

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

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company: BP	Contact: Steve Moskal
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9497
Facility Name: Gallegos Canyon Unit 264	Facility Type: Natural gas well

Surface Owner: Fee	Mineral Owner: Fee	API No. 3004520656
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: San Juan
E	17	28N	12W	1,630	North	1,150	West	

Latitude 36.66512° Longitude -108.14076°

NATURE OF RELEASE

Type of Release: Former earthen pit – condensate/produced water	Volume of Release: unknown	Volume Recovered: none
Source of Release: Former earthen pit	Date and Hour of Occurrence:	Date and Hour of Discovery: May 10, 2016
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? Steve Moskal	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. OIL CONS. DIV DIST. 3	

If a Watercourse was Impacted, Describe Fully.* **AUG 09 2017**

Describe Cause of Problem and Remedial Action Taken.* Impacts were discovered beneath a below grade tank during closure sampling. Impacts may have been associated with tank integrity as a corrosion hole was identified during inspection of the tank. Laboratory results confirmed the release exceeded the BGT closure standard and the spill and release guidelines. Remedial excavation then followed with impacts determined to be off location beneath an adjacent ephemeral wash. The excavation was stopped per the landowner's request and two phases of soil boring investigations were used to determine the extents of the remaining impacts. The attached report details the results and finding of the most recent soil boring investigation.

Describe Area Affected and Cleanup Action Taken.* A total of 3,700 cubic yards of soil was excavated from the impact area. Approximately 2,531 cubic yards of soil was excavated and removed from the site for landfarm treatment. The excavation measured 75'x95'x18' maximum depth. A single portion of the excavation had remaining impacts along the SW wall at a depth of 15-16' which was on the edge of the well location and at the interface of an ephemeral wash. The area of remaining contaminants is off the pad disturbance area and required landowner approval for excavation. The excavation was backfilled per landowner approval. BP further delineated the area of remaining impacts beneath the ephemeral wash via a soil boring investigation. The investigation determined the extents of impacts both vertically and horizontally. The results of investigation determined a relatively small amount of impacts pinch out beneath the wash, estimated to be approximately 220 cubic yards beneath approximately 1,500 cubic yards of clean overburden. BP believes these impacts to be historical and have very little impact to vegetation; no impact to groundwater; and absolutely no impact to surface water (depth of impacts at 16-22'). BP request no further action at the site pending OCD approval. The landowner has requested no further action.

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

OIL CONSERVATION DIVISION

Signature: 	Approved by Environmental Specialist: 	
Printed Name: Steve Moskal	Approval Date: <u>9/5/2017</u>	Expiration Date:
Title: Field Environmental Coordinator	Conditions of Approval:	
E-mail Address: steven.moskal@bp.com	Attached <input checked="" type="checkbox"/>	
Date: August 8, 2016	Phone: 505-326-9497	

* Attach Additional Sheets If Necessary

NCS1613445286

Fields, Vanessa, EMNRD

From: Fields, Vanessa, EMNRD
Sent: Thursday, August 31, 2017 1:54 PM
To: 'Moskal, Steven'
Cc: Smith, Cory, EMNRD
Subject: Gallegos Canyon Unit #264 Conditions of Approval

Steve,

OCD District III Office received a Final C-141 on August 09, 2017 in regards to the Gallegos Canyon Unit # 264 API# (30-045-20656) which has been approved with the following conditions of approval.

- BP has until November 30, 2017 to return to the site to perform either additional delineation or remediation in the South East portion of the well pad (GP 18).
- BP will notify the OCD at least 72 hours but no more than 1 week prior to the start of remediation/delineation.

If you have any questions please give me a call.

Thank you,
Vanessa Fields
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 119
Cell: (505) 419-0463
vanessa.fields@state.nm.us

