

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. 3004526882
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#### 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: 7/3/18	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: August 23, 2016	Phone: 505-326-9497	

\* Attach Additional Sheets If Necessary

NCS 1609733254

NMOCD

JUN 26 2018

DISTRICT III

20

CLIENT: BP

API #: 30-045-26882

TANK ID  
(if applicable):

# FIELD REPORT:

(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:

@ FIBERGLASS AGT

PAGE #: 1 of 1

## SITE INFORMATION:

SITE NAME: GCU 363

QUAD/UNIT: B SEC: 26 TWP: 29N RNG: 13W PM: NM CNTY: SJ ST: NM

1/4 - 1/4 FOOTAGE: 1265 FNL x 1805 FEL

LEASE TYPE: FEDERAL / STATE / FEE / INDIAN

LEASE #: NMSF 078926

PROD. FORMATION: PC

CONTRACTOR: —

DATE STARTED: 4/5/2016

DATE FINISHED: 8/10/2016

ENVIRONMENTAL  
SPECIALIST(S): JCB

## REFERENCE POINT:

WELL HEAD (W.H.) GPS COORD.: 36.70114 x 108.17223

GL ELEV.: 5722

1) _____	GPS COORD.: _____	DISTANCE/BEARING FROM W.H.: _____
2) _____	GPS COORD.: _____	DISTANCE/BEARING FROM W.H.: _____
3) _____	GPS COORD.: _____	DISTANCE/BEARING FROM W.H.: _____
4) _____	GPS COORD.: _____	DISTANCE/BEARING FROM W.H.: _____

## SAMPLING DATA:

CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL

1) SAMPLE ID: WATER RELEASE 5-PT 6"-9"	SAMPLE DATE: 4/5/2016	SAMPLE TIME: 1103	LAB ANALYSIS: TPH/BTEX/CL	Lab Chloride Results: 7,300 ppm	OVM READING (ppm): —
2) SAMPLE ID: WATER RELEASE 5-PT 5"-8"	SAMPLE DATE: 8/10/2016	SAMPLE TIME: 1427	LAB ANALYSIS: TPH/BTEX/CL	1,800 ppm	—
3) SAMPLE ID: _____	SAMPLE DATE: _____	SAMPLE TIME: _____	LAB ANALYSIS: (Note: TPH and BTEX test ND on both sample events)		
4) SAMPLE ID: _____	SAMPLE DATE: _____	SAMPLE TIME: _____	LAB ANALYSIS: _____		

## SOIL DESCRIPTION:

SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER

SOIL COLOR: TAN

COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE

CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE

MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATED

SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. 5

DISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION: WHITE STAIN @ Edges

PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD

HC ODOR DETECTED: YES / NO EXPLANATION: —

ANY AREAS DISPLAYING WETNESS: YES / NO EXPLANATION: Around Tank

## SITE OBSERVATIONS:

LOST INTEGRITY OF EQUIPMENT: YES / NO EXPLANATION: Tank Integrity Good - OVERFLOW

APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: YES / NO EXPLANATION: WET on 4/5/2016. White stain on 8/10/2016

EQUIPMENT SET OVER RECLAIMED AREA: YES / NO EXPLANATION: —

OTHER: SAMPLE SURFACE SOILS TO Determine Impact CONCENTRATIONS ON 4/5/2016

8/10/2016: SITE DRY - Resample Impact AREA then spread 2x40# BAGS GRPSUM.

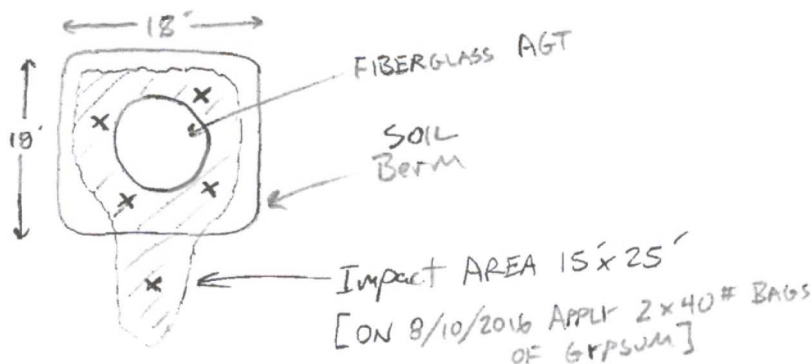
SOIL IMPACT DIMENSION ESTIMATION: 15 ft X 25 ft X 0.5 ft EXCAVATION ESTIMATION (Cubic Yards): —

