Total Xylenes*	<0.150	0.150	03/31/2017	ND	5.13	85.5	6.00	5.90		
Total BTEX	<0.300	0.300	03/31/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 72-148

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	03/29/2017	ND	222	111	200	0.749	
DRO >C10-C28	<10.0	10.0	03/29/2017	ND	223	111	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/29/2017	ND					

Surrogate: 1-Chlorooctane 103 % 25.1-158

Surrogate: 1-Chlorooctadecane 110 % 26.8-170

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

GHD SERVICES, INC.
BERNARD BUCKISCH
6121 INDIAN SCHOOL RD, NE STE. 200
ALBUQUERQUE NM, 87110
Fax To:

Received: 03/29/2017
Reported: 04/04/2017
Project Name: FULLERTON 16"
Project Number: 1113520-2
Project Location: NOT GIVEN

Sampling Date: 03/27/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S-1113520-2-032717- W. WALL (H700825-05)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/31/2017	ND	1.97	98.4	2.00	4.94		
Toluene*	<0.050	0.050	03/31/2017	ND	1.82	91.1	2.00	5.44		
Ethylbenzene*	<0.050	0.050	03/31/2017	ND	1.80	89.8	2.00	6.04		
Total Xylenes*	<0.150	0.150	03/31/2017	ND	5.13	85.5	6.00	5.90		
Total BTX	<0.300	0.300	03/31/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 72-148

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	03/29/2017	ND	222	111	200	0.749	
DRO >C10-C28	<10.0	10.0	03/29/2017	ND	223	111	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/29/2017	ND					

Surrogate: 1-Chlorooctane 88.4 % 25.1-158

Surrogate: 1-Chlorooctadecane 93.9 % 26.8-170

Cardinal Laboratories

*=Accredited Analyte

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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.
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



Celey D. Keene, Lab Director/Quality Manager



1 of 1

ANALYSIS REQUEST

BILL TO	
P.O. #:	
Company:	ETC
Attn:	Dean Entsson
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

DATE	TIME	BTX	TPH
3/27/12	1315	X	X
3/27/12	1545	X	X
3/27/12	1600	X	X
3/27/12	1530	X	X
3/27/12	1535	X	X

or for, share limited to the amount paid by the client for the received by Cardinal within 30 days after completion of the applicable loss of use, or loss of profits incurred by client, its subsidiaries, based upon any of the above stated reasons or otherwise.

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 #:
REMARKS:			
SOS-697-2025 Alan bernard.bockisch@ghd.com			