Figure 1

GCU 264
(E) Sec 17 - T28N - R12W
API: 30-045-20656

Legend
○ Geoprobe Point - Oct 2016
○ Geoprobe Point - July 2017

Remedial Excavation
Completed May 25, 2016

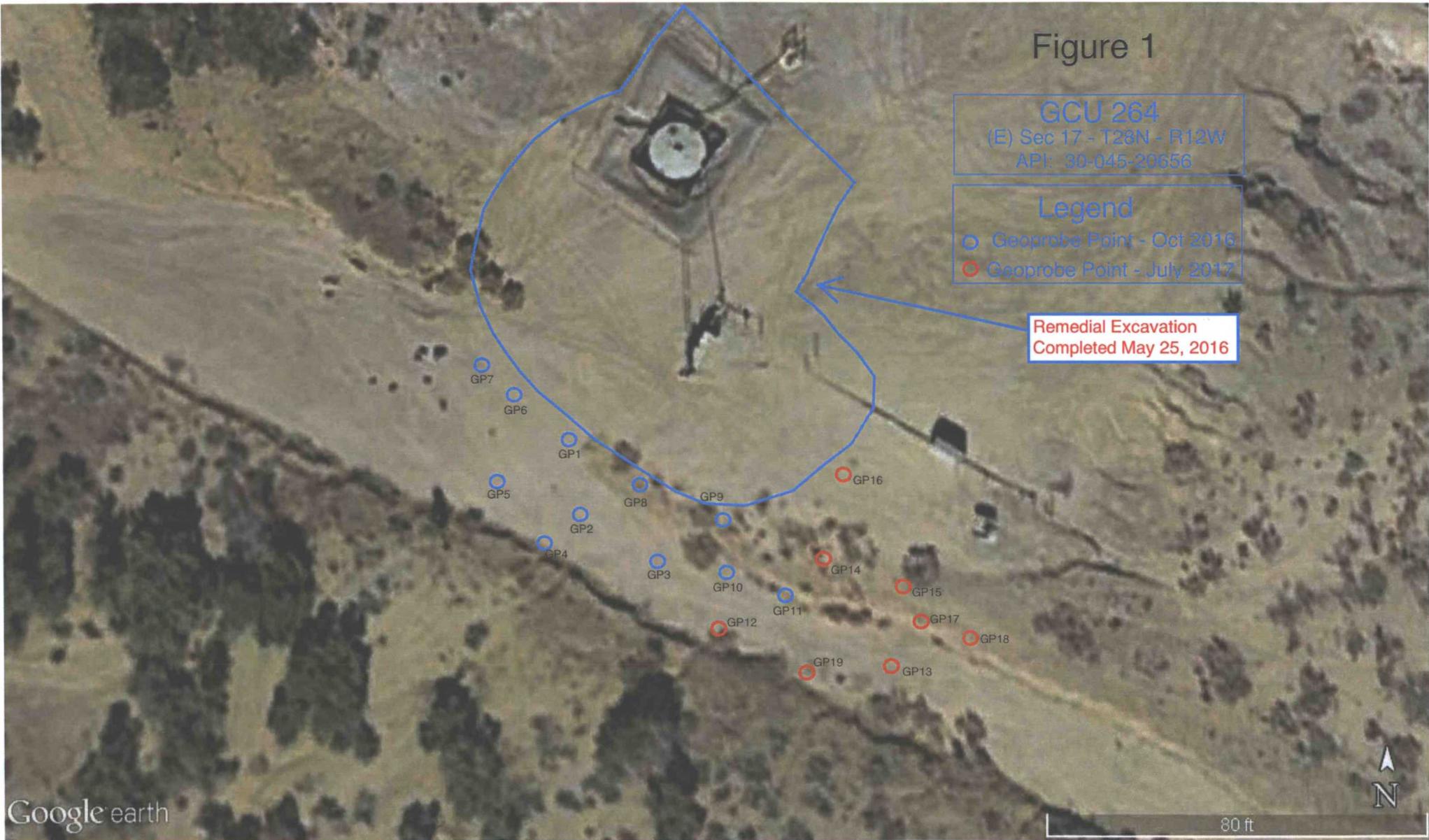


Figure 2

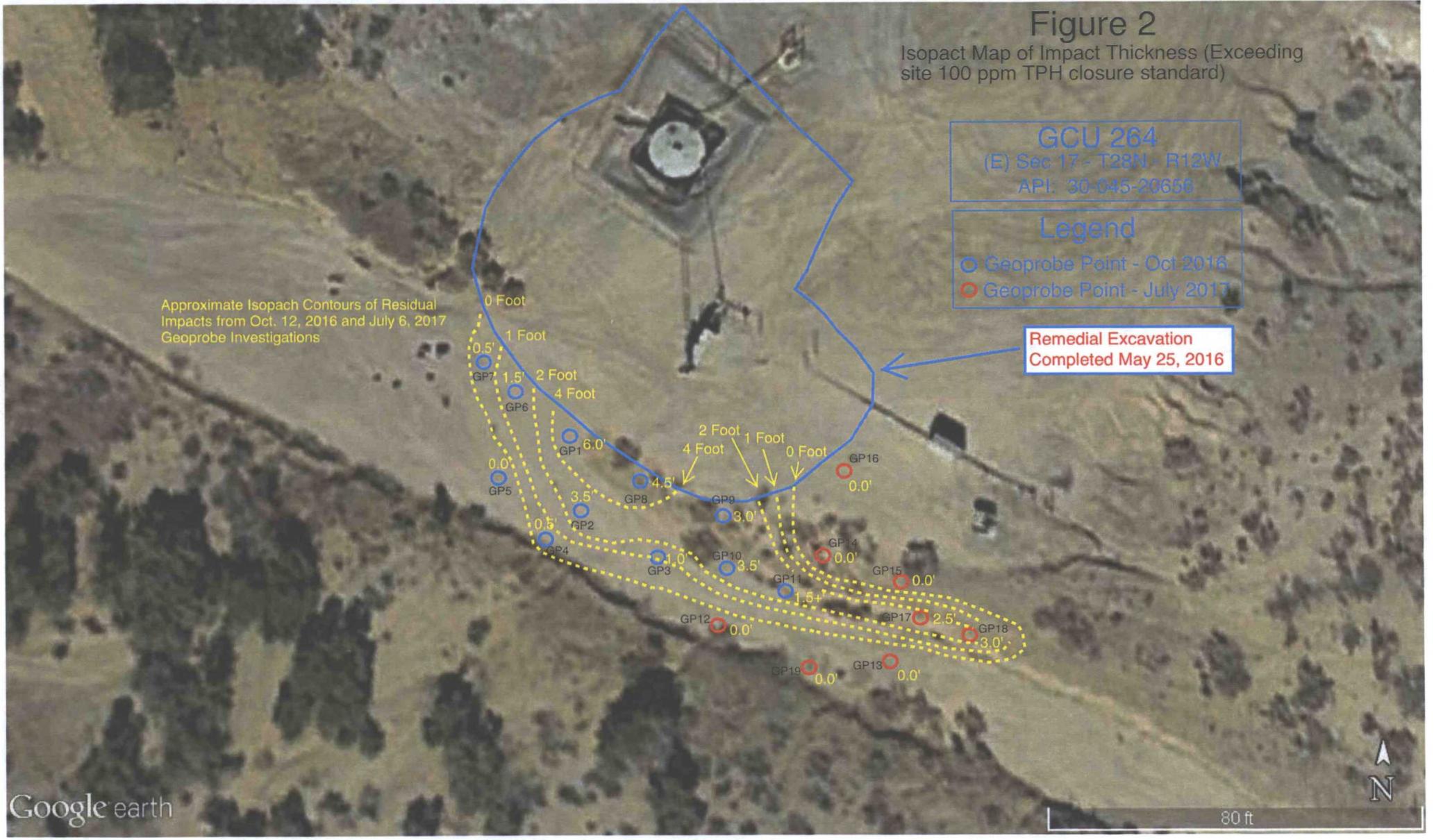
Isopact Map of Impact Thickness (Exceeding site 100 ppm TPH closure standard)

GCU 264
(E) Sec 17 - T28N - R12W
API: 30-045-20656

Legend
● Geoprobe Point - Oct 2016
● Geoprobe Point - July 2017

Remedial Excavation Completed May 25, 2016

Approximate Isopach Contours of Residual Impacts from Oct. 12, 2016 and July 6, 2017 Geoprobe Investigations



Boring Logs

BLAGG ENGINEERING, INC.
 P.O. BOX 87, BLOOMFIELD, NM 87413
 (505) 632-1199

LOCATED 15'
 FROM GP-10

FIELD BORING LOG

BORING ID: GP-12

PROJECT: GCU 264
 CLIENT: BP America Production Co.
 DRILLING CONTRACTOR: Envirodrill
 EQUIPMENT USED: Geoprobe 7720 DT
 DATE START: 7/6/2017 DATE FINISH: 7/6/2017 DRILLER: EC LOGGED BY: JB
 TOTAL DEPTH: 22' CASING TYPE & SIZE: — SLOT SIZE: —
 COMMENTS: Samples collected with 4' Long x 1" diameter pvc sleeves

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	DVM (ppm)	SAMPLE DESCRIPTION
1'	0825	1" sleeve ↓		START
2'				RECOVER 6" Dry Silty SAND, NO/NS
3'				
4'	0830			
5'				
6'				SAA, RECOVER 24", Lite Moisture
7'				
8'	0839			
9'				RECOVER, 44", SAA
10'				
11'				
12'	0842			RECOVER 40", SAA
13'				
14'				
15'				SAA 16"-18"
16'	0847	Lab Sample (15'-16') TPH=ND	2.7	
17'				
18'				18"-19 1/2", Increased Moisture, Red streaks, NO/NS
19'				
20'	0854	Lab Sample (19'-22') 2-pt Comp TPH=15 PPM	3.8	
21'				RECOVER 30", olive Green Shalestone, lite Moisture, NO/NS
22'	0907		1.9	
23'		REFUSAL @ 22'		
24'				
25'				
26'				
27'				
28'				
29'				
30'				

Note: SAA = Same as Above
 NO/NS = No Odor/No Stain

BLAGG ENGINEERING, INC.
 P.O. BOX 87, BLOOMFIELD, NM 87413
 (505) 632-1199

Located 21'
 FROM GP-11

FIELD BORING LOG

BORING ID: GP-13

PROJECT: GCV 204
 CLIENT: BP America Production Co.
 DRILLING CONTRACTOR: Envirodrill
 EQUIPMENT USED: Geoprobe
 DATE START: 7/6/2017 DATE FINISH: 7/6/2017 DRILLER: EC LOGGED BY: JB
 TOTAL DEPTH: 21' CASING TYPE & SIZE: - SLOT SIZE: -
 COMMENTS: Samples collected with 4' Long x 1" diameter pvc sleeves

