

APPROVED

By Olivia Yu at 10:33 am, Sep 14, 2018

June 5, 2018 Reference No. 11135250-05

Ms. Olivia Yu New Mexico Oil Conservation Division Energy, Minerals and Natural Resources Department 1625 N. French Dr. Hobbs, New Mexico 88240 NMOCD grants closure to 1RP-4523.

Dear Ms. Yu:

Re: Closure Request
MF-16 (1RP-4523)
ETC Field Services LLC
Site Location: Unit K, Sec. 29, T 21-S, R 37-E
(Lat 32.449613N°, Long -103.1858W°)
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 MF-16 pipeline (hereafter referred to as the "Site") release. The Site is located approximately 1.7 miles northwest of Eunice, New Mexico (see Figure 1).

In an Assessment Report dated October 10, 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.
- Reseed the area with a seed mix that is approved by the land owner. Warm season SSR special native grass blend was used.

The work scope was approved by Ms. Yu with the NMOCD on January 29, 2018. 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 for the Site.

Should you have any questions, or require additional information regarding this submittal, please feel free to contact myself or Alan Brandon at (505) 884-0672 or Alan.Brandon@ghd.com.

Sincerely,

GHD

Christine Mathews

Project Scientist/Coordinator

Museo Matareo

CM/ji/1

Encl.

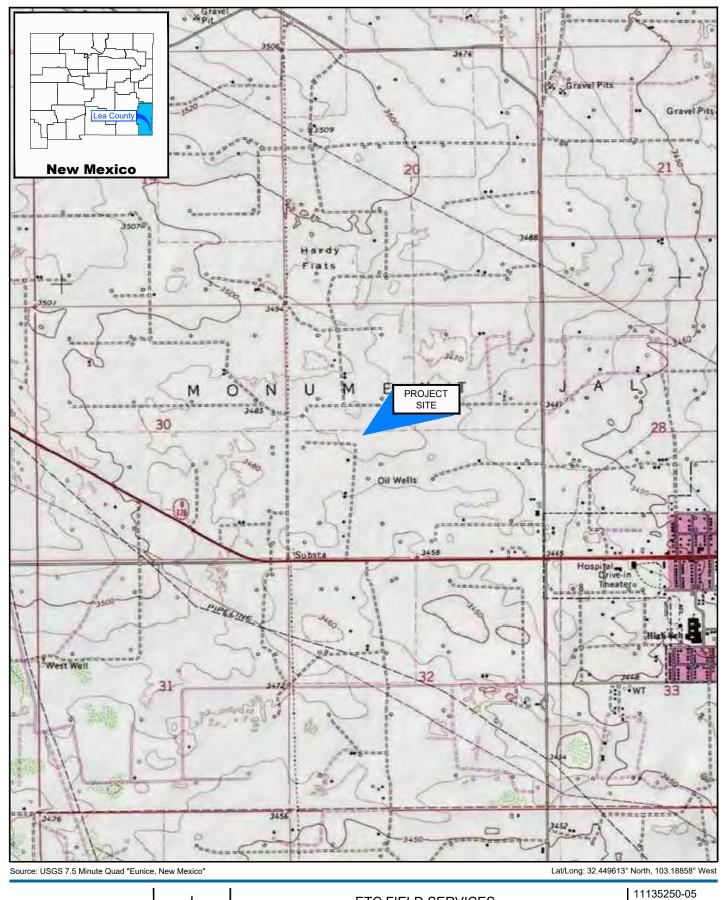
Alan Brandon

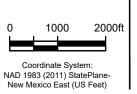
Senior Project Manager

AK Brank



Figures





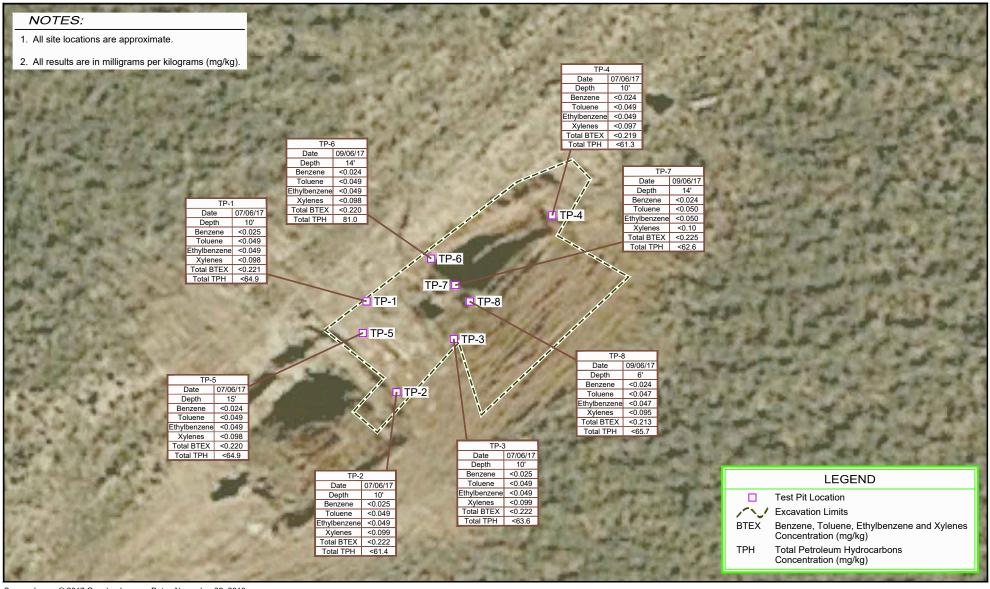


GHD

ETC FIELD SERVICES LEA COUNTY, NEW MEXICO MF-16 PIPELINE ASSESSMENT Jul 19, 2017

SITE LOCATION MAP

FIGURE 1



Source: Image © 2017 Google - Imagery Date: November 22, 2016







ETC FIELD SERVICES LEA COUNTY, NEW MEXICO MF-16 PIPELINE ASSESSMENT

SOIL SAMPLE LOCATION

11135250-05 Oct 3, 2017

FIGURE 2

Attachments

Attachment A Site Photographs



Photo 1 - Backfilled excavation



Photo 2 - Re-seeding



Site Photographs



Photo 3 - Irrigating seeds





Photo 4 - Site completion



Attachment B Final Form C-141

<u>District I</u> 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 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources**

Revised April 3, 2017

Form C-141

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

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

			Rele	ease Notific	ation	and Co	rrective A	ctior	1				
						OPERA	ΓOR		☐ Initia	al Report	\boxtimes	Final	Report
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Unit Letter	Section	Township	Range	Feet from the		OF REI	Feet from the	Fact/\	West Line	County			
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	_		Lati	tude <u>32.449613</u>	3N	Longitude	103.1858W NA	AD83					
	98			NAT	URE	OF REL	EASE						
Type of Relea	ase Gas and	d liquid				Volume of 7 bbls	Release 140 mscf		Volume R	Recovered 1	None		
Source of Re	lease Pipe	line				Date and H	our of Occurrence	2	Date and 11/07/201	Hour of Dis	covery	_	
Was Immedia	ate Notice C		Ves [No ⊠ Not Re	anirad	If YES, To			11/0//201	0 1 7:00			
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regulations al public health should their o	l operators or the envir perations had ment. In ad	are required to conment. The ave failed to a ddition, NMO	report an acceptanc dequately CD accep	is true and comple d/or file certain re e of a C-141 repor investigate and re tance of a C-141 re	lease no t by the mediate	tifications an NMOCD ma contamination	d perform correct arked as "Final Re on that pose a thre	ive acti port" d at to gr	ons for rele oes not reli ound water	ases which eve the open surface wa	may en- rator of ater, hun	danger liability nan hea	v.
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Signature:	LAR	n	· 6.	unde					91	1			
Printed Name	: Dean Eric	cson			A	approved by	Environmental Sp	ecialist		T			
Title: Sr. Env	rironmental	Specialist			A	pproval Date	9/14/2018	E	Expiration E	Date: XX/	xx/xxx	ίχ	
E-mail Addre	ss: Dean.E	ricson@ene	rgyTrans	fer.com	c	onditions of	Approval:			Attached			
Date:			Phone:	817-302-9758									

^{*} Attach Additional Sheets If Necessary

Attachment C Assessment Summary Report



October 10, 2017 Reference No. 11135250-5

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

Dear Mr. Ericson:

Re: Assessment Summary Report

MF-16 Inch

ETC Field Services LLC

1RP 4523

Site Location: Unit K, Sec. 29, T 21-S, R 37-E

(Lat 32.449613N°, Long -103.18858W°)

Lea County, New Mexico

GHD Services, Inc. (GHD) is pleased to present this report for the above referenced site. The MF-16 Inch pipeline (hereafter referred to as the "Site") is located within Unit K, Section 29, Township 21 South, Range 37 East, in Lea County, New Mexico (see Figure 1). The property is privately owned.

On November 17, 2017, a release of approximately 140,000 standard cubic feet (Mscf) of natural gas and seven barrels (bbls) of oil was reported to the State of New Mexico Oil Conservation Division (NMOCD) via Form C-141. A leak from a 16-inch pipeline was the cause of the release. None of the released material was recovered. Contaminated soils were excavated and stockpiled on site (see Figure 2). NMOCD release number 1RP 4523 was assigned.

1. Recommended Remediation Action Limits

Based on information available from the New Mexico Office of the State Engineer New Mexico Water Rights Reporting System website, the closest well with a recorded depth to water measurement is approximately 2.7 miles from the Site. The depth to groundwater measured in this well was 70 feet (ft) below ground surface (bgs).

Based on information available from the United States Geologic Survey National Water Information System, the depth to groundwater at the Site is approximately 98 ft. bgs. This is based on a water well that is located approximately 1.5 mile north, northwest of the Site (see Appendix A, Water Well Reports for depth to water). There are no well head protection areas or surface water bodies within 1000 feet of the Site. 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
Ranking Criteria Total Score	10*
*Because the ranking criteria total score is 10, NMOCD established RRALs are 10 m 50 mg/kg for total BTEX, 1,000 mg/kg for total TPH and 600 ppm for chlorides¹.	ng/kg for benzene,

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

2. Assessment Activities

The impacted area had initially been excavated to a depth of approximately 10 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 10 ft. bgs on November 8, 2016 (see Figure 2). The sample was submitted to Xenco Laboratories (Xenco) in Midland, Texas and analyzed for toxicity characteristic leaching procedure (TCLP) BTEX by EPA Method 8260B, TPH by EPA Method 8015B, and chloride by EPA Method 300. The analytical results for this sample were:

- TCLP Benzene: 0.568 milligrams per liter (mg/L)
- Total TCLP BTEX: 2.93 mg/L
- TPH: 22,160 milligrams per kilogram (mg/kg)
- Chloride: 8.48 mg/kg

Excavation activities to assess the horizontal and vertical extent of impacted soil from the release occurred on July 6, 2017 by GHD. Field screening of soil for petroleum hydrocarbons was performed to assess the horizontal and vertical extent of contaminated soil. Field screening of the soil was performed using the PetroFLAG Hydrocarbon Analysis System. Excavation activities were performed by Diamond Back of Hobbs, New Mexico and observed by GHD.

Once field screening indicated soil concentrations were near or below the RRALs, soil samples were collected and submitted to Hall Environmental Analysis Laboratory (HEAL) located in Albuquerque, New Mexico for analysis. The soil samples were analyzed for BTEX by EPA Method 8260B and TPH by EPA Method 8015 full range (Table 1).