DEPTH TO GROUNDWATER: > 100 NEAREST WATER SOURCE: > 1000 NEAREST SURFACE WATER: > 1000 NMOCOD TPH CLOSURE STD: 5,000 ppm

## SITE SKETCH

BGT Located: off / on site

PLOT PLAN circle: attached



X = Composite Sample Points

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; PBGTL = 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

OVM CALIB. READ. = \_\_\_\_\_ ppm RF = 0.52  
OVM CALIB. GAS = \_\_\_\_\_ ppm  
TIME: \_\_\_\_\_ am/pm DATE: \_\_\_\_\_

## MISCELL. NOTES

WO: —

PO #: —

PK: VMOS6HQFEC

PJ #: —

Permit date(s): —

OCD Appr. date(s): —

Tank ID OVM = Organic Vapor Meter

ppm = parts per million

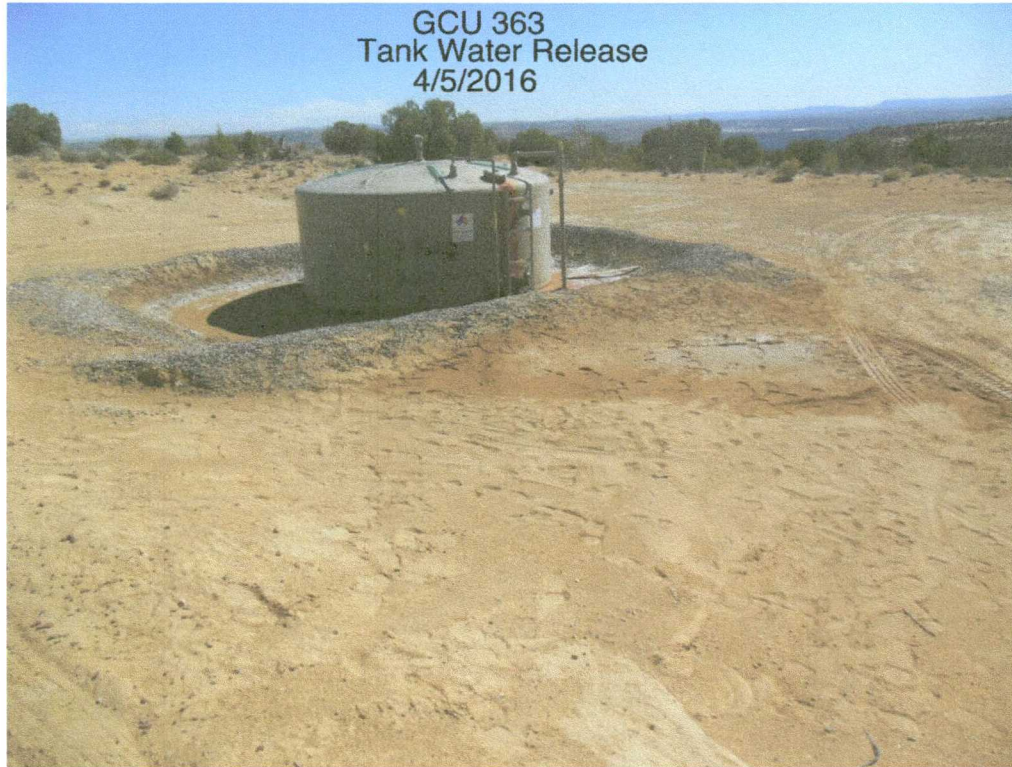
BGT Sidewalls Visible: Y / N

BGT Sidewalls Visible: Y / N

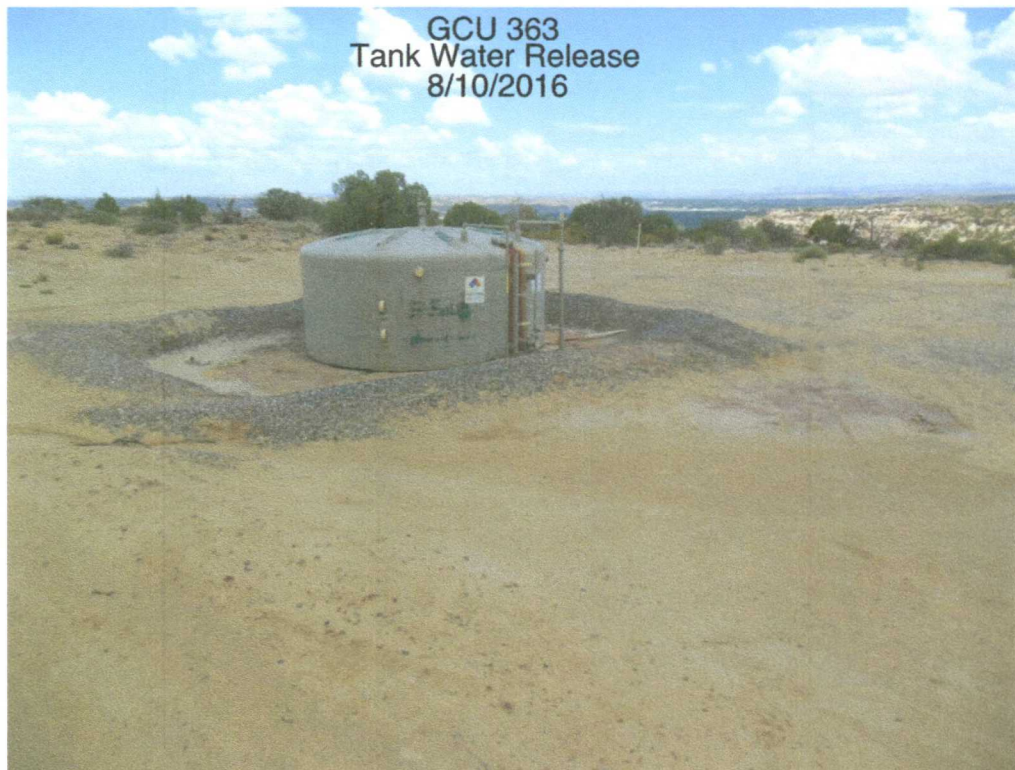
BGT Sidewalls Visible: Y / N

Magnetic declination: 10° E

GCU 363  
Tank Water Release  
4/5/2016



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](http://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](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1604278

Date Reported: 4/15/2016

CLIENT: Blagg Engineering

Project: GCU 363

Lab ID: 1604278-001

Matrix: SOIL

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

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

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: LGT
Chloride	7300	300		mg/Kg	200	4/13/2016 3:25:07 PM	24742
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							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
<b>EPA METHOD 8021B: VOLATILES</b>							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.	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	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.  
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 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  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

## Sample Log-In Check List

Client Name: **BLAGG**

Work Order Number: **1604278**

RcptNo: 1

Received by/date:

Logged By: **Ashley Gallegos**

4/6/2016 7:25 00 AM

Completed By: **Ashley Gallegos**

4/7/2016 11:39:37 AM

Reviewed By:

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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			

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.



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