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	DVM (ppm)	SAMPLE DESCRIPTION
1'	0928	1" sleeve ↓		START
2'				RECOVER 24" Dry Silty SAND, NO/NS
3'				
4'	0932			
5'				RECOVER 29" SAA, Lite Moisture
6'				
7'				
8'	0935			RECOVER 39" SAA
9'				
10'				
11'				RECOVER 40" SAA
12'	0939			
13'				
14'				SAA 16'-19', with increased moisture NO/NS 19'-19 ^{3/4} ' SAA with Red streaks NO/NS
15'				
16'	0943	Lab Sample (15'-16') TPH=ND	5.2	
17'				19 ^{3/4} '-20' Gray Shalestone NO/NS , v lite HC odor
18'				
19'				
20'	0949	Lab Sample (19'-21') TPH=15PPM	24.4	RECOVER 14" olive Green Shalestone, NO/NS
21'	0958		3.7	
22'				
23'				RECOVER @ 21'
24'				
25'				
26'				
27'				
28'				
29'				
30'				

Note: SAA = Same as Above
 NO/NS = No Odor/No Stain

BLAGG ENGINEERING, INC.
 P.O. BOX 87, BLOOMFIELD, NM 87413
 (505) 632-1199

Located
 15' NE of GP-11

FIELD BORING LOG

BORING ID: GP-14

PROJECT: GCV 264
 CLIENT: BP America Production Co.
 DRILLING CONTRACTOR: Envirodrill
 EQUIPMENT USED: Geoprobe
 DATE START: 7/6/2017 DATE FINISH: 7/6/2017 DRILLER: EC LOGGED BY: JB
 TOTAL DEPTH: 23 1/2 CASING TYPE & SIZE: - SLOT SIZE: -
 COMMENTS: Samples collected with 4' Long x 1" diameter pvc sleeves

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	DVM (ppm)	SAMPLE DESCRIPTION
1'	START @ 1014	1" sleeve ↓		START
2'				Recover 14" Dry, silty SAND, NO/NS
3'				
4'	1016			
5'				
6'				Recover 24" SAA, Increased moisture
7'				
8'	1018			
9'				Recover 40" SAA
10'				
11'				
12'	1022			
13'				Recover 30" SAA
14'				
15'				
16'	1026		5.1	SAA 16"-17" 17"-18" like olive Green shales, NO/NS 18"-20" SAA, No stain, like HC odor
17'				
18'			7.5	
19'				SAA, with like Gray streaking
20'	1034		346	
21'				
22'			828	
23'	1045			REFUSAL @ 23 1/2'
24'	1110		15.0	
25'				
26'				
27'				
28'				
29'				
30'				

Note: SAA = Same as Above
 NO/NS = No Odor/No Stain

FIELD BORING LOG

BORING ID: GP-15

PROJECT: GCU 264
CLIENT: BP America Production Co.
DRILLING CONTRACTOR: Envirodrill
EQUIPMENT USED: Geoprobe
DATE START: 7/6/2017 DATE FINISH: 7/6/2017 DRILLER: EC LOGGED BY: JB
TOTAL DEPTH: 24' CASING TYPE & SIZE: - SLOT SIZE: -
COMMENTS: Samples collected with 4' Long x 1" diameter pvc sample sleeves

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	DVM (ppm)	SAMPLE DESCRIPTION
1'	1132	1" sleeve		START
2'				Recover 14" Dry silty SAND, NO/NS
3'				
4'	1135			
5'				
6'				Recover 36" SAA, increased moisture
7'				
8'	1138			
9'				Recover 40" SAA
10'				
11'				
12'	1142			Recover 34" SAA
13'				
14'				
15'				
16'	1149		2.5	SAA 16'-18' 18'-19': Olive Green Shalestone, NO/NS 19'-20': Olive Green Shales thin, No stain, lite HC odor.
17'				
18'			4.6	
19'			11.0	
20'	1153			Olive Green Shalestone, Grey streaky, lite HC odor
21'				
22'			989	
23'			595	
24'	1219			REVERSAL @ 24'
25'				
26'				
27'				
28'				
29'				
30'				

Note: SAA = Same as Above
NO/NS = No Odor/No Stain

FIELD BORING LOG

BORING ID: GP-16

PROJECT: GCW 264
CLIENT: BP America Production Co.
DRILLING CONTRACTOR: Envirodrill
EQUIPMENT USED: Geoprobe
DATE START: 7/6/2017 DATE FINISH: 7/6/2017 DRILLER: EC LOGGED BY: JB
TOTAL DEPTH: 23' CASING TYPE & SIZE: - SLOT SIZE: -
COMMENTS: Samples collected with 4' Long x 1" diameter pvc sleeves

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	DVM (ppm)	SAMPLE DESCRIPTION
1'	1304			STACT
2'				Recover 14" silty sand, dry
3'				
4'	1304			
5'				Recover 36" silty sand, lite moisture, NO/NS
6'				
7'				
8'	1309			Recover 40", SAA
9'				
10'				
11'				SAA 12'-13' 13'-16" Olive Green Shalestone, NO/NS
12'	1314			
13'				
14'				SAA, Except lite HC odor 19'-20' + minor Grey streaking
15'				
16'	1319		2.4	
17'				SAA, minor HC odor + streaking
18'			55.6	
19'			905	
20'	1325			SAA, minor HC odor + streaking
21'			451	
22'			504	
23'	1403			REFUSAL @ 23'
24'				
25'				
26'				
27'				
28'				
29'				
30'				

Note: SAA = Same as Above
NO/NS = No Odor/No Stain

FIELD BORING LOG

BORING ID: GP-17

PROJECT: Geu 264
CLIENT: BP America Production Co.
DRILLING CONTRACTOR: Envirodrill
EQUIPMENT USED: Geoprobe
DATE START: 7/6/2017 DATE FINISH: 7/6/2017 DRILLER: EC LOGGED BY: JB
TOTAL DEPTH: 23 CASING TYPE & SIZE: SLOT SIZE:
COMMENTS: Samples collected with 4' Long x 1" diameter pvc sleeves

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	DVM (ppm)	SAMPLE DESCRIPTION	
1'	1427	1" sleeve		Recover 12" Dry Silty SAND	
2'		↓			
3'					
4'	1431				
5'				Recover 30", SAA, Increased Moisture	
6'					
7'					
8'	1434			Recover 36" SAA	
9'					
10'				SAA, NO/NS	
11'					
12'	1438				
13'		Recover 40"		SAA 16'-19'	
14'					
15'				19'-20' olive Green Shalestone, NO/NS	
16'	1444		2.9		
17'		Recover 40"		Shalestone, gray to black streaking, strong hydrocarbon odor	
18'			Lab Sample 2-pt Comp (17' - 20') TPH=ND		1.6
19'	1451				3.9
20'		Recover 40"		Refusal @ 23'	
21'			Lab Sample 2pt Comp (20.5' - 23') TPH=272 PPM		6.97
22'					
23'	1501		2301		
24'					
25'					
26'					
27'					
28'					
29'					
30'					

