

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 363	Facility Type: Natural gas well
Surface Owner: Fee	Mineral Owner: Fee
API No. 3004526883	

LOCATION OF RELEASE

Unit Letter B	Section 26	Township 29N	Range 13W	Feet from the 1,265	North/South Line North	Feet from the 1,805	East/West Line East	County: San Juan
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Latitude 36.7012634° Longitude -108.1725922°

NATURE OF RELEASE

Type of Release: produced water	Volume of Release: 8.7 bbl	Volume Recovered: 7.0 bbl
Source of Release: Failed automation on an above ground tank	Date and Hour of Occurrence: April 2, 2016; unknown	Date and Hour of Discovery: April 2, 2016 12:30 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Water truck driver arrived on location to find the above grade tank overflowing produced water tank leaking into the bermed area. The fluid from the AGT and saturated through the bermed. The fluid in the area was removed. The stained area was sampled and gypsum was raked into the surface

Describe Area Affected and Cleanup Action Taken.* The fluid was removed from the tank and bermed area. Soil was raked in place. Samples were collected and analyzed for BTEX, TPH via 8015 and chlorides. Results determine no hydrocarbon or volatile impacts, only chloride exceeded the closure standard. On August 10, 2016, two 40 lbs. bag of gypsum was applied to the impacted area and was raked in. Attached is a field report and sample results from the initial event in April 2016 and from the subsequent event in August 2016. BP requests no further action is necessary. Final reclamation will be performed during decommissioning of the production well.

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

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Steve Moskal	Approved by Environmental Specialist:	
Title: Field Environmental Coordinator	Approval Date: <u>11/3/2016</u>	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval: <u>NV F1630850920</u>	Attached <input type="checkbox"/>
Date: August 23, 2016	Phone: 505-326-9497	

* Attach Additional Sheets If Necessary

CLIENT: <u>BP</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	API # <u>30-045-26882</u> TANK ID (if applicable): _____
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FIELD REPORT:	(circle one): BGT CONFIRMATION / <u>RELEASE INVESTIGATION</u> / OTHER: <u>@ FIBERGLASS AGT</u>	PAGE #: <u>1</u> of <u>1</u>
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SITE INFORMATION:	SITE NAME: <u>GCU 363</u>	DATE STARTED: <u>4/5/2016</u>
QUAD/UNIT: <u>B SEC: 26 TWP: 29N</u>	RNG: <u>13W</u> PM: <u>NM</u> CNTY: <u>SJ</u> ST: <u>NM</u>	DATE FINISHED: <u>8/10/2016</u>
1/4-1/4 FOOTAGE: <u>1265 FNL x 1805 FEL</u>	LEASE TYPE: <u>FEDERAL / STATE / FEE / INDIAN</u>	ENVIRONMENTAL SPECIALIST(S): <u>JCB</u>
LEASE #: <u>NMSF 078926</u>	PROD. FORMATION: <u>PC</u> CONTRACTOR: <u>—</u>	

REFERENCE POINT:	WELL HEAD (W.H.) GPS COORD.: <u>36.70114 x 108.17223</u>	GL ELEV.: <u>5,722</u>
1) _____	GPS COORD.: _____	DISTANCE/BEARING FROM WH: _____
2) _____	GPS COORD.: _____	DISTANCE/BEARING FROM WH: _____
3) _____	GPS COORD.: _____	DISTANCE/BEARING FROM WH: _____
4) _____	GPS COORD.: _____	DISTANCE/BEARING FROM WH: _____

SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # OR LAB USED: <u>HALL</u>	
1) SAMPLE ID: <u>WATER RELEASE S-PC 6"-9"</u>	SAMPLE DATE: <u>4/5/2016</u> SAMPLE TIME: <u>1103</u> LAB ANALYSIS: <u>TPH/BTEX/CL</u>	Lab Chloride Results <u>7,300 ppm</u>
2) SAMPLE ID: <u>WATER RELEASE S-PC 5"-8"</u>	SAMPLE DATE: <u>8/10/2016</u> SAMPLE TIME: <u>1427</u> LAB ANALYSIS: <u>TPH/BTEX/CL</u>	<u>1,800 ppm</u>
3) SAMPLE ID: _____	SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: <u>(Note: TPH and BTEX test ND on both sample events)</u>	
4) SAMPLE ID: _____	SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____	