Five test pits (TP) were excavated, one on each side and one in the base of the original excavation (Figure 2). One sample was collected from TP-5 in the base of the excavation at a depth of 15 ft. bgs and soil samples were collected from four test pits (TP-1 through TP-4) at a depth of 10 ft. bgs for laboratory analysis. The field screening indicated that impacted soil did not extend to a depth greater than 15 ft. bgs.

The laboratory analytical results were all non-detect and thus, below the RRALs. Initial bottom of excavation and stockpile soil samples did not contain chloride concentrations above the RRAL and thus, the confirmation samples were not analyzed for chloride. Laboratory analytical reports can be found in Appendix B and the results summarized in Table 1.

Additional assessment consisting of three test pits (TP-6 through TP-8) was performed by GHD on September 6, 2017. Soil samples were collected at a depth of 14 ft. bgs in TP-6 and TP-7 and at a depth of 6 ft. bgs in TP-8. The soil samples were submitted to HEAL and analyzed for BTEX by EPA Method 8260B, TPH by EPA Method 8015 full range, and chloride by EPA method 300 (Table 1).

The sample collected from TP-6 was the only one that contained a detectable concentration above the laboratory reporting limit for the constituents analyzed for. This sample contained a total TPH concentration of 81 mg/kg.

3. Summary and Recommendations

Soil samples collected from the base of the excavation at a depth of 15 ft. bgs, and the four test pits (see Figure 2) were submitted for laboratory analysis. The laboratory analytical results were all non-detect and thus, below the RRALs. Based on the laboratory results, GHD recommends the following:

- Backfilling of the excavation with clean fill material and wheel compacting to grade.
- Reseed the 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 myself or Bernie Bockisch at (505) 884-0672.

Sincerely,

GHD

Alan Brandon

Senior Project Manager

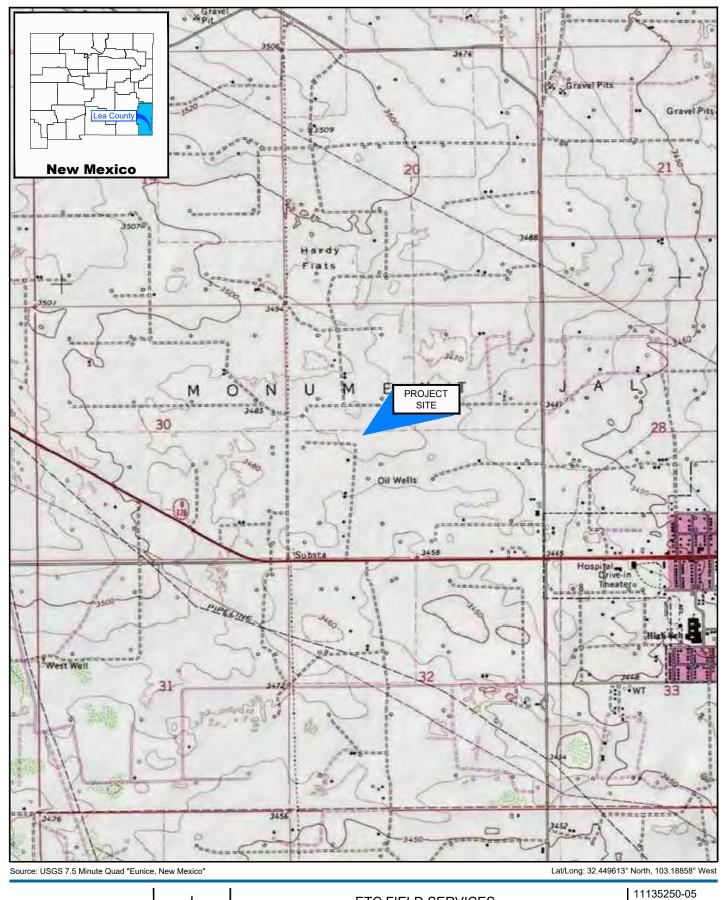
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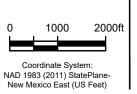
Bernard Bockisch

New Mexico Operations Manager

AK Brand

Figures





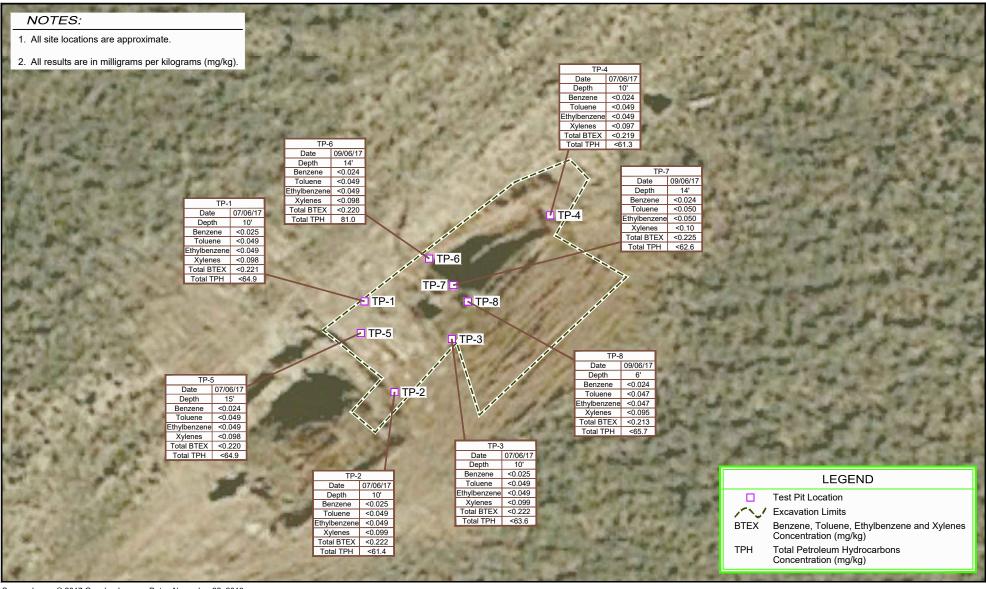


GHD

ETC FIELD SERVICES LEA COUNTY, NEW MEXICO MF-16 PIPELINE ASSESSMENT Jul 19, 2017

SITE LOCATION MAP

FIGURE 1



Source: Image © 2017 Google - Imagery Date: November 22, 2016







ETC FIELD SERVICES LEA COUNTY, NEW MEXICO MF-16 PIPELINE ASSESSMENT

SOIL SAMPLE LOCATION

11135250-05 Oct 3, 2017

FIGURE 2

Tables

Table 1

ETC Field Services LLC - MF-16 Section 29, 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	ТРН	ТРН	ТРН	Total TPH
		(ft.)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO (C6-C-10)	DRO (C10-C28)	EXT DRO (C28- C36)	GRO/DRO
									(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
NMOCD Remediatio	n Action Levels		600	10	NE	NE	NE	50	NE	NE	NE	1,000
						EXCAVAT	TION SAMPLES					
WstPile*	11/08/2016		18.1	0.154*	0.595*	0.226*	0.505*	1.48*	5,720	12,300	NA	18,020.0
FntWal*	11/08/2016	10	7.38	0.0301*	0.19*	0.114*	0.27*	0.604*	1,900.0	5,970.0	NA	7,870.0
BtmHol*	11/08/2016	10	8.48	0.568*	1.05*	0.357*	0.955*	2.93*	7,960.0	14,200.0	NA	22,160.0
NsidWal*	11/08/2016	8	7.87	<0.005*	<0.005*	<0.005*	<0.015*	<0.030*	15.3	60.3	NA	75.6
11135250-05-070617-MG-TP-1-10'	07/06/2017	10	NA	< 0.025	< 0.049	< 0.049	<0.098	<0.221	<4.9	<10	<50	<64.9
11135250-05-070617-MG-TP-2-10'	07/06/2017	10	NA	< 0.025	< 0.049	< 0.049	< 0.099	<0.222	<4.9	<9.5	<47	<61.4
11135250-05-070617-MG-TP-3-10'	07/06/2017	10	NA	< 0.025	< 0.049	< 0.049	< 0.099	<0.222	<4.9	<9.7	<49	<63.6
11135250-05-070617-MG-TP-4-10'	07/06/2017	10	NA	<0.024	< 0.049	< 0.049	< 0.097	<0.219	<4.9	<9.4	<47	<61.3
11135250-05-070617-MG-TP-5-15'	07/06/2017	15	NA	<0.024	< 0.049	< 0.049	<0.098	<0.220	<4.9	<10	<50	<64.9
S-11135250-05-090617-MG-TP-6-14	09/06/2017	14	<30	< 0.024	< 0.049	< 0.049	<0.098	<0.220	<4.9	32.0	49.0	81.0
S-11135250-05-090617-MG-TP-7-14	09/06/2017	14	<30	< 0.025	< 0.050	< 0.050	< 0.10	<0.225	<5.0	<9.6	<48	<62.6
S-11135250-05-090617-MG-TP-8-6	09/06/2017	6	<30	< 0.024	< 0.047	< 0.047	< 0.095	< 0.213	<4.7	<10.0	<51.0	<65.7

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

NE = Not Established mg/Kg = milligrams per Kilogram
-- = Not Applicable
NA = Not Analyzed

^{*} Samples taken by ETC Field Services (BTEX analyzed by 8260 TCLP and reported in milligrams per liter)

Appendices 11135250 05 Remediation Summary Report MF 16 Inch

Appendix A Water Well Report



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)

1 2 2 02 17S 37E

(NAD83 UTM in meters)

(In feet)

POD

Sub-

QQQ basin County 6416 4 Sec Tws Rng

X

667627 3588089

DistanceDepthWellDepthWater Column

Water

Average Depth to Water:

70 feet

Minimum Depth:

70 feet

Maximum Depth:

70 feet

Record Count: 1

POD Number

L 09966

Basin/County Search:

Basin: Lea County

County: Lea

UTMNAD83 Radius Search (in meters):

Easting (X): 670275

Northing (Y): 3591727

Radius: 4500 Mchos

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.

6/22/17 10:55 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

Data Category:		Geographic Area:		
Groundwater	V	United States	~	GO

Click to hideNews Bulletins

Please see news on new formats

Full News

m=-16- pipeline

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs site no list =

322816103114201

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 322816103114201 21S.37E.18.442123

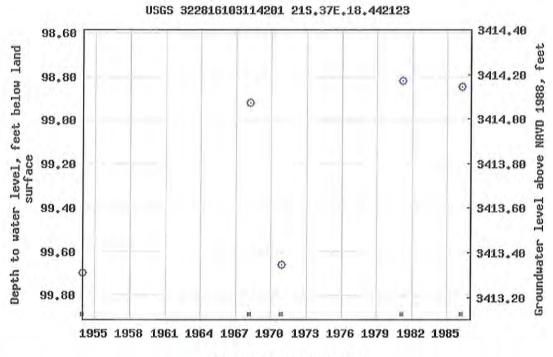
Available data for this site Groundwater: Field measurements ✓ GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°28'16", Longitude 103°11'42" NAD27
Land-surface elevation 3,513 feet above NAVD88
The depth of the well is 125 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	



Period of approved data

Breaks in the plot represent a gap of at least one year between field measurements.

Download a presentation-quality graph

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

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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: 2017-06-13 10:30:25 EDT

0.57 0.5 nadww01



Appendix B Laboratory Analytical Report

Analytical Report 539987

for Energy Transfer- Midland

Project Manager: Johnnie Bradford MF-16

15-NOV-16

Collected By: Client





1211 W. Florida Ave, Midland TX 79701

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

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

Xenco-Phoenix Mobile (EPA Lab code: AZ00901). Arizona (AZM757)



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15-NOV-16

Project Manager: Johnnie Bradford Energy Transfer- Midland 600 N Marienfield Ste 700 Midland, TX 79701

Reference: XENCO Report No(s): 539987

MF-16

Project Address: Eunice NM

Johnnie Bradford:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 539987. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 539987 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks

Project Manager

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

Certified and approved by numerous States and Agencies.