Note: SAA = Same as Above
NO/NS = No Odor/No Stain

FIELD BORING LOG

BORING ID: GP-18

PROJECT: GW 264
CLIENT: BP America Production Co.
DRILLING CONTRACTOR: Envirodrill
EQUIPMENT USED: Geoprobe
DATE START: 7/6/2017 DATE FINISH: 7/6/2017 DRILLER: EC LOGGED BY: JB
TOTAL DEPTH: 23 CASING TYPE & SIZE: - SLOT SIZE: -
COMMENTS: Samples collected with 4' Long x 1" diameter pvc sleeves

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	DVM (ppm)	SAMPLE DESCRIPTION
1'	1518	1" sleeve ↓		STAC Recover 12" Dry Silty Sand
2'				
3'				
4'	1522			
5'				
6'				Recover 36" SAA, increased Moisture, NO/NS
7'				
8'	1524			
9'				
10'				Recover 36" SAA
11'				
12'	1528			
13'				
14'				Recover 48" SAA
15'				
16'	1540		1.1	
17'				
18'				Recover 48" SAA
19'				
20'	1540	Lab Sample (2-pt Comp) (19'-22')	2.1	
21'		TPH-590 PPM		SAA 20'-21'
22'		Lab Sample (22'-23')	123	21'-22': SAA Except lite Gray streaks
23'	1550	TPH-553 PPM	46	22'-22½': Black consolidated sand, Lite HC ODOR
24'				22½'-23' Brown/Orange, Possible Sandstone surface
25'				
26'				
27'				
28'				
29'				
30'				

Note: SAA = Same as Above
NO/NS = No Odor/No Stain

FIELD BORING LOG

BORING ID: GP-19

PROJECT: GCU 264
CLIENT: BP America Production Co.
DRILLING CONTRACTOR: EnviroDrill
EQUIPMENT USED: Geoprobe
DATE START: 7/6/2017 DATE FINISH: 7/6/2017 DRILLER: EC LOGGED BY: JB
TOTAL DEPTH: 23' CASING TYPE & SIZE: — SLOT SIZE: —
COMMENTS: Using 5' Rods & Sleeves

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	DVM (ppm)	SAMPLE DESCRIPTION
1'	1640	1" Sleeve ↓		START
2'				Recover 24" Dry silty sand
3'				
4'				
5'	1646			
6'				Recover 40" SAA, Increased moisture
7'				
8'				
10'	1649			Recover 40", SAA
11'				
12'				
13'				
15'	1652		3.6	Recover 40", SAA, NO/NS, Red 1" streak @ 19'
16'				
17'			1.0	
18'		Lab Sample 2-pt Comp (16' - 19') TPH=ND		
20'	1655		3.1	Recover 36", SAA, V. moist @ 22'-23', NO/NS
21'				
22'		Lab Sample 2-pt Comp (21' - 23') TPH=72 PPM	3.2	
23'	1704		1.6	
24'				Retired @ 23'
25'				
26'				
27'				
28'				
29'				
30'				

Note: SAA = Same as Above
NO/NS = No Odor/No Stain

Laboratory Analytical Reports



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

July 24, 2017

Steven Moskal
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: GCU 264

OrderNo.: 1707644

Dear Steven Moskal:

Hall Environmental Analysis Laboratory received 16 sample(s) on 7/11/2017 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-12 (15-16)

Project: GCU 264

Collection Date: 7/6/2017 8:47:00 AM

Lab ID: 1707644-001

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	32	30		mg/Kg	20	7/20/2017 11:19:11 PM	32929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/18/2017 2:18:37 PM	32803
Surr: BFB	93.2	70-130		%Rec	1	7/18/2017 2:18:37 PM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: MAB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/17/2017 2:30:41 PM	32806
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/17/2017 2:30:41 PM	32806
Surr: DNOP	92.7	70-130		%Rec	1	7/17/2017 2:30:41 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.024		mg/Kg	1	7/18/2017 2:18:37 PM	32803
Toluene	ND	0.048		mg/Kg	1	7/18/2017 2:18:37 PM	32803
Ethylbenzene	ND	0.048		mg/Kg	1	7/18/2017 2:18:37 PM	32803
Xylenes, Total	ND	0.095		mg/Kg	1	7/18/2017 2:18:37 PM	32803
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	7/18/2017 2:18:37 PM	32803
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	7/18/2017 2:18:37 PM	32803
Surr: Dibromofluoromethane	101	70-130		%Rec	1	7/18/2017 2:18:37 PM	32803
Surr: Toluene-d8	104	70-130		%Rec	1	7/18/2017 2:18:37 PM	32803

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-12 (2-pt)(19-22)

Project: GCU 264

Collection Date: 7/6/2017 9:07:00 AM

Lab ID: 1707644-002

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							
							Analyst: MRA
Chloride	45	30		mg/Kg	20	7/20/2017 11:56:26 PM	32929
EPA METHOD 8015D MOD: GASOLINE RANGE							
							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/18/2017 2:48:20 PM	32803
Surr: BFB	89.4	70-130		%Rec	1	7/18/2017 2:48:20 PM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
							Analyst: MAB
Diesel Range Organics (DRO)	15	9.6		mg/Kg	1	7/17/2017 3:56:28 PM	32806
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/17/2017 3:56:28 PM	32806
Surr: DNOP	92.6	70-130		%Rec	1	7/17/2017 3:56:28 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST							
							Analyst: AG
Benzene	ND	0.023		mg/Kg	1	7/18/2017 2:48:20 PM	32803
Toluene	ND	0.047		mg/Kg	1	7/18/2017 2:48:20 PM	32803
Ethylbenzene	ND	0.047		mg/Kg	1	7/18/2017 2:48:20 PM	32803
Xylenes, Total	ND	0.094		mg/Kg	1	7/18/2017 2:48:20 PM	32803
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	7/18/2017 2:48:20 PM	32803
Surr: 4-Bromofluorobenzene	97.1	70-130		%Rec	1	7/18/2017 2:48:20 PM	32803
Surr: Dibromofluoromethane	100	70-130		%Rec	1	7/18/2017 2:48:20 PM	32803
Surr: Toluene-d8	106	70-130		%Rec	1	7/18/2017 2:48:20 PM	32803

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-13 (15-16)

Project: GCU 264

Collection Date: 7/6/2017 9:43:00 AM

Lab ID: 1707644-003

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS Analyst: MRA							
Chloride	ND	30		mg/Kg	20	7/21/2017 12:08:50 AM	32929
EPA METHOD 8015D MOD: GASOLINE RANGE Analyst: AG							
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/18/2017 4:17:51 PM	32803
Surr: BFB	94.2	70-130		%Rec	1	7/18/2017 4:17:51 PM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: MAB							
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/17/2017 4:24:52 PM	32806
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/17/2017 4:24:52 PM	32806
Surr: DNOP	94.8	70-130		%Rec	1	7/17/2017 4:24:52 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST Analyst: AG							
Benzene	ND	0.024		mg/Kg	1	7/18/2017 4:17:51 PM	32803
Toluene	ND	0.048		mg/Kg	1	7/18/2017 4:17:51 PM	32803
Ethylbenzene	ND	0.048		mg/Kg	1	7/18/2017 4:17:51 PM	32803
Xylenes, Total	ND	0.097		mg/Kg	1	7/18/2017 4:17:51 PM	32803
Surr: 1,2-Dichloroethane-d4	98.5	70-130		%Rec	1	7/18/2017 4:17:51 PM	32803
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	7/18/2017 4:17:51 PM	32803
Surr: Dibromofluoromethane	102	70-130		%Rec	1	7/18/2017 4:17:51 PM	32803
Surr: Toluene-d8	108	70-130		%Rec	1	7/18/2017 4:17:51 PM	32803