SOIL DESCRIPTION:	SOIL TYPE: SAND / <u>SILTY SAND</u> / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER _____	
SOIL COLOR: <u>TAN</u>	PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC	
COHESION (ALL OTHERS): NON COHESIVE / <u>SLIGHTLY COHESIVE</u> / COHESIVE / HIGHLY COHESIVE	DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD	
CONSISTENCY (NON COHESIVE SOILS): LOOSE / <u>FIRM</u> / DENSE / VERY DENSE	HC ODOR DETECTED: YES / <u>NO</u> / EXPLANATION: _____	
MOISTURE: DRY / SLIGHTLY MOIST / MOIST / <u>WET / SATURATED</u> / SUPER SATURATED	ANY AREAS DISPLAYING WETNESS: <u>YES</u> / NO / EXPLANATION: <u>Around Tank</u>	
SAMPLE TYPE: GRAB / <u>COMPOSITE</u> - # OF PTS. <u>5</u>	DISCOLORATION/STAINING OBSERVED: <u>YES</u> / NO / EXPLANATION: <u>WHITE STAIN @ Edges</u>	

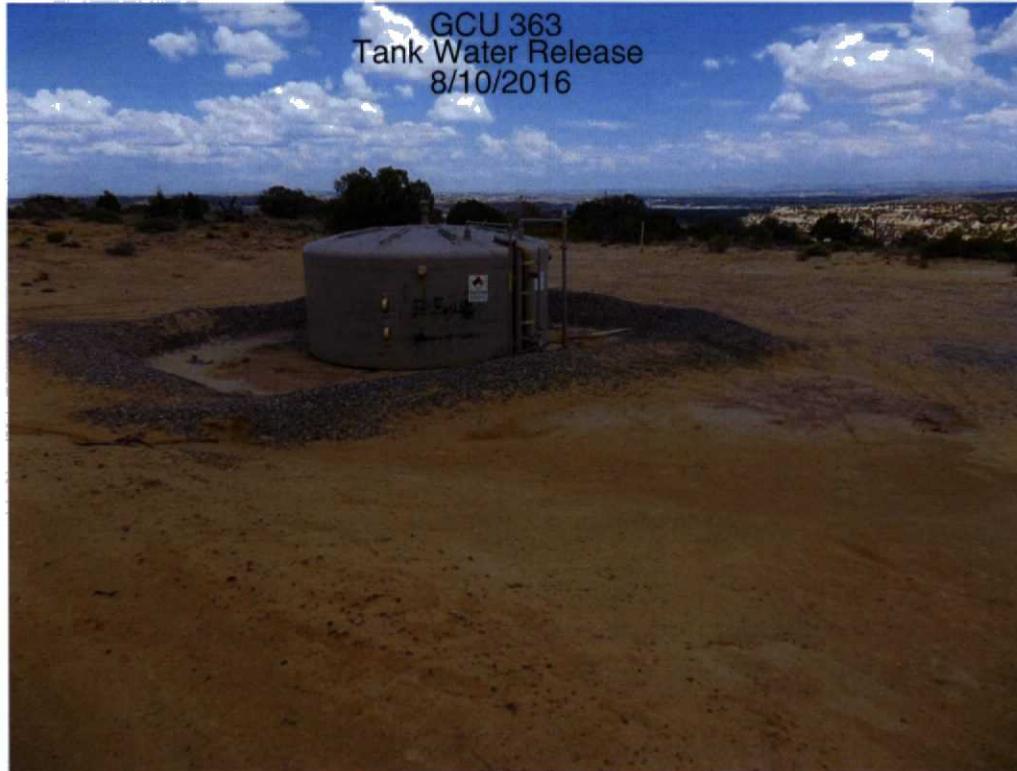
SITE OBSERVATIONS:	LOST INTEGRITY OF EQUIPMENT: YES / <u>NO</u> / EXPLANATION: <u>Tank Integrity Good - OVERFLOW</u>	
APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: <u>YES</u> / NO / EXPLANATION: <u>Wet on 4/5/2016. White stain on 8/10/2016</u>	EQUIPMENT SET OVER RECLAIMED AREA: YES / <u>NO</u> / EXPLANATION: _____	
OTHER: <u>SAMPLE SURFACE SOILS TO DETERMINE IMPACT CONCENTRATIONS ON 4/5/2016</u>	<u>8/10/2016: SITE DRY - Resample Impact AREA then spread 2x40# BAGS Gypsum.</u>	
SOIL IMPACT DIMENSION ESTIMATION: <u>15</u> ft X <u>25</u> ft X <u>0.5</u> ft	EXCAVATION ESTIMATION (Cubic Yards): _____	
DEPTH TO GROUNDWATER: <u>> 100</u>	NEAREST WATER SOURCE: <u>> 1000</u>	NEAREST SURFACE WATER: <u>> 1000</u> NMCCD TPH CLOSURE STD: <u>5,000</u> ppm