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

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



Sample Cross Reference 539987



Energy Transfer- Midland, Midland, TX

MF-16

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	11-08-16 07:40		539987-001
S	11-08-16 07:34	- 10 ft	539987-002
S	11-08-16 07:37	- 10 ft	539987-003
S	11-08-16 07:49	- 8 ft	539987-004
	S S S	S 11-08-16 07:40 S 11-08-16 07:34 S 11-08-16 07:37	S 11-08-16 07:40 S 11-08-16 07:34 - 10 ft S 11-08-16 07:37 - 10 ft



CASE NARRATIVE



Client Name: Energy Transfer- Midland

Project Name: MF-16

Project ID:

Work Order Number(s): 539987

Report Date: 15-NOV-16 Date Received: 11/08/2016

Sample receipt non conformances and comments:

Level III Std QC+Forms

Sample receipt non conformances and comments per sample:

None



Johnnie Bradford Eunice NM

Project Location:

Contact:

Certificate of Analysis Summary 539987 Energy Transfer- Midland, Midland, TX

Project Name: MF-16

Date Received in Lab: Tue Nov-08-16 02:55 pm Report Date: 15-NOV-16

Project Manager: Kelsey Brooks

	Lab Id:	539987-001	101	539987-002	2	539987-003	539987-004		
A	Field Id:	WstPile		FntWal		BtmHol	NsidWal		
Anutysis nequesieu	Depth;			-10 ft	Ī	-10 ft	-8 A		
	Matrix:	SOIL	Ī	SOIL		SOIL	SOIL		
	Sampled:	Nov-08-16 07:40	07:40	Nov-08-16 07:34	7:34	Nov-08-16 07:37	Nov-08-16 07:49		
TCLP BTEX by SW 8260B	Extracted:	Nov-11-16 14:00	14:00	Nov-11-16 14:00	00:1	Nov-11-16 14:00	Nov-11-16 17:00		
SUB: TX104704215	Analyzed:	Nov-11-16	16:39	Nov-11-16 15:42	5:42	Nov-11-16 16:01	Nov-11-16 17:27		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L RL	mg/L RL		
Benzene		0.154	00100	0.0301	0.0100	0.568 0.0100	ND 0.00500	6	
Toluene		0.595	0.0100	0.190	0.0100	1.05 0.0100	ND 0.00500		
Ethylbenzene		0.226	00100	0.114	0.0100	0,357 0,0100	ND 0.00500	c	
m,p-Xylenes		0.346	0.0200	0.180	0.0200	0.643 0.0200	ND 0.0100	.0	
o-Xylene		0.159	0.0100	0.0903	0.0100	0,312 0,0100	ND 0.00500	9.0	
TCLP Mercury by SW 7470A	Extracted:	Nov-14-16 09:30	06:60	Nov-14-16 09:30	9:30	Nov-14-16 09:30	Nev-14-16 09:30		
SUB: TX104704215	Analyzed:	Nov-14-16	16:02	Nov-14-16 16:03	6:03	Nov-14-16 16:05	Nov-14-16 16:06		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L RL	mg/L RL		
Mercury		Q	ND 0.000200	ND 0.000200	0002000	ND 0.000200	ND 0.000200	0	
TCLP Metals by SW846 6010B	Extracted:	Nov-14-16 09:30	06:30	Nov-14-16 09:30	9:30	Nov-14-16 09:30	Nov-14-16 09:30		
SUB: TX104704215	Analyzed:	Nov-14-16 21:29	21:29	Nov-14-16 21:32	1:32	Nov-14-16 21:35	Nov-14-16 21:38		
	Units/RL:	mg/L.	RL	mg/L	RL	mg/L RL	mg/L RL		
Arsenic		0.0925	0.0500	6680'0	0.0500	0.0531 0.0500	ND 0.0500	0	
Barium		0.881	0.0500	THE	0.0500	1.91 0.0500	1.09 0.0500	0	
Cadmium		ND	0.0250	ON	0.0250	ND 0.0250	ND 0.0250	0	
Chromium		ND	0.050.0	QN	0.0500	ND 0.0500	ND 0.0500	0	
Lead		QN	0.0500	QN	0.0500	ND 0.0500	ND 0.0500	0	
Selenium		ON	001'0	QN	0.100	ND 0.100	ND 0.100	0	
Silver		ON	0.100	QN	0.100	ND 0.100	ND 0.100	0	

Project Manager Kelsey Brooks

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

Final 1.000



Johnnie Bradford Eunice NM

Project Location:

Project Id: Contact:

Certificate of Analysis Summary 539987 Energy Transfer- Midland, Midland, TX

Project Name: MF-16

Date Received in Lab: Tue Nov-08-16 02:55 pm Report Date: 15-NOV-16

Project Manager: Kelsey Brooks

	Lab Id:	539987-001		539987-002	539987-003	539987-004	
Analysis Ronnostod	Field Id:	WstPile		FntWal	BtmHol	NsidWal	
Timeton requested	Depth:			10 ft	10 ft	Я й	
	Matrix:	SOIL		SOIL	SOIL	SOIL	
	Sampled:	Nov-08-16 07:40	40	Nov-08-16 07:34	Nov-08-16 07:37	Nov-08-16 07:49	
Inorganic Anions by EPA 300/300.1	Extracted:	Nov-09-16 11:00	00	Nov-09-16 11:00	Nov-09-16 11:00	Nov-09-16 11:00	
	Analyzed:	Nov-09-16 14:52	52	Nov-09-16 15:41	Nov-09-16 15:48	Nov-09-16 15:55	
	Units/RL:	mg/kg	RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		18.1	5.00	7.38 5.00	8.48 5.00	7.87 5.00	
TPH by SW 8015B	Extracted:	Nov-08-16 17:00	00	Nov-08-16 17:00	Nov-08-16 17:00	Nov-08-16 17:00	
	Analyzed:	Nov-09-16 01:20	20	Nov-09-16 08:14	Nov-09-16 02:09	Nov-09-16 02:33	
	Units/RL:	mg/kg	RL	mg/kg RL	mg/kg RL	mg/kg RL	
C6-C10 Gasoline Range Hydrocarbons		5720	150	1900 75.0	7960 150	15.3 15.0	
C10-C28 Diesel Range Hydrocarbons		12300	150	5970 75.0	14200 150	60.3 15.0	
Total TPH		18200	150	7970 75.0	22400 150	75.6 15.0	

Kelsey Brooks Project Manager

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Flagging Criteria



- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- ** Surrogate recovered outside laboratory control limit.
- BRL Below Reporting Limit.
- **RL** Reporting Limit

MDL Method Detection Limit

SDL Sample Detection Limit

LOD Limit of Detection

PQL Practical Quantitation Limit

MQL Method Quantitation Limit

LOO Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

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

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Form 2 - Surrogate Recoveries

Project Name: MF-16

Work Orders: 539987,

Lab Batch #: 3003551

Sample: 539987-001 / SMP

Project ID:

Batch: Matrix: Soil

Units:

mg/kg

Date Analyzed: 11/09/16 01:20

SURROGATE RECOVERY STUDY

oma, mg ng	30	KKOGATE N	ECOTEKT.	31001	
TPH by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes	191		[D]	100	
1-Chlorooctane	119	99.8	119	70-135	
o-Terphenyl	55.0	49.9	110	70-135	-

Lab Batch #: 3003551

Sample: 539987-003 / SMP

Batch: 1 Matrix: Soil

Units:

mg/kg

Date Analyzed: 11/09/16 02:09

SURROGATE RECOVERY STUDY

Amount Found	True Amount IRI	Recovery	Control Limits %R	Flags
100	101	[D]	11371	
89.8	99.9	90	70-135	
51.8	50.0	104	70-135	
	Found [A] 89.8	Found Amount [B] 89.8 99.9	Found Amount Recovery %R	Found Amount Recovery Limits %R

Lab Batch #: 3003551

Sample: 539987-004 / SMP

Batch:

Matrix: Soil

Units: mg/kg	ing/kg Date Analyzed: 11/09/16 02:33 SURROGATE RECOVERY STU					
ТР	H by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	71806	120	99.7	120	70-135	
o Temberul		50.7	40.0	117	70-135	

Lab Batch #: 3003551

o-Terphenyl

Sample: 539987-002 / SMP

Batch:

Units: mg/kg Date Analyzed: 11/09/16 08:14	SURROGATE RECOVERY STUDY					
TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane	108	100	108	70-135		
o-Tembenyl	57.2	50.0	114	70-135		

Surrogate Recovery [D] = 100 * A / B

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

^{*} Surrogate outside of Laboratory QC limits

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Form 2 - Surrogate Recoveries

Batch:

Project Name: MF-16

Work Orders: 539987,

Lab Batch #: 3003724

Sample: 539987-002 / SMP

Project ID:

Matrix: Soil

Trateur

ma/I

Date Analyzed: 11/11/16 15:42

SURROGATE RECOVERY STUDY

Units: mg/L Date Analyzed: 11/11/16 15:42	SURROGATE RECOVERY STUDY					
TCLP BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
Dibromofluoromethane	0.0503	0.0500	101	75-131		
1,2-Dichloroethane-D4	0.0471	0.0500	94	63-144		
Toluene-D8	0.0476	0.0500	95	80-117		

Lab Batch #: 3003724

Sample: 539987-003 / SMP

Batch:

Matrix: Soil

Units:

ma/L

Date Analyzed: 11/11/16 16:01

Daten.

SUBBOCATE RECOVERY STUDY

Units: Ingl. Date Analyzed: 11/11/10 10:01	SURROGATE RECOVERY STUDY					
TCLP BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
Dibromofluoromethane	0.0495	0.0500	99	75-131		
1,2-Dichloroethane-D4	0.0465	0.0500	93	63-144		
Toluene-D8	0.0472	0.0500	94	80-117		

Lab Batch #: 3003724

Sample: 539987-001 / SMP

Batch:

Matrix: Soil

Units:

mg/L

Date Analyzed: 11/11/16 16:39

SURROGATE RECOVERY STUDY

Amount True Control

TCLP BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes	the public or to	- E	[D]		
Dibromofluoromethane	0.0519	0.0500	104	75-131	
1,2-Dichloroethane-D4	0.0481	0.0500	96	63-144	
Toluene-D8	0.0472	0.0500	94	80-117	

Lab Batch #: 3003724

Sample: 539987-004 / SMP

Batch:

Matrix: Soil

Units:

mg/L

Date Analyzed: 11/11/16 17:27

17:27 SURROGATE RECOVERY STUDY

Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
0.0510	0.0500	102	75-131	
0.0484	0.0500	97	63-144	
0.0458	0.0500	92	80-117	
	Found [A] 0.0510 0.0484	Found Amount [B] 0.0510 0.0500 0.0484 0.0500	Found Amount Recovery %R	Found Amount Recovery Limits %R

Surrogate Recovery [D] = 100 * A / B

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

^{*} Surrogate outside of Laboratory QC limits

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Form 2 - Surrogate Recoveries

Project Name: MF-16

Work Orders: 539987,

Lab Batch #: 3003551

Project ID:

Sample: 715881-1-BLK / BLK

Matrix: Solid Batch:

Units:	mg/kg	Date Analyzed: 11/08/16 20:52	SU	RROGATE R	ECOVERY	STUDY	
	TPI	H by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorood	ctane	*****	128	100	128	70-135	