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-13 (2-pt) (19-21)

Project: GCU 264

Collection Date: 7/6/2017 9:58:00 AM

Lab ID: 1707644-004

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	7/21/2017 12:21:15 AM	32929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/18/2017 4:47:41 PM	32803
Surr: BFB	90.9	70-130		%Rec	1	7/18/2017 4:47:41 PM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: MAB
Diesel Range Organics (DRO)	15	9.3		mg/Kg	1	7/17/2017 4:53:21 PM	32806
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/17/2017 4:53:21 PM	32806
Surr: DNOP	93.2	70-130		%Rec	1	7/17/2017 4:53:21 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.025		mg/Kg	1	7/18/2017 4:47:41 PM	32803
Toluene	ND	0.049		mg/Kg	1	7/18/2017 4:47:41 PM	32803
Ethylbenzene	ND	0.049		mg/Kg	1	7/18/2017 4:47:41 PM	32803
Xylenes, Total	ND	0.099		mg/Kg	1	7/18/2017 4:47:41 PM	32803
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	7/18/2017 4:47:41 PM	32803
Surr: 4-Bromofluorobenzene	98.7	70-130		%Rec	1	7/18/2017 4:47:41 PM	32803
Surr: Dibromofluoromethane	101	70-130		%Rec	1	7/18/2017 4:47:41 PM	32803
Surr: Toluene-d8	103	70-130		%Rec	1	7/18/2017 4:47:41 PM	32803

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-14 (3-pt) (19-23)

Project: GCU 264

Collection Date: 7/6/2017 10:45:00 AM

Lab ID: 1707644-005

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	490	30		mg/Kg	20	7/21/2017 12:33:40 AM	32929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	13	4.7		mg/Kg	1	7/18/2017 5:17:33 PM	32803
Surr: BFB	92.4	70-130		%Rec	1	7/18/2017 5:17:33 PM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: MAB
Diesel Range Organics (DRO)	27	9.7		mg/Kg	1	7/17/2017 5:21:58 PM	32806
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/17/2017 5:21:58 PM	32806
Surr: DNOP	93.7	70-130		%Rec	1	7/17/2017 5:21:58 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.024		mg/Kg	1	7/18/2017 5:17:33 PM	32803
Toluene	ND	0.047		mg/Kg	1	7/18/2017 5:17:33 PM	32803
Ethylbenzene	ND	0.047		mg/Kg	1	7/18/2017 5:17:33 PM	32803
Xylenes, Total	ND	0.095		mg/Kg	1	7/18/2017 5:17:33 PM	32803
Surr: 1,2-Dichloroethane-d4	99.9	70-130		%Rec	1	7/18/2017 5:17:33 PM	32803
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	7/18/2017 5:17:33 PM	32803
Surr: Dibromofluoromethane	98.7	70-130		%Rec	1	7/18/2017 5:17:33 PM	32803
Surr: Toluene-d8	109	70-130		%Rec	1	7/18/2017 5:17:33 PM	32803

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-14 (23-23 1/2)

Project: GCU 264

Collection Date: 7/6/2017 11:10:00 AM

Lab ID: 1707644-006

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	940	30		mg/Kg	20	7/21/2017 12:46:04 AM	32929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/18/2017 5:47:25 PM	32803
Surr: BFB	91.0	70-130		%Rec	1	7/18/2017 5:47:25 PM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: MAB
Diesel Range Organics (DRO)	13	9.6		mg/Kg	1	7/17/2017 5:50:17 PM	32806
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/17/2017 5:50:17 PM	32806
Surr: DNOP	95.5	70-130		%Rec	1	7/17/2017 5:50:17 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.023		mg/Kg	1	7/18/2017 5:47:25 PM	32803
Toluene	ND	0.047		mg/Kg	1	7/18/2017 5:47:25 PM	32803
Ethylbenzene	ND	0.047		mg/Kg	1	7/18/2017 5:47:25 PM	32803
Xylenes, Total	ND	0.093		mg/Kg	1	7/18/2017 5:47:25 PM	32803
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%Rec	1	7/18/2017 5:47:25 PM	32803
Surr: 4-Bromofluorobenzene	99.7	70-130		%Rec	1	7/18/2017 5:47:25 PM	32803
Surr: Dibromofluoromethane	101	70-130		%Rec	1	7/18/2017 5:47:25 PM	32803
Surr: Toluene-d8	106	70-130		%Rec	1	7/18/2017 5:47:25 PM	32803

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-15 (2-pt) (20-23)

Project: GCU 264

Collection Date: 7/6/2017 11:53:00 AM

Lab ID: 1707644-007

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							
Chloride	290	30		mg/Kg	20	7/21/2017 12:58:29 AM	32929
Analyst: MRA							
EPA METHOD 8015D MOD: GASOLINE RANGE							
Gasoline Range Organics (GRO)	10	5.0		mg/Kg	1	7/18/2017 6:17:03 PM	32803
Surr: BFB	96.9	70-130		%Rec	1	7/18/2017 6:17:03 PM	32803
Analyst: AG							
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
Diesel Range Organics (DRO)	45	9.5		mg/Kg	1	7/17/2017 6:18:36 PM	32806
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/17/2017 6:18:36 PM	32806
Surr: DNOP	95.3	70-130		%Rec	1	7/17/2017 6:18:36 PM	32806
Analyst: MAB							
EPA METHOD 8260B: VOLATILES SHORT LIST							
Benzene	ND	0.025		mg/Kg	1	7/18/2017 6:17:03 PM	32803
Toluene	ND	0.050		mg/Kg	1	7/18/2017 6:17:03 PM	32803
Ethylbenzene	ND	0.050		mg/Kg	1	7/18/2017 6:17:03 PM	32803
Xylenes, Total	ND	0.099		mg/Kg	1	7/18/2017 6:17:03 PM	32803
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	7/18/2017 6:17:03 PM	32803
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/18/2017 6:17:03 PM	32803
Surr: Dibromofluoromethane	98.3	70-130		%Rec	1	7/18/2017 6:17:03 PM	32803
Surr: Toluene-d8	104	70-130		%Rec	1	7/18/2017 6:17:03 PM	32803
Analyst: AG							

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-15 (23-24)

Project: GCU 264

Collection Date: 7/6/2017 12:10:00 PM

Lab ID: 1707644-008

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	280	30		mg/Kg	20	7/21/2017 1:10:54 AM	32929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	11	4.8		mg/Kg	1	7/18/2017 6:46:36 PM	32803
Surr: BFB	90.9	70-130		%Rec	1	7/18/2017 6:46:36 PM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: MAB
Diesel Range Organics (DRO)	40	9.9		mg/Kg	1	7/17/2017 6:46:36 PM	32806
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/17/2017 6:46:36 PM	32806
Surr: DNOP	89.6	70-130		%Rec	1	7/17/2017 6:46:36 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.024		mg/Kg	1	7/18/2017 6:46:36 PM	32803
Toluene	ND	0.048		mg/Kg	1	7/18/2017 6:46:36 PM	32803
Ethylbenzene	ND	0.048		mg/Kg	1	7/18/2017 6:46:36 PM	32803
Xylenes, Total	ND	0.096		mg/Kg	1	7/18/2017 6:46:36 PM	32803
Surr: 1,2-Dichloroethane-d4	99.9	70-130		%Rec	1	7/18/2017 6:46:36 PM	32803
Surr: 4-Bromofluorobenzene	92.4	70-130		%Rec	1	7/18/2017 6:46:36 PM	32803
Surr: Dibromofluoromethane	102	70-130		%Rec	1	7/18/2017 6:46:36 PM	32803
Surr: Toluene-d8	106	70-130		%Rec	1	7/18/2017 6:46:36 PM	32803