SITE SKETCH	BGT Located: <u>off / on site</u>	PLOT PLAN circle: <u>attached</u>	
	<p style="text-align: right;">N ↑</p> <p>OVM CALIB. READ. = _____ ppm RF=0.52</p> <p>OVM CALIB. GAS = _____ ppm</p> <p>TIME = _____ am/pm DATE = _____</p>	MISCELL. NOTES WO: _____ PO #: _____ PK: <u>VMOS6HQFEC</u> PJ #: _____ Permit date(s): _____ OCD Appr. date(s): _____ Tank ID: _____ OVM = Organic Vapor Meter ppm = parts per million BGT Sidewalls Visible: Y / N BGT Sidewalls Visible: Y / N BGT Sidewalls Visible: Y / N Magnetic declination: <u>10° E</u>	

NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; - = APPROX.; W.H. = WELL HEAD; T.B. = TANK BOTTOM; PBGT.L. = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA - NOT APPLICABLE OR NOT AVAILABLE; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM

NOTES: _____ ONSITE: 4/5/2016 + 8/10/2016

GCU 363
Tank Water Release
8/10/2016





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

April 15, 2016

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 632-1199
FAX (505) 632-3903

RE: GCU 363

OrderNo.: 1604278

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/6/2016 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1604278

Date Reported: 4/15/2016

CLIENT: Blagg Engineering

Client Sample ID: Water Release 5-pt @ 6"-9"

Project: GCU 363

Collection Date: 4/5/2016 11:03:00 AM

Lab ID: 1604278-001

Matrix: SOIL

Received Date: 4/6/2016 7:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	7300	300		mg/Kg	200	4/13/2016 3:25:07 PM	24742
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	4/11/2016 6:23:37 PM	24685
Surr: DNOP	75.1	70-130		%Rec	1	4/11/2016 6:23:37 PM	24685
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/11/2016 9:57:52 AM	24697
Surr: BFB	105	80-120		%Rec	1	4/11/2016 9:57:52 AM	24697
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	4/11/2016 9:57:52 AM	24697
Toluene	ND	0.047		mg/Kg	1	4/11/2016 9:57:52 AM	24697
Ethylbenzene	ND	0.047		mg/Kg	1	4/11/2016 9:57:52 AM	24697
Xylenes, Total	ND	0.094		mg/Kg	1	4/11/2016 9:57:52 AM	24697
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	4/11/2016 9:57:52 AM	24697

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
R	RPD outside accepted recovery limits	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#: 1604278
 15-Apr-16

Client: Blagg Engineering
Project: GCU 363

Sample ID MB-24742	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 24742	RunNo: 33467								
Prep Date: 4/11/2016	Analysis Date: 4/11/2016	SeqNo: 1029376	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID LCS-24742	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 24742	RunNo: 33467								
Prep Date: 4/11/2016	Analysis Date: 4/11/2016	SeqNo: 1029377	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	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
- R RPD outside accepted recovery limits
- 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#: 1604278

15-Apr-16

Client: Blagg Engineering
Project: GCU 363

Sample ID	LCS-24685	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	24685	RunNo:	33431					
Prep Date:	4/7/2016	Analysis Date:	4/11/2016	SeqNo:	1028306	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	95.9	65.8	136			
Surr: DNOP	4.1		5.000		82.1	70	130			

Sample ID	MB-24685	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	24685	RunNo:	33431					
Prep Date:	4/7/2016	Analysis Date:	4/11/2016	SeqNo:	1028307	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	7.9		10.00		79.4	70	130			

Sample ID	LCS-24721	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	24721	RunNo:	33451					
Prep Date:	4/11/2016	Analysis Date:	4/12/2016	SeqNo:	1028810	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		5.000		78.3	70	130			

Sample ID	MB-24721	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	24721	RunNo:	33451					
Prep Date:	4/11/2016	Analysis Date:	4/12/2016	SeqNo:	1028811	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.1		10.00		80.7	70	130			

Sample ID	LCS-24759	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	24759	RunNo:	33451					
Prep Date:	4/12/2016	Analysis Date:	4/13/2016	SeqNo:	1030989	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.7		5.000		73.6	70	130			