64.4

Lab Batch #: 3003724

Sample: 716005-1-BLK / BLK

Batch: 1 Matrix: Water

50.0

Units:

o-Terphenyl

mg/L

Date Analyzed: 11/11/16 12:26

SURROGATE RECOVERY STUDY

129

70-135

TCLP BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0517	0.0500	103	75-131	
1,2-Dichloroethane-D4	0.0478	0.0500	96	63-144	
Toluene-D8	0.0452	0.0500	90	80-117	

Lab Batch #: 3003551

Sample: 715881-1-BKS / BKS

Batch:

Matrix: Solid

Units:

mg/kg

Date Analyzed: 11/08/16 21:16

SURROGATE RECOVERY STUDY Amount True Control TPH by SW 8015B Found Amount Recovery Limits Flags [B] %R %R [A] [D] Analytes 129 100 129 70-135 50.0 128 64.0 70-135

Lab Batch #: 3003724

1-Chlorooctane

o-Terphenyl

Sample: 716005-1-BKS / BKS

Batch:

Matrix: Water

SURROGATE RECOVERY STUDY

Units:

mg/L

Date Analyzed: 11/11/16 09:50

TCLP BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes	10.50	151	[D]	7415	

Dibromofluoromethane 0.0510 0.0500 102 75-131 1,2-Dichloroethane-D4 0.0538 0.0500 108 63-144 Toluene-D8 0.0487 0,0500 97 80-117

Surrogate Recovery [D] = 100 * A / B

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

Surrogate outside of Laboratory QC limits

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Form 2 - Surrogate Recoveries

Project Name: MF-16

Work Orders: 539987,

Lab Batch #: 3003551 Sample: 715881-1-BSD / BSD Project ID:

1 Matrix: Solid

Units:

mo/kp

Date Analyzed: 11/08/16 21:40

SUPPOCATE RECOVERY STUDY

30	KKOGATE K	ECOVERT	SICDI	
Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
V.,	791	[D]		
124	100	124	70-135	
64.8	50.0	130	70-135	
	Amount Found [A]	Amount Found Amount [A] [B]	Amount True Recovery %R	Found Amount Recovery Limits %R

Lab Batch #: 3003724

Sample: 716005-1-BSD / BSD

Matrix: Water

Units:

mg/L

Date Analyzed: 11/11/16 10:17

SURROGATE RECOVERY STUDY

Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
0.0491	0.0500	98	75-131	
0.0461	0.0500	92	63-144	
0.0487	0.0500	97	80-117	-
	Found [A] 0.0491 0.0461	Found Amount [B] 0.0491 0.0500 0.0461 0.0500	Found Amount Recovery %R	Found Amount Recovery Limits %R

Lab Batch #: 3003551

1-Chlorooctane o-Terphenyl

Sample: 539784-001 S / MS

Batch:

Matrix: Soil

SURROGATE RECOVERY STUDY

Units:

mg/kg

Date Analyzed: 11/08/16 22:53

	TO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
TPH by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes	101	121	[D]	70.5	
	128	99.9	128	70-135	
	60.9	50.0	122	70.135	

Lab Batch #: 3003724

Sample: 539915-001 S / MS

Batch: I

Matrix: Soil

SURROGATE RECOVERY STUDY

Units:

mg/L

Date Analyzed: 11/11/16 14:04

TCLP BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0510	0.0500	102	75-131	
1,2-Dichloroethane-D4	0.0563	0.0500	113	63-144	
Toluene-D8	0.0484	0.0500	97	80-117	
AND THE STATE OF T					

Surrogate Recovery [D] = 100 * A / B

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

^{*} Surrogate outside of Laboratory QC limits

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Form 2 - Surrogate Recoveries

Project Name: MF-16

Work Orders: 539987,

Lab Batch #: 3003551 5

Sample: 539784-001 SD / MSD

Project ID:

Batch: | Matrix: Soil

Units:

mg/kg

Date Analyzed: 11/08/16 23:17

SURROGATE RECOVERY STUDY

VIII. 118.18	50	THE COLLEGE IS		4 6 40 40 40	
TPH by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes	IAI	177	[D]		
1-Chlorooctane	129	99.9	129	70-135	
o-Terphenyl	60.6	50.0	121	70-135	

Lab Batch #: 3003724

Sample: 539915-001 SD / MSD

Batch: | Matrix: Soil

Units:

mg/L

Date Analyzed: 11/11/16 14:25

SURROGATE RECOVERY STUDY

30	KKOGATE N	ECOVERT	31001	
Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
0.0501	0.0500	100	75-131	
0.0492	0.0500	98	63-144	
0.0490	0.0500	98	80-117	
	Amount Found [A] 0.0501 0.0492	Amount True Amount [B] 0.0501 0.0500 0.0492 0.0500	Amount Found Amount [B] Recovery %R [D]	Found Amount Recovery Limits %R

Surrogate Recovery [D] = 100 * A / B

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

Surrogate outside of Laboratory QC limits

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



BS / BSD Recoveries



Project Name: MF-16

Work Order #: 539987

Lab Batch ID: 3003608 MNR Analyst:

Sample: 715909-1-BKS

Date Prepared: 11/09/2016

Batch #: 1

Project ID:

Date Analyzed: 11/09/2016 Matrix: Solid

Units:	mg/kg		BLAN	K/BLANK	SPIKE / I	STANK S	BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY	LICATE	RECOV	ERY STUI	Y(
Ino	Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added	Blank Spike Duplicate Result [F]	BIK. Spk Dup. %R [G]	RPD %	Control Limits	Control Limits %RPD	E 65
Chloride	ary tes	<5.00	250	242	97	250	242	76	0	90-110	20	
Analyst:	JTR		ite Prepar	Date Prepared: 11/11/2016	91			Date A	nalyzed:	Date Analyzed: 11/11/2016		

Lab Batch ID: 3003724 JTR Analyst:

Sample: 716005-1-BKS

Batch #: 1

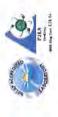
Matrix: Water

Units: mg/L		BLAN	BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY	SPIKE / I	3LANK	PIKE DUP	LICATE	RECOV	ERY STUI	YO	
TCLP BTEX by SW 8260B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result C	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	BIK. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00500	0.500	0.469	94	0.500	0.453	16	'n	66-142	20	
Toluene	<0.00500	0.500	0.466	93	0.500	0.444	68	5	59-139	20	
Ethylbenzene	<0.00500	0.500	0.466	93	0.500	0.459	92	2	75-125	20	
m,p-Xylenes	<0.0100	1.00	0.910	16	1.00	0.883	88	n	75-125	20	
o-Xylene	<0.00500	0.500	0.457	16	0.500	0.462	92	-	75-125	20	

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



BS / BSD Recoveries



Project Name: MF-16

Work Order #: 539987

DEP Analyst:

Units:

Sample: 716061-1-BKS Lab Batch ID: 3003836

Date Prepared: 11/14/2016

Batch #: 1

Date Analyzed: 11/14/2016 Project ID:

Matrix: Water

Flag Limits %RPD Control 20 BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY 80-120 Control Limits RPD % 0 Blk. Spk Dup. %R [G] 100 Duplicate Result [F] 0.00200 Blank Spike 0.00200 Spike Ξ Blank Spike %R [D] 86 0.00196 Blank Spike Result [C] 0.00200 Spike Added B Blank Sample Result <0.000200 M TCLP Mercury by SW 7470A mg/L Analytes Mercury

Sample: 716077-1-BKS Lab Batch ID: 3003887 DEP

Analyst:

Date Prepared: 11/14/2016 Batch #: 1

Matrix: Water

Date Analyzed: 11/14/2016

Units: mg/L		BLANI	K/BLANK	SPIKE/1	BLANK S	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY	LICATE	RECOV	ERY STUI)Y	
TCLP Metals by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	BIK. Spk Dup. %R G	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.0100	1.00	1.00	100	1.00	1.02	102	7	80-120	20	
Barium	<0.0100	1.00	1.00	100	1.00	1.01	101	1	80-120	20	
Cadmium	<0.00500	1.00	0.985	66	1.00	0.984	86	0	80-120	20	
Chromium	<0.0100	1.00	996'0	16	1.00	896.0	16	0	80-120	20	
Lead	<0.0100	1.00	1.02	102	1.00	1.02	102	0	80-120	20	
Selenium	<0.0200	1.00	0.984	86	1.00	0.995	100	1	80-120	20	
Silver	<0.0200	0.500	0.503	101	0.500	0.499	100	1	80-120	20	_

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



BS / BSD Recoveries



Project Name: MF-16

Work Order #: 539987

Lab Batch ID: 3003551 ARM Analyst:

Sample: 715881-1-BKS

Date Prepared: 11/08/2016

Date Analyzed: 11/08/2016 Project ID:

Matrix: Solid

Batch #: 1

Jnits: mg/kg		BLAN	SLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY	SPIKE / 1	3LANK S	PIKE DUP	LICATE	RECOV	ERY STUI	λC	
TPH by SW 8015B Analytes	Blank Sample Result [A]	Spike Added	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	BIK. Spk Dup. %R [G]	RPD %	Control Limits	Control Limits %RPD	Has
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	1000	100	1000	1010	101	÷	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15,0	1000	1090	109	1000	1090	109	0	70-135	35	

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



Form 3 - MS / MSD Recoveries

Project Name: MF-16

QC-Sample ID: 539986-001 S

Batch #:

Matrix: Soil

Project ID:

Date Prepared: 11/09/2016

11/09/2016

mg/kg

Reporting Units:

Date Analyzed: Lab Batch ID:

3003608 539987

Work Order #:

Analyst: MNR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1	y EPA 300/300.1	Parent Sample	Spike	Spiked Sample Spil Result Sam	Spiked Sample	Spike	Duplicate Spiked Sample	41	RPD	Control Limits	Control Limits	Flag
Analytes	s	Result [A]	Added	[2]	%R [D]	Added [E]	Result [F]	%R G	%	%R	%RPD	
Chloride		308	250	548	96	250	529	100	2	90-110	20	
Lab Batch ID: 3003608		QC- Sample ID:	540004-004	-004 S	Bat	Batch #:	1 Matrix:	: Soil				

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY mg/kg

Date Prepared: 11/09/2016

11/09/2016

Reporting Units: Date Analyzed:

Analyst: MNR

Inorgan	Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Spiked Result Sample S [C] %R A	Spiked Sample %R [D]	pike dded [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits	Control Limits %RPD	E S
Chloride		1870	1250	3080	46	1250	3050	94	1	90-110	20	
Lab Batch ID:	3003724	QC- Sample ID: 539915-001 S	539915	S 100-	Bat	Batch #:	1 Matrix: Soil	r: Soil				
Date Analyzed:	11/11/2016	Date Prepared:	11/11/2016	910	Ans	Analyst: JTR	IR					
Reporting Units: mg/L	T/Su		2	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY	E/MATE	IX SPI	KE DUPLICA	TE REC	OVERY	STUDY		

TCLP BTEX by SW 8260B Analytes	Parent Sample Result A	Spike Added [B]	Spiked Sample sike Result lded [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits	Control Limits %RPD	
Benzene	<0.00500	0,500	0.469	94	0.500	0.456	16	3	66-142	20	
Toluene	<0.00500	0.500	0.463	93	0.500	0.454	91	2	59-139	20	-
Ethylbenzene	<0.00500	0.500	0.459	92	0.500	0.456	16		75-125	20	_
m.p-Xylenes	<0.0100	1.00	0.890	68	1.00	0.884	88	7	75-125	20	_
o-Xylene	<0.00500	0.500	0.454	91	0.500	0.443	68	61	75-125	20	-