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-16 (3-pt) (17-21)

Project: GCU 264

Collection Date: 7/6/2017 1:25:00 PM

Lab ID: 1707644-009

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS Analyst: MRA							
Chloride	360	30		mg/Kg	20	7/21/2017 1:23:19 AM	32929
EPA METHOD 8015D MOD: GASOLINE RANGE Analyst: AG							
Gasoline Range Organics (GRO)	6.2	4.9		mg/Kg	1	7/18/2017 7:16:12 PM	32803
Surr: BFB	91.3	70-130		%Rec	1	7/18/2017 7:16:12 PM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: MAB							
Diesel Range Organics (DRO)	28	9.8		mg/Kg	1	7/17/2017 7:14:43 PM	32806
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/17/2017 7:14:43 PM	32806
Surr: DNOP	96.1	70-130		%Rec	1	7/17/2017 7:14:43 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST Analyst: AG							
Benzene	ND	0.024		mg/Kg	1	7/18/2017 7:16:12 PM	32803
Toluene	ND	0.049		mg/Kg	1	7/18/2017 7:16:12 PM	32803
Ethylbenzene	ND	0.049		mg/Kg	1	7/18/2017 7:16:12 PM	32803
Xylenes, Total	ND	0.097		mg/Kg	1	7/18/2017 7:16:12 PM	32803
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%Rec	1	7/18/2017 7:16:12 PM	32803
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	1	7/18/2017 7:16:12 PM	32803
Surr: Dibromofluoromethane	96.4	70-130		%Rec	1	7/18/2017 7:16:12 PM	32803
Surr: Toluene-d8	104	70-130		%Rec	1	7/18/2017 7:16:12 PM	32803

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-16 (22-23)

Project: GCU 264

Collection Date: 7/6/2017 2:03:00 PM

Lab ID: 1707644-010

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	470	30		mg/Kg	20	7/21/2017 1:35:43 AM	32929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	20	4.9		mg/Kg	1	7/18/2017 7:45:44 PM	32803
Surr: BFB	98.0	70-130		%Rec	1	7/18/2017 7:45:44 PM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: MAB
Diesel Range Organics (DRO)	37	9.5		mg/Kg	1	7/17/2017 7:42:49 PM	32806
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/17/2017 7:42:49 PM	32806
Surr: DNOP	90.1	70-130		%Rec	1	7/17/2017 7:42:49 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.024		mg/Kg	1	7/18/2017 7:45:44 PM	32803
Toluene	ND	0.049		mg/Kg	1	7/18/2017 7:45:44 PM	32803
Ethylbenzene	ND	0.049		mg/Kg	1	7/18/2017 7:45:44 PM	32803
Xylenes, Total	ND	0.097		mg/Kg	1	7/18/2017 7:45:44 PM	32803
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	7/18/2017 7:45:44 PM	32803
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	7/18/2017 7:45:44 PM	32803
Surr: Dibromofluoromethane	100	70-130		%Rec	1	7/18/2017 7:45:44 PM	32803
Surr: Toluene-d8	106	70-130		%Rec	1	7/18/2017 7:45:44 PM	32803

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-17 (2-pt) (17-20)

Project: GCU 264

Collection Date: 7/6/2017 2:51:00 PM

Lab ID: 1707644-011

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							
Analyst: MRA							
Chloride	330	30		mg/Kg	20	7/21/2017 1:48:08 AM	32929
EPA METHOD 8015D MOD: GASOLINE RANGE							
Analyst: AG							
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/18/2017 11:39:28 PM	32803
Surr: BFB	91.5	70-130		%Rec	1	7/18/2017 11:39:28 PM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
Analyst: MAB							
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/17/2017 8:10:53 PM	32806
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/17/2017 8:10:53 PM	32806
Surr: DNOP	92.9	70-130		%Rec	1	7/17/2017 8:10:53 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST							
Analyst: AG							
Benzene	ND	0.024		mg/Kg	1	7/18/2017 11:39:28 PM	32803
Toluene	ND	0.048		mg/Kg	1	7/18/2017 11:39:28 PM	32803
Ethylbenzene	ND	0.048		mg/Kg	1	7/18/2017 11:39:28 PM	32803
Xylenes, Total	ND	0.097		mg/Kg	1	7/18/2017 11:39:28 PM	32803
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%Rec	1	7/18/2017 11:39:28 PM	32803
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	7/18/2017 11:39:28 PM	32803
Surr: Dibromofluoromethane	97.4	70-130		%Rec	1	7/18/2017 11:39:28 PM	32803
Surr: Toluene-d8	104	70-130		%Rec	1	7/18/2017 11:39:28 PM	32803

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-17 (2-pt) (20 1/2-23)

Project: GCU 264

Collection Date: 7/6/2017 3:01:00 PM

Lab ID: 1707644-012

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							
Chloride	450	30		mg/Kg	20	7/21/2017 2:25:23 AM	32929
EPA METHOD 8015D MOD: GASOLINE RANGE							
Gasoline Range Organics (GRO)	23	4.9		mg/Kg	1	7/19/2017 12:08:26 AM	32803
Surr: BFB	90.9	70-130		%Rec	1	7/19/2017 12:08:26 AM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
Diesel Range Organics (DRO)	170	9.7		mg/Kg	1	7/17/2017 9:07:10 PM	32806
Motor Oil Range Organics (MRO)	79	49		mg/Kg	1	7/17/2017 9:07:10 PM	32806
Surr: DNOP	98.8	70-130		%Rec	1	7/17/2017 9:07:10 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST							
Benzene	ND	0.024		mg/Kg	1	7/19/2017 12:08:26 AM	32803
Toluene	ND	0.049		mg/Kg	1	7/19/2017 12:08:26 AM	32803
Ethylbenzene	ND	0.049		mg/Kg	1	7/19/2017 12:08:26 AM	32803
Xylenes, Total	ND	0.098		mg/Kg	1	7/19/2017 12:08:26 AM	32803
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	7/19/2017 12:08:26 AM	32803
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	7/19/2017 12:08:26 AM	32803
Surr: Dibromofluoromethane	99.3	70-130		%Rec	1	7/19/2017 12:08:26 AM	32803
Surr: Toluene-d8	111	70-130		%Rec	1	7/19/2017 12:08:26 AM	32803

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-18 (2-pt) (19-22)