Sample ID	MB-24759	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	24759	RunNo:	33451					
Prep Date:	4/12/2016	Analysis Date:	4/13/2016	SeqNo:	1030990	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.5		10.00		74.8	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
- R RPD outside accepted recovery limits
- 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#: 1604278

15-Apr-16

Client: Blagg Engineering

Project: GCU 363

Sample ID	MB-24697	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	24697	RunNo:	33445					
Prep Date:	4/8/2016	Analysis Date:	4/11/2016	SeqNo:	1028431	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	1000		1000		104	80	120			

Sample ID	LCS-24697	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	24697	RunNo:	33445					
Prep Date:	4/8/2016	Analysis Date:	4/11/2016	SeqNo:	1028432	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.4	80	120			
Surr: BFB	1100		1000		111	80	120			

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 |
| R RPD outside accepted recovery limits | 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#: 1604278
15-Apr-16

Client: Blagg Engineering
Project: GCU 363

Sample ID	MB-24697	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	24697	RunNo:	33445					
Prep Date:	4/8/2016	Analysis Date:	4/11/2016	SeqNo:	1028486	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: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID	LCS-24697	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	24697	RunNo:	33445					
Prep Date:	4/8/2016	Analysis Date:	4/11/2016	SeqNo:	1028487	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.7	75.3	123			
Toluene	0.89	0.050	1.000	0	89.1	80	124			
Ethylbenzene	0.88	0.050	1.000	0	87.7	82.8	121			
Xylenes, Total	2.6	0.10	3.000	0	87.1	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		114	80	120			

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
- R RPD outside accepted recovery limits
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- RL Reporting Detection Limit
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Hall Environmental Analysis Laboratory
 4901 Hawkins NE
 Albuquerque, NM 87109
 TEL: 505-345-3975 FAX: 505-345-4107
 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **BLAGG** Work Order Number: **1604278** RcptNo: **1**

Received by/date: *AM* *04/06/16*

Logged By: **Ashley Gallegos** 4/6/2016 7:25:00 AM *AG*

Completed By: **Ashley Gallegos** 4/7/2016 11:39:37 AM *AG*

Reviewed By: *JG* *04/07/16*

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

Person Notified: _____ Date: _____
 By Whom: _____ Via: eMail Phone Fax In Person
 Regarding: _____
 Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			



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

August 22, 2016

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 632-1199
FAX (505) 632-3903

RE: GCU 363

OrderNo.: 1608693

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/11/2016 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
 Lab Order 1608693
 Date Reported: 8/22/2016

CLIENT: Blagg Engineering

Client Sample ID: Water Release 5-pt @ 5"-8"

Project: GCU 363

Collection Date: 8/10/2016 2:27:00 PM

Lab ID: 1608693-001

Matrix: SOIL

Received Date: 8/11/2016 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1800	75		mg/Kg	50	8/18/2016 4:34:13 PM	27014
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/16/2016 6:47:00 AM	26952
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/16/2016 6:47:00 AM	26952
Surr: DNOP	91.9	70-130		%Rec	1	8/16/2016 6:47:00 AM	26952
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/16/2016 1:06:29 AM	26953
Surr: BFB	80.1	68.3-144		%Rec	1	8/16/2016 1:06:29 AM	26953
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	8/16/2016 1:06:29 AM	26953
Toluene	ND	0.048		mg/Kg	1	8/16/2016 1:06:29 AM	26953
Ethylbenzene	ND	0.048		mg/Kg	1	8/16/2016 1:06:29 AM	26953
Xylenes, Total	ND	0.096		mg/Kg	1	8/16/2016 1:06:29 AM	26953
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	8/16/2016 1:06:29 AM	26953

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
R	RPD outside accepted recovery limits	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#: 1608693

22-Aug-16

Client: Blagg Engineering

Project: GCU 363

Sample ID MB-27014	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 27014	RunNo: 36535								
Prep Date: 8/16/2016	Analysis Date: 8/16/2016	SeqNo: 1131490	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID LCS-27014	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 27014	RunNo: 36535								
Prep Date: 8/16/2016	Analysis Date: 8/16/2016	SeqNo: 1131491	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.1	90	110			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | 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#: 1608693
 22-Aug-16

Client: Blagg Engineering
Project: GCU 363

Sample ID	LCS-26952	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	26952	RunNo:	36499					
Prep Date:	8/12/2016	Analysis Date:	8/16/2016	SeqNo:	1131127	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	62.6	124			
Surr: DNOP	4.7		5.000		94.7	70	130			