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

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

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



Form 3 - MS / MSD Recoveries

Project Name: MF-16

QC-Sample ID: 539905-001 S

11/14/2016

mg/L

Reporting Units:

Date Analyzed:

3003836

Lab Batch ID:

539987

Work Order #:

Date Prepared: 11/14/2016

Matrix: Soil Analyst: DEP Batch #:

Project ID:

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Flag %RPD Limits 20 75-125 Control Limits %R RPD Spiked Dup. 901 Matrix: Soil <u>[</u> Duplicate Spiked Sample Result [F] 0.00212 Spike Added 0.00200 Batch #: Spiked Sample 108 0 Spiked Sample Result 0.00215 0 QC-Sample ID: 540191-001 S Spike 0.00200 B <0.000200 Parent Sample Result A TCLP Mercury by SW 7470A Analytes 3003836 Lab Batch ID:

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY Analyst: DEP Date Prepared: 11/14/2016 11/14/2016

T/Su

Reporting Units:

Date Analyzed:

Flag Control Limits %RPD 20 75-125 Limits Control %R RPD 0 Spiked Dup. Spiked Sample Duplicate Result [F] 0.00212 Added 0.00200 Spike Spiked Sample 107 %R Spiked Sample Result 0.00213 C 0.00200 Added B <0.000200 Sample Result Parent ¥. TCLP Mercury by SW 7470A Analytes Mercury

Matrix: Solid Analyst: DEP Batch #: QC-Sample ID: 540125-001 S Date Prepared: 11/14/2016 11/14/2016 3003887

mg/L

Reporting Units:

Date Analyzed: Lab Batch ID:

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TCLP Metals by SW846 6010B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	SOS	Spike Added [E]	Duplicate Spiked Sample Result [F]	<u>v</u>	RPD %		Control Limits %R	27%
A STATE OF THE STA	000000	2.00	5.15	103	2,00	2,02	102			071-09	07 071-08
Barium	3.10	5.00	8.07	66	5.00	8.11	100		0	0 80-120	0 80-120 20
Cadmium	<0.0250	5.00	4.97	66	5.00	5.00	100		1	1 80-120	1 80-120 20
Chromium	<0.0500	5.00	4.75	95	5.00	4.77	95		0	0 80-120	
Lead	<0.0500	5.00	5.03	101	5.00	5.06	101		~	1 80-120	
Selenium	<0.100	5.00	5.14	103	5.00	5.16	103		0	0 80-120	0 80-120 20
Silver	<0.100	2.50	2.54	102	2.50	2.55	102		0	0 80-120	0 80-120 20

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

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

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



Form 3 - MS / MSD Recoveries

Project Name: MF-16

Project ID:

Matrix: Soil Batch #: 1

QC-Sample ID: 539784-001 S Date Prepared: 11/08/2016

> 11/08/2016 mg/kg

Date Analyzed: Lab Batch ID:

Reporting Units:

3003551 539987

Work Order #:

Analyst: ARM

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control	Control	Flag
Analytes	Result [A]	Added	בו	%R [D]	Added	Result [F]	%R G	%	%R	%RPD	
C6-C10 Gasoline Range Hydrocarbons	<15.0	666	914	16	666	937	94	7	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	666	983	86	666	1010	101	3	70-135	35	

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

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

Final 1.000



Page 19 of 21

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



Stafford, Texas (281-240-4200)

CHAIN OF CUSTODY

San Antonio, Texas (210-509-3334) Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

Relinquished by:	11/1/11/11	Kelifquished by Samp		TAT Sta	3 Day E	2 Day E	☐ Next Da	Same Day TAI	Tun	10	9	8	7	6	5	4 NSidWa	3 BtmHol	2 FntWal	1 WstPile	No.		ampiers's Name	oroject Contact: Johnnie Bradford	ohnnie bradfor	mail:	300 N. Marient	Company Address:	Energy Transi	Client /			Dalias Texa
Relinquished by:	lby:	to samples		TAT Starts Day received by Lab, if received by 5:00 pm	3 Day EMERGENCY	2 Day EMERGENCY	Next Day EMERGENCY	TAT	Turnaround Time (Business days)							a				Field (D / Point of Collection		ampiers's Name - Johnnie Bradford	ord	ohnnie.bradford@energytransfer.com		500 N. Marienfeld, Midland, Texas 79701	P	Energy Transfer Company Field Services	Reporting information			Delias Texas (214-902-0300)
	!	S	SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DE	ab, if received by 5:00		Contract TAT	7 Day TAT	X 6 Day TAT	CALMAN CALMAN NO.											ollection				(432) 450-5542	Phone No:			ės				
Date Time:	Date Time:	Date Time: 11/8/2016	Y MUST BE D	pm (8		10	 	Sample Depth	- - -		,,,	- (6	<u></u>		n 70	7 v=				22
		145%	CUMENTED						100000							11/8/2016	11/8/2016	11/8/2016	11/8/2016	Date	Collection	PO Number: INOMO		Same as above	nvoice To:	Ephilos Min	Project Location:	MF-16		10 88 SEC		Midland, Texas (432-704-5251)
Received By:	Received By:	1 Recoved	BELOW EAC			Leve	X Lev	ا ا ا	2. 新年次							7:49	7:37	7:34	7:40	Time		9	8	bove			- 2	umber:	Proje			(as (432-70
2	y:	THE ST	H TIME SAM		TRRP Checklist	Level 3 (CLP Forms)	X Level III Std QC+ Forms	Level II Std QC	Data							S	S	S		Matrix bot	-								Project Information		www	4-5251)
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								! 			<u> </u>										} 									<u>!</u>	!	1

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be involced at \$5 per sample. These ferms will be enforced unless previously negotiated under a fully executed client contract.



XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: Energy Transfer- Midland

Date/ Time Received: 11/08/2016 02:55:00 PM

Work Order #: 539987

Analyst:

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

Temperature Measuring device used: R8

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		4.9	
#2 *Shipping container in good condition?		N/A	
#3 *Samples received on ice?		Yes	
#4 *Custody Seal present on shipping cont	ainer/ cooler?	N/A	
#5 *Custody Seals intact on shipping conta	iner/ cooler?	N/A	
#6 Custody Seals intact on sample bottles?		N/A	
#7 *Custody Seals Signed and dated?		N/A	
#8 *Chain of Custody present?		Yes	
#9 Sample instructions complete on Chain	of Custody?	Yes	
#10 Any missing/extra samples?		No	
#11 Chain of Custody signed when relinqui	shed/ received?	Yes	
#12 Chain of Custody agrees with sample I	abel(s)?	Yes	
#13 Container label(s) legible and intact?		Yes	
#14 Sample matrix/ properties agree with C	hain of Custody?	Yes	
#15 Samples in proper container/ bottle?		Yes	
#16 Samples properly preserved?		Yes	
#17 Sample container(s) intact?		Yes	
#18 Sufficient sample amount for indicated	test(s)?	Yes	
#19 All samples received within hold time?		Yes	
#20 Subcontract of sample(s)?		Yes	Houston
#21 VOC samples have zero headspace (le	ss than 1/4 inch bubble)?	N/A	
#22 <2 for all samples preserved with HNO: samples for the analysis of HEM or HEM-SG analysts.		N/A	
#23 >10 for all samples preserved with NaA	sO2+NaOH, ZnAc+NaOH?	N/A	

		4
Checklist completed by:	JESSICA VRAMER Jessica Kramer	Date: 11/08/2016
Checklist reviewed by:	Kuns Boah	Date: 11/09/2016

Kelsey Brooks

PH Device/Lot#:

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



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

July 14, 2017

Bernie Bockish GHD 6121 Indian School Road, NE #200 Albuquerque, NM 87110 TEL: (505) 884-0672

FAX

RE: MF 16 OrderNo.: 1707310

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 5 sample(s) on 7/7/2017 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 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order **1707310**Date Reported: **7/14/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: 11135250-05-070617-MGTP-1-

 Project:
 MF 16
 Collection Date: 7/6/2017 10:50:00 AM

 Lab ID:
 1707310-001
 Matrix:
 Received Date: 7/7/2017 10:25:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	,			Analyst	: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/12/2017 1:00:35 PM	32747
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/12/2017 1:00:35 PM	32747
Surr: DNOP	93.8	70-130	%Rec	1	7/12/2017 1:00:35 PM	32747
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/12/2017 1:56:49 PM	32740
Surr: BFB	92.3	54-150	%Rec	1	7/12/2017 1:56:49 PM	32740
EPA METHOD 8260B: VOLATILES SHO	ORT LIST				Analyst	: DJF
Benzene	ND	0.025	mg/Kg	1	7/12/2017 5:54:58 PM	32740
Toluene	ND	0.049	mg/Kg	1	7/12/2017 5:54:58 PM	32740
Ethylbenzene	ND	0.049	mg/Kg	1	7/12/2017 5:54:58 PM	32740
Xylenes, Total	ND	0.098	mg/Kg	1	7/12/2017 5:54:58 PM	32740
Surr: 1,2-Dichloroethane-d4	109	70-130	%Rec	1	7/12/2017 5:54:58 PM	32740
Surr: 4-Bromofluorobenzene	87.5	70-130	%Rec	1	7/12/2017 5:54:58 PM	32740
Surr: Dibromofluoromethane	107	70-130	%Rec	1	7/12/2017 5:54:58 PM	32740
Surr: Toluene-d8	98.8	70-130	%Rec	1	7/12/2017 5:54:58 PM	32740

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

- 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 Quanitative 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 Page 1 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order **1707310**

Date Reported: 7/14/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Client Sample ID:** 11135250-05-070617-MGTP-5-

 Project:
 MF 16
 Collection Date: 7/6/2017 11:15:00 AM

 Lab ID:
 1707310-002
 Matrix:
 Received Date: 7/7/2017 10:25:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/12/2017 2:07:13 PM	32747
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/12/2017 2:07:13 PM	32747
Surr: DNOP	92.4	70-130	%Rec	1	7/12/2017 2:07:13 PM	32747
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/12/2017 2:21:03 PM	32740
Surr: BFB	96.7	54-150	%Rec	1	7/12/2017 2:21:03 PM	32740
EPA METHOD 8260B: VOLATILES SH	HORT LIST				Analyst	: DJF
Benzene	ND	0.024	mg/Kg	1	7/12/2017 7:22:02 PM	32740
Toluene	ND	0.049	mg/Kg	1	7/12/2017 7:22:02 PM	32740
Ethylbenzene	ND	0.049	mg/Kg	1	7/12/2017 7:22:02 PM	32740
Xylenes, Total	ND	0.098	mg/Kg	1	7/12/2017 7:22:02 PM	32740
Surr: 1,2-Dichloroethane-d4	106	70-130	%Rec	1	7/12/2017 7:22:02 PM	32740
Surr: 4-Bromofluorobenzene	89.9	70-130	%Rec	1	7/12/2017 7:22:02 PM	32740
Surr: Dibromofluoromethane	108	70-130	%Rec	1	7/12/2017 7:22:02 PM	32740
Surr: Toluene-d8	98.1	70-130	%Rec	1	7/12/2017 7:22:02 PM	32740

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

- * 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 Quanitative 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 Page 2 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order **1707310**Date Reported: **7/14/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Client Sample ID:** 11135250-05-070617-MGTP-2-