Project: GCU 264

Collection Date: 7/6/2017 3:40:00 PM

Lab ID: 1707644-013

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	180	30		mg/Kg	20	7/21/2017 10:06:10 AM	32936
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/19/2017 12:37:42 AM	32803
Surr: BFB	101	70-130		%Rec	1	7/19/2017 12:37:42 AM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: MAB
Diesel Range Organics (DRO)	350	9.6		mg/Kg	1	7/17/2017 9:35:16 PM	32806
Motor Oil Range Organics (MRO)	240	48		mg/Kg	1	7/17/2017 9:35:16 PM	32806
Surr: DNOP	94.9	70-130		%Rec	1	7/17/2017 9:35:16 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.025		mg/Kg	1	7/19/2017 12:37:42 AM	32803
Toluene	ND	0.049		mg/Kg	1	7/19/2017 12:37:42 AM	32803
Ethylbenzene	ND	0.049		mg/Kg	1	7/19/2017 12:37:42 AM	32803
Xylenes, Total	ND	0.098		mg/Kg	1	7/19/2017 12:37:42 AM	32803
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	7/19/2017 12:37:42 AM	32803
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	7/19/2017 12:37:42 AM	32803
Surr: Dibromofluoromethane	103	70-130		%Rec	1	7/19/2017 12:37:42 AM	32803
Surr: Toluene-d8	107	70-130		%Rec	1	7/19/2017 12:37:42 AM	32803

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-18 (22-23)

Project: GCU 264

Collection Date: 7/6/2017 3:50:00 PM

Lab ID: 1707644-014

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS Analyst: MRA							
Chloride	200	30		mg/Kg	20	7/21/2017 10:43:24 AM	32936
EPA METHOD 8015D MOD: GASOLINE RANGE Analyst: AG							
Gasoline Range Organics (GRO)	23	4.8		mg/Kg	1	7/19/2017 1:07:06 AM	32803
Surr: BFB	86.3	70-130		%Rec	1	7/19/2017 1:07:06 AM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: MAB							
Diesel Range Organics (DRO)	290	9.4		mg/Kg	1	7/17/2017 10:03:20 PM	32806
Motor Oil Range Organics (MRO)	240	47		mg/Kg	1	7/17/2017 10:03:20 PM	32806
Surr: DNOP	98.7	70-130		%Rec	1	7/17/2017 10:03:20 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST Analyst: AG							
Benzene	ND	0.024		mg/Kg	1	7/19/2017 1:07:06 AM	32803
Toluene	ND	0.048		mg/Kg	1	7/19/2017 1:07:06 AM	32803
Ethylbenzene	ND	0.048		mg/Kg	1	7/19/2017 1:07:06 AM	32803
Xylenes, Total	ND	0.096		mg/Kg	1	7/19/2017 1:07:06 AM	32803
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	7/19/2017 1:07:06 AM	32803
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/19/2017 1:07:06 AM	32803
Surr: Dibromofluoromethane	102	70-130		%Rec	1	7/19/2017 1:07:06 AM	32803
Surr: Toluene-d8	105	70-130		%Rec	1	7/19/2017 1:07:06 AM	32803

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-19 (2-pt) (16-20)

Project: GCU 264

Collection Date: 7/6/2017 4:55:00 PM

Lab ID: 1707644-015

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							
Analyst: MRA							
Chloride	ND	30		mg/Kg	20	7/21/2017 10:55:48 AM	32936
EPA METHOD 8015D MOD: GASOLINE RANGE							
Analyst: AG							
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/19/2017 1:36:23 AM	32803
Surr: BFB	94.6	70-130		%Rec	1	7/19/2017 1:36:23 AM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
Analyst: MAB							
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/17/2017 10:31:15 PM	32806
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/17/2017 10:31:15 PM	32806
Surr: DNOP	89.2	70-130		%Rec	1	7/17/2017 10:31:15 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST							
Analyst: AG							
Benzene	ND	0.025		mg/Kg	1	7/19/2017 1:36:23 AM	32803
Toluene	ND	0.049		mg/Kg	1	7/19/2017 1:36:23 AM	32803
Ethylbenzene	ND	0.049		mg/Kg	1	7/19/2017 1:36:23 AM	32803
Xylenes, Total	ND	0.099		mg/Kg	1	7/19/2017 1:36:23 AM	32803
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%Rec	1	7/19/2017 1:36:23 AM	32803
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	7/19/2017 1:36:23 AM	32803
Surr: Dibromofluoromethane	99.1	70-130		%Rec	1	7/19/2017 1:36:23 AM	32803
Surr: Toluene-d8	104	70-130		%Rec	1	7/19/2017 1:36:23 AM	32803

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

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

Analytical Report

Lab Order 1707644

Date Reported: 7/24/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-19 (2-pt) (21-23)

Project: GCU 264

Collection Date: 7/6/2017 5:04:00 PM

Lab ID: 1707644-016

Matrix: SOIL

Received Date: 7/11/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	7/21/2017 11:08:13 AM	32936
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/19/2017 2:05:34 AM	32803
Surr: BFB	94.5	70-130		%Rec	1	7/19/2017 2:05:34 AM	32803
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: MAB
Diesel Range Organics (DRO)	22	9.8		mg/Kg	1	7/17/2017 10:58:51 PM	32806
Motor Oil Range Organics (MRO)	50	49		mg/Kg	1	7/17/2017 10:58:51 PM	32806
Surr: DNOP	98.0	70-130		%Rec	1	7/17/2017 10:58:51 PM	32806
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.024		mg/Kg	1	7/19/2017 2:05:34 AM	32803
Toluene	ND	0.048		mg/Kg	1	7/19/2017 2:05:34 AM	32803
Ethylbenzene	ND	0.048		mg/Kg	1	7/19/2017 2:05:34 AM	32803
Xylenes, Total	ND	0.096		mg/Kg	1	7/19/2017 2:05:34 AM	32803
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	7/19/2017 2:05:34 AM	32803
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	7/19/2017 2:05:34 AM	32803
Surr: Dibromofluoromethane	100	70-130		%Rec	1	7/19/2017 2:05:34 AM	32803
Surr: Toluene-d8	104	70-130		%Rec	1	7/19/2017 2:05:34 AM	32803

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1707644

24-Jul-17

Client: Blagg Engineering

Project: GCU 264

Sample ID	MB-32929	SampType:	mblk	TestCode:	EPA Method 300.0: Anlons					
Client ID:	PBS	Batch ID:	32929	RunNo:	44377					
Prep Date:	7/20/2017	Analysis Date:	7/20/2017	SeqNo:	1402601	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-32929	SampType:	lcs	TestCode:	EPA Method 300.0: Anlons					
Client ID:	LCSS	Batch ID:	32929	RunNo:	44377					
Prep Date:	7/20/2017	Analysis Date:	7/20/2017	SeqNo:	1402602	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.1	90	110			

Sample ID	MB-32936	SampType:	mblk	TestCode:	EPA Method 300.0: Anlons					
Client ID:	PBS	Batch ID:	32936	RunNo:	44426					
Prep Date:	7/21/2017	Analysis Date:	7/21/2017	SeqNo:	1404232	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-32936	SampType:	lcs	TestCode:	EPA Method 300.0: Anlons					
Client ID:	LCSS	Batch ID:	32936	RunNo:	44426					
Prep Date:	7/21/2017	Analysis Date:	7/21/2017	SeqNo:	1404233	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.7	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1707644

24-Jul-17

Client: Blagg Engineering

Project: GCU 264

Sample ID	LCS-32806	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	32806	RunNo:	44252					
Prep Date:	7/14/2017	Analysis Date:	7/17/2017	SeqNo:	1397581	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.0	73.2	114			
Surr: DNOP	4.6		5.000		91.0	70	130			