Sample ID	MB-26952	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	26952	RunNo:	36499					
Prep Date:	8/12/2016	Analysis Date:	8/16/2016	SeqNo:	1131128	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.5		10.00		85.3	70	130			

Sample ID	LCS-26990	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	26990	RunNo:	36499					
Prep Date:	8/15/2016	Analysis Date:	8/16/2016	SeqNo:	1131339	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-26990	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	26990	RunNo:	36499					
Prep Date:	8/15/2016	Analysis Date:	8/16/2016	SeqNo:	1131341	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		108	70	130			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | 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#: 1608693

22-Aug-16

Client: Blagg Engineering
Project: GCU 363

Sample ID	MB-26953	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	26953	RunNo:	36508					
Prep Date:	8/12/2016	Analysis Date:	8/15/2016	SeqNo:	1130701	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	760		1000		75.7	68.3	144			

Sample ID	LCS-26953	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	26953	RunNo:	36508					
Prep Date:	8/12/2016	Analysis Date:	8/15/2016	SeqNo:	1130702	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	81.2	80	120			
Surr: BFB	860		1000		85.6	68.3	144			

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 |
| R RPD outside accepted recovery limits | 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#: 1608693
 22-Aug-16

Client: Blagg Engineering
Project: GCU 363

Sample ID MB-26953	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 26953	RunNo: 36508								
Prep Date: 8/12/2016	Analysis Date: 8/15/2016	SeqNo: 1130726	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: 4-Bromofluorobenzene	1.0		1.000		99.8	80	120			

Sample ID LCS-26953	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 26953	RunNo: 36508								
Prep Date: 8/12/2016	Analysis Date: 8/15/2016	SeqNo: 1130727	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	100	75.3	123			
Toluene	1.0	0.050	1.000	0	102	80	124			
Ethylbenzene	0.96	0.050	1.000	0	96.4	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	95.8	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

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
- R RPD outside accepted recovery limits
- 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: **1608693**

RcptNo: **1**

Received by/date:	<u>LM</u>	<u>08/11/16</u>	
Logged By:	Michelle Garcia	8/11/2016 6:45:00 AM	<i>Michelle Garcia</i>
Completed By:	Michelle Garcia	8/11/2016 3:02:52 PM	<i>Michelle Garcia</i>
Reviewed By:	<u>as</u>	<u>08/11/16</u>	

Chain of Custody

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

Log In

- Was an attempt made to cool the samples? Yes No NA
- Were all samples received at a temperature of >0° C to 6.0°C? Yes No NA
- Sample(s) in proper container(s)? Yes No
- Sufficient sample volume for indicated test(s)? Yes No
- Are samples (except VOA and ONG) properly preserved? Yes No
- Was preservative added to bottles? Yes No NA
- VOA vials have zero headspace? Yes No No VOA Vials
- Were any sample containers received broken? Yes No
- Does paperwork match bottle labels? Yes No
- Are matrices correctly identified on Chain of Custody? Yes No
- Is it clear what analyses were requested? Yes No
- Were all holding times able to be met? Yes No

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

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

17. Additional remarks:

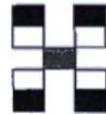
18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			

Chain-of-Custody Record

Client: **BP AMERICA**
Blagg Engineering
 Mailing Address:
 Phone #: **505-320-1183**
 email or Fax#:
 QA/QC Package:
 Standard Level 4 (Full Validation)
 Accreditation
 NELAP Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush _____
 Project Name:
GCU 363
 Project #:
 Project Manager:
J. Blagg
 Sampler: **J. Blagg**
 On Ice: Yes No
 Sample Temperature: **21**



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX + MTBE + THMs (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHLORIDE	Air Bubbles (Y or N)
X	X	X									X	

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
8/10/2016	1427	SOIL	water Release 5-pt @ 5"-8"	4oz x1	COOL	11081693 -001

Date: 8/10/2016 Time: 1710 Relinquished by: **Jill Blagg**
 Date: 8/10/2016 Time: 1710 Received by: **Christine Wale**
 Date: 8/11/2016 Time: 0945 Relinquished by: **Christine Wale**
 Date: 8/11/2016 Time: 0945 Received by: **[Signature]**

Remarks: **Bill BP CONTACT: STEVE MOSKAL VID: VMOSGHQFEC**

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.