 Project:
 MF 16
 Collection Date: 7/6/2017 11:30:00 AM

 Lab ID:
 1707310-003
 Matrix:
 Received Date: 7/7/2017 10:25:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	1			Analyst	том
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	7/12/2017 2:29:30 PM	32747
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/12/2017 2:29:30 PM	32747
Surr: DNOP	92.1	70-130	%Rec	1	7/12/2017 2:29:30 PM	32747
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/12/2017 3:33:58 PM	32740
Surr: BFB	102	54-150	%Rec	1	7/12/2017 3:33:58 PM	32740
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	: DJF
Benzene	ND	0.025	mg/Kg	1	7/12/2017 7:51:00 PM	32740
Toluene	ND	0.049	mg/Kg	1	7/12/2017 7:51:00 PM	32740
Ethylbenzene	ND	0.049	mg/Kg	1	7/12/2017 7:51:00 PM	32740
Xylenes, Total	ND	0.099	mg/Kg	1	7/12/2017 7:51:00 PM	32740
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	7/12/2017 7:51:00 PM	32740
Surr: 4-Bromofluorobenzene	91.1	70-130	%Rec	1	7/12/2017 7:51:00 PM	32740
Surr: Dibromofluoromethane	104	70-130	%Rec	1	7/12/2017 7:51:00 PM	32740
Surr: Toluene-d8	99.5	70-130	%Rec	1	7/12/2017 7:51:00 PM	32740

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

- * 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 Quanitative 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 Page 3 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order **1707310**Date Reported: **7/14/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Client Sample ID:** 11135250-05-070617-MGTP-3-

 Project:
 MF 16
 Collection Date: 7/6/2017 11:45:00 AM

 Lab ID:
 1707310-004
 Matrix:
 Received Date: 7/7/2017 10:25:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	1			Analyst	: ТОМ
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/12/2017 2:51:56 PM	32747
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/12/2017 2:51:56 PM	32747
Surr: DNOP	80.3	70-130	%Rec	1	7/12/2017 2:51:56 PM	32747
EPA METHOD 8015D: GASOLINE R.	ANGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/12/2017 3:58:16 PM	32740
Surr: BFB	97.7	54-150	%Rec	1	7/12/2017 3:58:16 PM	32740
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst	: DJF
Benzene	ND	0.025	mg/Kg	1	7/12/2017 8:19:50 PM	32740
Toluene	ND	0.049	mg/Kg	1	7/12/2017 8:19:50 PM	32740
Ethylbenzene	ND	0.049	mg/Kg	1	7/12/2017 8:19:50 PM	32740
Xylenes, Total	ND	0.099	mg/Kg	1	7/12/2017 8:19:50 PM	32740
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	7/12/2017 8:19:50 PM	32740
Surr: 4-Bromofluorobenzene	93.1	70-130	%Rec	1	7/12/2017 8:19:50 PM	32740
Surr: Dibromofluoromethane	103	70-130	%Rec	1	7/12/2017 8:19:50 PM	32740
Surr: Toluene-d8	105	70-130	%Rec	1	7/12/2017 8:19:50 PM	32740

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

- * 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 Quanitative 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 Page 4 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order **1707310**

Date Reported: 7/14/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Client Sample ID:** 11135250-05-070617-MGTP-4-

 Project:
 MF 16
 Collection Date: 7/6/2017 12:00:00 PM

 Lab ID:
 1707310-005
 Matrix:
 Received Date: 7/7/2017 10:25:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	}			Analyst	: ТОМ
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	7/12/2017 3:14:14 PM	32747
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/12/2017 3:14:14 PM	32747
Surr: DNOP	91.1	70-130	%Rec	1	7/12/2017 3:14:14 PM	32747
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/12/2017 4:22:33 PM	32740
Surr: BFB	102	54-150	%Rec	1	7/12/2017 4:22:33 PM	32740
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	: DJF
Benzene	ND	0.024	mg/Kg	1	7/12/2017 8:48:37 PM	32740
Toluene	ND	0.049	mg/Kg	1	7/12/2017 8:48:37 PM	32740
Ethylbenzene	ND	0.049	mg/Kg	1	7/12/2017 8:48:37 PM	32740
Xylenes, Total	ND	0.097	mg/Kg	1	7/12/2017 8:48:37 PM	32740
Surr: 1,2-Dichloroethane-d4	109	70-130	%Rec	1	7/12/2017 8:48:37 PM	32740
Surr: 4-Bromofluorobenzene	90.1	70-130	%Rec	1	7/12/2017 8:48:37 PM	32740
Surr: Dibromofluoromethane	109	70-130	%Rec	1	7/12/2017 8:48:37 PM	32740
Surr: Toluene-d8	102	70-130	%Rec	1	7/12/2017 8:48:37 PM	32740

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

- * 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 Quanitative 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 Page 5 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

GHD

Client:

Hall Environmental Analysis Laboratory, Inc.

WO#: 1707310

14-Jul-17

Surr. DNOP	Project:	MF 16										
Prop Date 7/11/2017	Sample ID	LCS-32747	SampTyp	e: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Client ID:	LCSS	Batch II	D: 32	747	F	RunNo: 4	4147				
Sumple ID MB-32747 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 32747 RunNo: 44147 SeqNo: 1393410 Units: mg/Kg Analysis Date: 7/11/2017 Analysis Date: 7/12/2017 SeqNo: 1393410 Units: mg/Kg Analysis Date: MBC SPK value SPK Ref Val MREC LowLimit HighLimit MRPD RPDLimit Qual MREC Client ID: MREC MRE	Prep Date:	7/11/2017	Analysis Date	e: 7/	12/2017	S	SeqNo: 1	393409	Units: mg/k	K g		
Surr: DNOP A.6 5.000 93.0 70 130	Analyte		Result I	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID MB-32747 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics PRO	-	=		10		0						
Client ID: PBS	Surr: DNOP		4.6		5.000		93.0	70	130			
Prep Date: 7/11/2017 Analysis Date: 7/12/2017 SeqNo: 1393410 Units: mg/Ky	Sample ID	MB-32747	SampTyp	e: M E	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Client ID:	PBS	Batch II	D: 32	747	F	RunNo: 4	4147				
Surr DNOP ND 10 10 10 10 10 10 10 1	Prep Date:	7/11/2017	Analysis Date	e: 7/	12/2017	8	SeqNo: 1	393410	Units: mg/h	K g		
Surr DNOP 9.5 10.00 95.4 70 13	Analyte		Result I	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr. DNOP 9.5 10.00 95.4 70 130	-	=		-								
TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: 11135250-05-070617 Batch ID: 32747 RunNo: 44147 RunNo: 44147 RunNo: 41147 RunNo: 41187 RunNo		=		50	10.00		05.4	70	120			
Client ID: 11135250-05-070617 Batch ID: 32747 RunNo: 44147 SeqNo: 1394365 Units: mg/Kg	Juli. DNOF		9.5		10.00		33.4	70	130			
Prep Date: 7/11/2017 Analysis Date: 7/12/2017 SeqNo: 1394365 Units: mg/Kg	Sample ID	1707310-001AMS	SampTyp	e: M \$	3	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Analyste	Client ID:	11135250-05-070	617 Batch II): 32	747	F	RunNo: 4	4147				
Sample D 1707310-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics	Prep Date:	7/11/2017	Analysis Date	e: 7/	12/2017	S	SeqNo: 1	394365	Units: mg/k	K g		
Surr: DNOP 4.4 5.040 87.6 70 130 1	Analyte									%RPD	RPDLimit	Qual
TestCode: EPA Method 8015M/D: Diesel Range Organics TestCode: EPA Method 8015M/D: Diesel Range Organics	_	=		10		0						
Client ID: 11135250-05-070617 Batch ID: 32747 RunNo: 44147	Suff: DNOP		4.4		5.040		87.6	70	130			
Prep Date: 7/11/2017 Analysis Date: 7/12/2017 SeqNo: 1394366 Units: mg/Kg	Sample ID	1707310-001AMS	D SampTyp	e: M \$	SD	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Result PQL SPK value SPK Ref Val %REC Seq No: 1394824 Units: %Rec PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual PQL SPK value SPK Ref Val %REC LowLimit HighLimit SPK Ref Val SPK	Client ID:	11135250-05-070	617 Batch II	D: 32	747	F	RunNo: 4	4147				
Surr: DNOP 49 10 50.45 0 96.8 55.8 122 5.67 20	Prep Date:	7/11/2017	Analysis Date	e: 7/	12/2017	S	SeqNo: 1	394366	Units: mg/l	K g		
Surr: DNOP	Analyte		Result I	PQL	SPK value	SPK Ref Val	%REC		HighLimit		RPDLimit	Qual
Sample ID MB-32779 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 32779 RunNo: 44187 Prep Date: 7/13/2017 Analysis Date: 7/13/2017 SeqNo: 1394824 Units: %Rec Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr: DNOP 12 10.00 117 70 130 Sample ID LCS-32779 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 32779 RunNo: 44187 Prep Date: 7/13/2017 Analysis Date: 7/13/2017 SeqNo: 1394828 Units: %Rec	-	=	_	10		0						
RunNo: 44187 Prep Date: 7/13/2017 Analysis Date: 7/13/2017 SeqNo: 1394824 Units: %Rec	Suff: DNOP		4.6		5.045		91.9	70	130	0	0	
Prep Date: 7/13/2017 Analysis Date: 7/13/2017 SeqNo: 1394824 Units: %Rec Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr: DNOP 12 10.00 117 70 130 Sample ID LCS-32779 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 32779 RunNo: 44187 Prep Date: 7/13/2017 Analysis Date: 7/13/2017 SeqNo: 1394828 Units: %Rec	Sample ID	MB-32779	SampTyp	e: M E	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr: DNOP 12 10.00 117 70 130 Sample ID LCS-32779 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 32779 RunNo: 44187 Prep Date: 7/13/2017 Analysis Date: 7/13/2017 SeqNo: 1394828 Units: %Rec	Client ID:	PBS	Batch II	D: 32	779	F	RunNo: 4	4187				
Surr: DNOP 12 10.00 117 70 130 Sample ID LCS-32779 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 32779 RunNo: 44187 Prep Date: 7/13/2017 Analysis Date: 7/13/2017 SeqNo: 1394828 Units: %Rec	Prep Date:	7/13/2017	Analysis Date	e: 7/	13/2017	S	SeqNo: 1	394824	Units: %Re	С		
Sample ID LCS-32779 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 32779 RunNo: 44187 Prep Date: 7/13/2017 Analysis Date: 7/13/2017 SeqNo: 1394828 Units: %Rec	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Client ID: LCSS Batch ID: 32779 RunNo: 44187 Prep Date: 7/13/2017 Analysis Date: 7/13/2017 SeqNo: 1394828 Units: %Rec	Surr: DNOP		12		10.00		117	70	130			
Prep Date: 7/13/2017 Analysis Date: 7/13/2017 SeqNo: 1394828 Units: %Rec	Sample ID	LCS-32779	SampTyp	e: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
			Batch II	D: 32	779					J	-	
Apolisto Popult DOI CDK volus CDK Bof Vol 3/ DEC Loud imit. Llimb Limit. 0/ DDD DDD imit. Over	Prep Date:	7/13/2017	Analysis Date	e: 7/	13/2017	S	SeqNo: 1	394828	Units: %Re	С		
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Analyte		Result I	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

Page 6 of 10

RLReporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1707310

14-Jul-17

Client: GHD
Project: MF 16

Sample ID LCS-32779 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 32779 RunNo: 44187

Prep Date: 7/13/2017 Analysis Date: 7/13/2017 SeqNo: 1394828 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 5.7 5.000 114 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 Quanitative 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

Page 7 of 10

Hall Environmental Analysis Laboratory, Inc.