Sample ID	MB-32806	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	32806	RunNo:	44252					
Prep Date:	7/14/2017	Analysis Date:	7/17/2017	SeqNo:	1397582	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	9.3		10.00		93.1	70	130			

Sample ID	1707644-001AMS	SampType:	MS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	GP-12 (15-16)	Batch ID:	32806	RunNo:	44251					
Prep Date:	7/14/2017	Analysis Date:	7/17/2017	SeqNo:	1398025	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	9.7	48.36	0	112	55.8	122			
Surr: DNOP	4.8		4.836		99.6	70	130			

Sample ID	1707644-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	GP-12 (15-16)	Batch ID:	32806	RunNo:	44251					
Prep Date:	7/14/2017	Analysis Date:	7/17/2017	SeqNo:	1398026	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	9.2	45.96	0	127	55.8	122	7.65	20	S
Surr: DNOP	4.8		4.596		105	70	130	0	0	

Sample ID	MB-32859	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	32859	RunNo:	44338					
Prep Date:	7/18/2017	Analysis Date:	7/20/2017	SeqNo:	1401060	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.8		10.00		98.0	70	130			

Sample ID	LCS-32859	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	32859	RunNo:	44338					
Prep Date:	7/18/2017	Analysis Date:	7/20/2017	SeqNo:	1401181	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1707644

24-Jul-17

Client: Blagg Engineering

Project: GCU 264

Sample ID	LCS-32859	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	32859	RunNo:	44338					
Prep Date:	7/18/2017	Analysis Date:	7/20/2017	SeqNo:	1401181	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		95.1	70	130			

Sample ID	LCS-32876	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	32876	RunNo:	44338					
Prep Date:	7/19/2017	Analysis Date:	7/20/2017	SeqNo:	1402474	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		91.9	70	130			

Sample ID	MB-32876	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	32876	RunNo:	44338					
Prep Date:	7/19/2017	Analysis Date:	7/20/2017	SeqNo:	1402475	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		101	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1707644

24-Jul-17

Client: Blagg Engineering

Project: GCU 264

Sample ID	mb-32803	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	32803	RunNo:	44302					
Prep Date:	7/14/2017	Analysis Date:	7/18/2017	SeqNo:	1398985	Units:	mg/Kg			
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	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.4	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		99.3	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Sample ID	1707644-001AMS	SampType:	MS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	GP-12 (15-16)	Batch ID:	32803	RunNo:	44302					
Prep Date:	7/14/2017	Analysis Date:	7/18/2017	SeqNo:	1400325	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9785	0	107	61.9	146			
Toluene	1.0	0.049	0.9785	0	105	70	130			
Ethylbenzene	0.93	0.049	0.9785	0	95.0	70	130			
Xylenes, Total	2.7	0.098	2.935	0	92.2	70	130			
Surr: 1,2-Dichloroethane-d4	0.49		0.4892		101	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.4892		97.0	70	130			
Surr: Dibromofluoromethane	0.50		0.4892		102	70	130			
Surr: Toluene-d8	0.52		0.4892		106	70	130			

Sample ID	1707644-001AMSD	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	GP-12 (15-16)	Batch ID:	32803	RunNo:	44302					
Prep Date:	7/14/2017	Analysis Date:	7/18/2017	SeqNo:	1400326	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.023	0.9355	0	101	61.9	146	9.49	20	
Toluene	0.96	0.047	0.9355	0	102	70	130	6.93	20	
Ethylbenzene	0.83	0.047	0.9355	0	89.0	70	130	11.1	0	
Xylenes, Total	2.4	0.094	2.806	0	86.1	70	130	11.3	0	
Surr: 1,2-Dichloroethane-d4	0.46		0.4677		97.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.45		0.4677		96.5	70	130	0	0	
Surr: Dibromofluoromethane	0.44		0.4677		95.0	70	130	0	0	
Surr: Toluene-d8	0.50		0.4677		107	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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1707644

24-Jul-17

Client: Blagg Engineering

Project: GCU 264

Sample ID	ics-32803	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	32803	RunNo:	44302					
Prep Date:	7/14/2017	Analysis Date:	7/18/2017	SeqNo:	1400354	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	118	70	130			
Toluene	1.2	0.050	1.000	0	120	70	130			
Ethylbenzene	1.0	0.050	1.000	0	105	70	130			
Xylenes, Total	3.0	0.10	3.000	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.6	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.2	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.3	70	130			
Surr: Toluene-d8	0.54		0.5000		109	70	130			

Qualifiers:

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- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
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- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1707644

24-Jul-17

Client: Blagg Engineering

Project: GCU 264

Sample ID	mb-32803	SampType:	MBLK	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	32803	RunNo:	44302					
Prep Date:	7/14/2017	Analysis Date:	7/18/2017	SeqNo:	1398988	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	460		500.0		92.4	70	130			

Sample ID	ics-32803	SampType:	LCS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	32803	RunNo:	44302					
Prep Date:	7/14/2017	Analysis Date:	7/18/2017	SeqNo:	1398989	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	122	70	130			
Surr: BFB	470		500.0		93.8	70	130			

Sample ID	1707644-002AMS	SampType:	MS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	GP-12 (2-pt)(19-22)	Batch ID:	32803	RunNo:	44302					
Prep Date:	7/14/2017	Analysis Date:	7/18/2017	SeqNo:	1400299	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.8	23.97	0.9074	114	63.2	128			
Surr: BFB	430		479.4		89.4	70	130			

Sample ID	1707644-002AMSD	SampType:	MSD	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	GP-12 (2-pt)(19-22)	Batch ID:	32803	RunNo:	44302					
Prep Date:	7/14/2017	Analysis Date:	7/18/2017	SeqNo:	1400300	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	24.95	0.9074	104	63.2	128	5.24	20	
Surr: BFB	460		499.0		92.7	70	130	0	0	

Qualifiers:

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



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

Sample Log-In Check List

Client Name: **BLAGG**

Work Order Number: **1707844**

RcptNo: **1**

Received By: **Anne Thorne** 7/11/2017 7:00:00 AM
 Completed By: **Erin Melendrez** 7/13/2017 1:12:25 PM
 Reviewed By: **SKE 07/13/17**

Anne Thorne
U. Melendrez

Chain of Custody

- 1. Custody seals intact on sample bottles? Yes No Not Present
- 2. Is Chain of Custody complete? Yes No Not Present
- 3. How was the sample delivered? Courier

Log In

- 4. Was an attempt made to cool the samples? Yes No NA
- 5. Were all samples received at a temperature of >0° C to 8.0°C Yes No NA
- 6. Sample(s) in proper container(s)? Yes No
- 7. Sufficient sample volume for indicated test(s)? Yes No
- 8. Are samples (except VOA and ONG) properly preserved? Yes No
- 9. Was preservative added to bottles? Yes No NA
- 10. VOA vials have zero headspace? Yes No No VOA Vials
- 11. Were any sample containers received broken? Yes No
- 12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes No
- 13. Are matrices correctly identified on Chain of Custody? Yes No
- 14. Is it clear what analyses were requested? Yes No
- 15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes No

of preserved bottles checked for pH: _____
 (<2 or >12 unless noted)
 Adjusted? _____
 Checked by: _____

Special Handling (if applicable)

- 16. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

18. Cooler Information

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