WO#: **1707310**

14-Jul-17

Client: GHD Project: MF 16

Sample ID MB-32740 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 32740 RunNo: 44163

Prep Date: 7/11/2017 Analysis Date: 7/12/2017 SeqNo: 1394414 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 970 1000 96.9 54 150

Sample ID LCS-32740 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 32740 RunNo: 44163

Prep Date: 7/11/2017 Analysis Date: 7/12/2017 SeqNo: 1394415 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 5.0 25.00 103 76.4 125

Surr: BFB 1100 1000 109 54 150

Sample ID 1707310-002AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: 11135250-05-070617 Batch ID: 32740 RunNo: 44163

Prep Date: 7/11/2017 Analysis Date: 7/12/2017 SeqNo: 1394421 Units: mg/Kg

PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual Gasoline Range Organics (GRO) 29 23.95 122 77.8 128 Surr: BFB 1000 957.9 109 54 150

Sample ID 1707310-002AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: 11135250-05-070617 Batch ID: 32740 RunNo: 44163

Prep Date: 7/11/2017 Analysis Date: 7/12/2017 SeqNo: 1394422 Units: mg/Kg

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 30 4.9 24.34 123 77.8 128 2.72 20 Λ Surr: BFB 1100 973.7 114 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 Quanitative 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

Page 8 of 10

Hall Environmental Analysis Laboratory, Inc.

WO#: 1707310

14-Jul-17

Client:	GHD
Project:	MF 16

Sample ID mb-32740	SampT	SampType: MBLK TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch	n ID: 32	740	R	RunNo: 4	4176				
Prep Date: 7/11/2017	Analysis D	ate: 7/	12/2017	S	SeqNo: 1	394707	Units: mg/K	g		
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: 1,2-Dichloroethane-d4	0.54		0.5000		108	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		87.9	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID Ics-32740	Samp1	Type: LC	S	TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: LCSS	Batc	h ID: 32	740	RunNo: 44176							
Prep Date: 7/11/2017	Analysis [Date: 7/	12/2017	9	SeqNo: 1	394708	Units: mg/k	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.025	1.000	0	108	70	130				
Toluene	0.91	0.050	1.000	0	91.3	70	130				
Surr: 1,2-Dichloroethane-d4	0.57		0.5000		115	70	130				
Surr: 4-Bromofluorobenzene	0.44		0.5000		87.4	70	130				
Surr: Dibromofluoromethane	0.54		0.5000		107	70	130				
Surr: Toluene-d8	0.51		0.5000		101	70	130				

Sample ID 1707310-001ams	s SampT	ype: M \$	3	TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: 11135250-05-070	0617 Batch	n ID: 32	740	RunNo: 44176							
Prep Date: 7/11/2017	Analysis D	oate: 7/	12/2017	8	SeqNo: 1	394710	Units: mg/k	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.024	0.9569	0	112	61.9	146		_		
Toluene	0.96	0.048	0.9569	0	100	70	130				
Surr: 1,2-Dichloroethane-d4	0.48		0.4785		101	70	130				
Surr: 4-Bromofluorobenzene	0.43		0.4785		90.0	70	130				
Surr: Dibromofluoromethane	0.47		0.4785		98.7	70	130				
Surr: Toluene-d8	0.49		0.4785		103	70	130				

Sample ID	1707310-001amsd	Samp Type:	MSD	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID:	11135250-05-070617	Batch ID:	32740	F	RunNo: 4	4176				
Prep Date:	7/11/2017 A	nalysis Date:	7/12/2017	S	SeqNo: 1	394711	Units: mg/K	(g		
Analyte		Result PC	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.1 0.0	0.9814	0	112	61.9	146	2.21	20	
Toluene		0.93 0.0	0.9814	0	94.9	70	130	3.18	20	

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 9 of 10

Sample pH Not In Range P

RLReporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1707310

14-Jul-17

Client: GHD
Project: MF 16

Sample ID 1707310-001amsd SampType: MSD TestCode: EPA Method 8260B: Volatiles Short List

Client ID: 11135250-05-070617 Batch ID: 32740 RunNo: 44176

Prep Date: 7/11/2017 Analysis Date: 7/12/2017 SeqNo: 1394711 Units: mq/Kq

Prep Date. 7/11/2017	Analysis D	ale. 11	12/2017	3	eqino. 1	394711	Units: Ing/N	.g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.52		0.4907		106	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.44		0.4907		90.4	70	130	0	0	
Surr: Dibromofluoromethane	0.51		0.4907		105	70	130	0	0	
Surr: Toluene-d8	0.49		0.4907		100	70	130	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 Quanitative 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

Page 10 of 10



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109

Sample Log-In Check List

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Client Name:	GHD	Work Order Num	ber: 1707310		RcptNo:	1
Received By:	Erin Melendrez	7/7/2017 10:25:00	AM	uas	·	
Completed By:	Ashley Gallegos	7/7/2017 3:55:26 P		LIL AZ		
Reviewed By:	N	7/10/17	141	Stoff		
Chain of Cus	tody					
1. Custody sea	ils intact on sample bottles	97	Yes 🗌	No 🗆	Not Present 🗹	
2. Is Chain of C	Custody complete?		Yes 🔽	No 🗌	Not Present	
3. How was the	e sample delivered?		<u>Courier</u>			
<u>Log In</u>						
4. Was an atte	mpt made to cool the sam	ples?	Yes 🔽	No 🗌	na 🗆	-
5. Were all sam	nples received at a temper	rature of >0° C to 6.0°C	Yeş 🗹	No 🗌	NA 🗌	
6. Sample(s) in	n proper container(s)?		Yes 🗹	No 🗌		
7. Sufficient sar	mple volume for indicated	test(s)?	Yes 🗹	No 🗀		
8. Are samples	(except VOA and ONG) p	roperly preserved?	Yes 🗹	No 🗌		
9. Was preserve	ative added to bottles?		Yes 🗌	No 🗹	NA 🗌	
10.VOA vials ha	ve zero headspace?		Yes 🗌	No 🗌	No VOA Vials 🗹	
11, Were any sa	imple containers received	broken?	Yes 🗆	No 🗹	# of preserved	
•	ork match bottle labels? cancies on chain of custod	v)	Yes 🗹	No 🗆	bottles checked for pH:	r >12 unless noted)
	correctly identified on Cha		Yes 🗹	No 🗆	Adjusted?	1 × 12 dilless floted)
	at analyses were requeste	· ·	Yes 🗸	No \square	_	
	ling times able to be met? customer for authorization.)	Yes 🗹	No 🗆	Checked by:	
Special Handl	ing (if applicable)					
	otified of all discrepancies	with this order?	Yes 🗌	No 🗌	NA 🗹	
Person	Notified:	Date				- -
By Who	om:	Via:	*	hone Fax	☐ In Person	
Regardi	ing:					!
Client Ir	nstructions:					
17. Additional rer	marks:					
18. <u>Cooler Information Cooler No</u> 1		Seal Intact Seal No Yes	Seal Date	Signed By		

Address: GLSI TANIANS A ROLL BY Sec 200 METE MENT BE CONTRINED BY SECOND BY	Lecord		HALL ENVIDONMENTAL
Project Name: Project Name			ANALYSIS LABORATORY
Dong Learning Carlo Done			www.hallenvironmental.com
Purgue-reque_N/N_6711C	St. 200	10	4901 Hawkins NE - Albuquerque, NM 87109
Time Religion of the Contract of Section 1 Type and # Type Contract of Section 1 Type Contract of Type Contract of Section 1 Type Contract of Type Contract o		roject #:	Tel. 505-345-3975 Fax 505-345-4107
Time Matrix Sample Request 1D Container Preservative ACCS A Secretary Received to 1 Sample From Project Manager: Time Matrix Sample Request 1D Container Preservative Acceptance Acceptanc	3#: SOS 884 0762		Analysis
C20 Semple Request Dontier Semple Sempl		roject Manager:	(V)()
C30 Sample Request Online Nichael Gark 633-3-19 Online Container Nichael Gark 633-3-19 Online Container Canada Online Container Canada Online Online Canada Online Canada Online Canada Online Canada Online Online Online Canada Online	Package: Level 4 (Full Validation.)	Bernard Bockisch	(SMI
Container Preservative Container Preserv	□ Other	Michael Barrt 832-37	2908/ 2808/ 50/05/ 2801/ 20/06/ 341/
Time Matrix Sample Request D Container Preservative HEAL No.		emperature 5.	(GR 500 VOV (GR 50
S SUBSISSE OFFERENCE POST OF STATE OF S	Matrix	Preservative Type	BTEX + MTI TPH 80158 TPH (Methol PAH's (8310 RCRA 8 Me Anions (F,C Anions (F,C 8270 (Semi-
100 S = NUSSOS - 04-05677 NG-19-10 MV Of DOT T X X X X X X X X	1030 5	TRE	* * *
140 5 5 148520-04-010577-MCP-446	100 5	AMOR	XX
17.3.0 % 5-1485520490577-146-185-16 OPH SEPARCHE X 13.5.0 % 5-1485520-5-076417-14-18-1-6 11.15 % 5-1485250-5-076417-14-18-1-6 11.15 % 5-1485250-5-076417-14-18-18-16 11.15 % 5-1485250-5-076417-14-18-18-18-18-18-18-18-18-18-18-18-18-18-	1140 5		×
1240 S E-WESSEG-SC-10-TRS-10-10-10-10-10-10-10-10-10-10-10-10-10-	1220 5	1000	×
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1145 S 5-1435350-55-07247-044-7P3-16 -003 X -003 X 1145 S 5-143550-55-07247-04-7P3-16 -004 X X 1145 S 5-143550-55-072647-04-7P3-16 -004 X X Time: Relinquished by: Time: Reli	S	100-	X X X
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1146 5 5 11/35/350-05-070647-ACTR3-16 1300 5 511/35/350-05-070647-ACTR3-16 Time: Relinquished by: 1415	S	-003	×
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Time: Relinguished by:	1415 Mellinguished by	1 1/1/1	Remarks:
	Time: Relingished by:	Death Think	

Andy Freeman

From:

Brandon, Alan K. < Alan.Brandon@ghd.com>

Sent:

Friday, July 07, 2017 11:34 AM

To:

Andy Freeman

Subject:

Trunk-MC and MF-16 COC

Attachments:

Trunk MC and MF-16 COC.pdf

Andy,

These samples should be arriving today or already have. Can you please split the reporting between the 2 sites as noted on the attached?

Thanks

CONFIDENTIALITY NOTICE: This email, including any attachments, is confidential and may be privileged. If you are not the intended recipient please notify the sender immediately, and please delete it; you should not copy it or use it for any purpose or disclose its contents to any other person. GHD and its affiliates reserve the right to monitor and modify all email communications through their networks.



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

September 18, 2017

Bernie Bockisch GHD 6121 Indian School Road, NE #200 Albuquerque, NM 87110 TEL: (505) 884-0672

FAX

RE: MF 16 OrderNo.: 1709690

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 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order: **1709690**

Date Reported: 9/18/2017

Hall Environmental Analysis Laboratory, Inc.

Lab Order: 1709690

Project: MF 16

GHD

CLIENT:

Lab ID: 1709690-001 **Collection Date:** 9/6/2017 10:20:00 AM

Client Sample ID: S-11135250-05-090617-MG-TP-6-14' Matrix: SOIL

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS					Ana	alyst: MRA
Chloride	ND	30	mg/Kg	20	9/15/2017 5:39:24	PM 33876
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	3			Ana	alyst: TOM
Diesel Range Organics (DRO)	32	9.3	mg/Kg	1	9/15/2017 4:25:14	PM 33875
Motor Oil Range Organics (MRO)	49	47	mg/Kg	1	9/15/2017 4:25:14	PM 33875
Surr: DNOP	85.2	70-130	%Rec	1	9/15/2017 4:25:14	PM 33875
EPA METHOD 8015D: GASOLINE RANG	E				Ana	alyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/15/2017 9:49:51	PM 33871
Surr: BFB	106	54-150	%Rec	1	9/15/2017 9:49:51	PM 33871
EPA METHOD 8021B: VOLATILES					Ana	alyst: NSB
Benzene	ND	0.024	mg/Kg	1	9/15/2017 9:49:51	PM 33871
Toluene	ND	0.049	mg/Kg	1	9/15/2017 9:49:51	PM 33871
Ethylbenzene	ND	0.049	mg/Kg	1	9/15/2017 9:49:51	PM 33871
Xylenes, Total	ND	0.098	mg/Kg	1	9/15/2017 9:49:51	PM 33871
Surr: 4-Bromofluorobenzene	116	66.6-132	%Rec	1	9/15/2017 9:49:51	PM 33871

Lab ID: 1709690-002 **Collection Date:** 9/6/2017 10:30:00 AM

Client Sample ID: S-11135250-05-090617-MG-TP-7-14' Matrix: SOIL

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS					Ana	alyst: MRA
Chloride	ND	30	mg/Kg	20	9/15/2017 6:16:38	PM 33876
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Ana	alyst: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	9/15/2017 4:53:25	PM 33875
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/15/2017 4:53:25	PM 33875
Surr: DNOP	86.3	70-130	%Rec	1	9/15/2017 4:53:25	PM 33875
EPA METHOD 8015D: GASOLINE RAN	GE				Ana	alyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/15/2017 10:13:10	DPM 33871
Surr: BFB	97.0	54-150	%Rec	1	9/15/2017 10:13:10	PM 33871
EPA METHOD 8021B: VOLATILES					Ana	alyst: NSB
Benzene	ND	0.025	mg/Kg	1	9/15/2017 10:13:10	PM 33871
Toluene	ND	0.050	mg/Kg	1	9/15/2017 10:13:10	PM 33871
Ethylbenzene	ND	0.050	mg/Kg	1	9/15/2017 10:13:10	DPM 33871
Xylenes, Total	ND	0.10	mg/Kg	1	9/15/2017 10:13:10	PM 33871
Surr: 4-Bromofluorobenzene	106	66.6-132	%Rec	1	9/15/2017 10:13:10	PM 33871

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

Unaimers: " value exceeds Maximum Contaminant Level	Oualifiers:	*	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 Quanitative 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 Page 1 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order: **1709690**

Date Reported: 9/18/2017

Hall Environmental Analysis Laboratory, Inc.

Lab Order: 1709690

Project: MF 16

GHD

CLIENT:

Lab ID: 1709690-003 **Collection Date:** 9/6/2017 11:05:00 AM

Client Sample ID: S-11135250-05-090617-MG-TP-8-6' Matrix: SOIL

Chefit bumple 1D: B 11133230 03 070017	1010 11 (3 0	1714	uia. Boile		
Analyses	Result	PQL Qua	al Units	DF Date	Analyzed	Batch ID
EPA METHOD 300.0: ANIONS					Anal	yst: MRA
Chloride	ND	30	mg/Kg	20 9/15/2	2017 6:29:03 P	M 33876
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Anal	yst: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1 9/15/2	2017 5:21:43 P	M 33875
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1 9/15/2	2017 5:21:43 P	M 33875
Surr: DNOP	75.5	70-130	%Rec	1 9/15/2	2017 5:21:43 P	M 33875
EPA METHOD 8015D: GASOLINE RANGE					Anal	yst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1 9/15/2	2017 10:36:29 I	PM 33871
Surr: BFB	100	54-150	%Rec	1 9/15/2	2017 10:36:29 I	PM 33871
EPA METHOD 8021B: VOLATILES					Anal	yst: NSB
Benzene	ND	0.024	mg/Kg	1 9/15/2	2017 10:36:29 I	PM 33871
Toluene	ND	0.047	mg/Kg	1 9/15/2	2017 10:36:29 I	PM 33871
Ethylbenzene	ND	0.047	mg/Kg	1 9/15/2	2017 10:36:29 I	PM 33871
Xylenes, Total	ND	0.095	mg/Kg	1 9/15/2	2017 10:36:29 I	PM 33871
Surr: 4-Bromofluorobenzene	110	66.6-132	%Rec	1 9/15/2	2017 10:36:29 I	PM 33871

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

- * 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 Quanitative 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 Page 2 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709690**

18-Sep-17

Client: GHD Project: MF 16

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 Quanitative 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

Page 3 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709690**

18-Sep-17

Client: GHD Project: MF 16

Sample ID LCS-33875 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics LCSS Client ID: Batch ID: 33875 RunNo: 45643 SeqNo: 1448863 Prep Date: 9/14/2017 Analysis Date: 9/15/2017 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 51 50.00 0 73.2 101 114 Surr: DNOP 4.7 5.000 94.6 70 130

Sample ID MB-33875 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 33875 RunNo: 45643 Prep Date: 9/14/2017 Analysis Date: 9/15/2017 SeqNo: 1448864 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 Quanitative 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

Page 4 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#: 1709690

18-Sep-17

Client: GHD Project: MF 16

Sample ID MB-33871 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 33871 RunNo: 45651

Prep Date: 9/14/2017 Analysis Date: 9/15/2017 SeqNo: 1449668 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Gasoline Range Organics (GRO) ND 5.0

1000 Surr: BFB 1100 105 54 150

Sample ID LCS-33871 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 33871 RunNo: 45651

Analysis Date: 9/15/2017 Prep Date: 9/14/2017 SeqNo: 1449669 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Gasoline Range Organics (GRO) 5.0 25.00 114 76.4 125 Surr: BFB 1100 1000 114 54 150

Sample ID 1709690-002AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: S-11135250-05-0906 Batch ID: 33871 RunNo: 45651

Prep Date: 9/14/2017 Analysis Date: 9/15/2017 SeqNo: 1449674 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** LowLimit HighLimit Qual Gasoline Range Organics (GRO) 33 4.8 23.99 137 77.8 128

Surr: BFB 1100 959.7 54 150 118

SampType: MSD Client ID: S-11135250-05-0906 Batch ID: 33871 RunNo: 45651

Analysis Date: 9/15/2017 Prep Date: 9/14/2017 SeqNo: 1449675 Units: mg/Kg

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 32 4.6 22.96 138 77.8 128 3.83 20 S Λ Surr: BFB 1100 918.3 117 54 150 0 0

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Sample ID 1709690-002AMSD

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

POL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

TestCode: EPA Method 8015D: Gasoline Range

Е Value above quantitation range

J Analyte detected below quantitation limits

Page 5 of 6

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709690**

18-Sep-17

Client:	GHD
Project:	MF 16

Sample ID MB-33871	BLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS Batch ID: 33871			871	R						
Prep Date: 9/14/2017	Analysis D	oate: 9/	15/2017	S	SeqNo: 1	449704	Units: mg/K	(g		
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	1.2		1.000		117	66.6	132			

Sample ID LCS-33871	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Vola			
Client ID: LCSS	Batch	n ID: 33	871	RunNo: 45651						
Prep Date: 9/14/2017	Analysis D	oate: 9/	15/2017	S	SeqNo: 1	449705	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	114	80	120			
Toluene	1.1	0.050	1.000	0	111	80	120			
Ethylbenzene	1.1	0.050	1.000	0	114	80	120			
Xylenes, Total	3.5	0.10	3.000	0	116	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		118	66.6	132			

Sample ID 1709690-001AM	I S SampT	ype: MS	3	Tes	tCode: El	PA Method	8021B: Volat	tiles			
Client ID: S-11135250-05-	0906 Batch	n ID: 33	871	RunNo: 45651							
Prep Date: 9/14/2017	Analysis D	ate: 9/	15/2017	S	SeqNo: 1	449711	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.023	0.9242	0	119	80.9	132				
Toluene	1.1	0.046	0.9242	0.01268	116	79.8	136				
Ethylbenzene	1.1	0.046	0.9242	0	121	79.4	140				
Xylenes, Total	3.4	0.092	2.773	0	124	78.5	142				
Surr: 4-Bromofluorobenzene	1.1		0.9242		115	66.6	132				

Sample ID 1709690-001AMS	SD SampT	ype: MS	SD .	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: S-11135250-05-0	906 Batch	1D: 33	B71	R	RunNo: 4	5651				
Prep Date: 9/14/2017	Analysis D	ate: 9/	15/2017	S	SeqNo: 1	449712	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.023	0.9166	0	122	80.9	132	1.73	20	
Toluene	1.1	0.046	0.9166	0.01268	121	79.8	136	3.68	20	
Ethylbenzene	1.2	0.046	0.9166	0	127	79.4	140	3.60	20	
Xylenes, Total	3.5	0.092	2.750	0	128	78.5	142	2.28	20	
Surr: 4-Bromofluorobenzene	1.1		0.9166		124	66.6	132	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 Quanitative 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

Page 6 of 6



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:	1709690		RcptNo:	1
Received By: Erin Melendrez	9/12/2017 10:15:00 AM	I	UNG.	-	
Completed By: Ashley Gallegos	9/13/2017 1:54:49 PM		A		
Reviewed By: SRC 09/14			, 0		
Chain of Custody					
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			
<u>Log In</u>					
Was an attempt made to cool the sam	ples?	Yes 🗹	No 🗆	na 🗆	
5. Were all samples received at a temper	ature 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) p	roperly 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 🗹 🛚	# of preserved	
		_		bottles checked	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custod	v)	Yes 🗹	No 📙	for pH: (<2 o	r >12 unless noted)
13. Are matrices correctly identified on Cha		Yes 🗹	No 🗆	Adjusted?	
14. Is it clear what analyses were requeste		Yes 🗹	No 🗆		
15. Were all holding times able to be met? (If no, notify customer for authorization		Yes 🗹	No 🗌	Checked by:	
Special Handling (if applicable)					
16. Was client notified of all discrepancies	with this order?	Yes 🗌	No 🗌	NA 🗹	
Person Notified:	Date				
By Whom:	Via: [eMail	Phone Fax	☐ In Person	
Regarding:			near the control of t		
Client Instructions:		Marine and the second s	<u>e e e e destronte continue e e e e e e e e e e e e e e e e e e </u>		
17. Additional remarks:					1
18. Cooler Information					
Cooler No Temp °C Condition	Seal Intact Seal No	Seal Date	Signed By		
1 5.1 Good	Yes				

	AL.			Q ²	W			(1)	10	, (,)	selddu8 yiA					
THEFT	ANAL ENVIRONMENTAL	mox	4901 Hawkins NE - Albuquerque, NM 37109	505-345-4107	**		0 (Σ	(A(8270 (Sem (75[A]	X	X	×		
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						-	Sockisch	Zeint	□ No		HEAL No.	100 -	-003	-003	Date Time	SION Time SION SION SION SION SION SION SION SION
Time:	Rush	G:	D	9			7	duel G	۱	perature: 5.	Preservative	TOE				ام
Turn-Around Time:	☐ Standard	Project Name:		Project #:	20.11	Project Manager	Bernard	1	On los:	Sample Temperature:	Container Type and #	45512c			Received by	Moderne Pay
Chain-of-Custody Record	CES THE.		612 Indian Short NOTE 200	N/M 87110	C672	email or Fax# fx-mand- Deckiech of Na. Com	☐ Level 4 (Full Validation)				Sample Request ID	\$ 117555045-01947ANG-TP-1-1-1	HI-1-1919741000000000000000000000000000000000	3-8-8-47-24/100-20-022811-2	Saby National States	Time Relinquished by Policetive Medicative Management of the September 1990 Septe
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