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](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report**Lab Order **1608693**Date Reported: **8/22/2016****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Blagg Engineering**Project:** GCU 363**Lab ID:** 1608693-001**Matrix:** SOIL**Client Sample ID:** Water Release 5-pt @ 5"-8"**Collection Date:** 8/10/2016 2:27:00 PM**Received Date:** 8/11/2016 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	1800	75		mg/Kg	50	8/18/2016 4:34:13 PM	27014
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
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.

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

22-Aug-16

Client: Blagg Engineering

Project: GCU 363

Sample ID	<b>MB-26953</b>		SampType:	<b>MBLK</b>		TestCode:	<b>EPA Method 8021B: Volatiles</b>			
Client ID:	<b>PBS</b>		Batch ID:	<b>26953</b>		RunNo:	<b>36508</b>			
Prep Date:	<b>8/12/2016</b>		Analysis Date:	<b>8/15/2016</b>		SeqNo:	<b>1130726</b>	Units:	<b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	80	120			

Sample ID	<b>LCS-26953</b>		SampType:	<b>LCS</b>		TestCode:	<b>EPA Method 8021B: Volatiles</b>			
Client ID:	<b>LCSS</b>		Batch ID:	<b>26953</b>		RunNo:	<b>36508</b>			
Prep Date:	<b>8/12/2016</b>		Analysis Date:	<b>8/15/2016</b>		SeqNo:	<b>1130727</b>	Units:	<b>mg/Kg</b>	
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

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P Sample pH Not In Range  
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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: 1608693

RcptNo: 1

Received by/date: LM 08/11/16

Logged By: Michelle Garcia 8/11/2016 6:45:00 AM

*Michelle Garcia*

Completed By: Michelle Garcia 8/11/2016 3:02:52 PM

*Michelle Garcia*

Reviewed By: *aj* 08/11/16

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			

Chain-of-Custody Record		Turn-Around Time:
Client: <u>BP AMERICA</u>	<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush _____
<u>BAGB Engineering</u>	Project Name: <u>GCU 363</u>	
Mailing Address: _____	Project #: _____	
Phone #: <u>505-320-1183</u>	Project Manager: <u>J. BLAGG</u>	
email or Fax#: _____	QA/QC Package:	
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Level 4 (Full Validation)	
Accreditation	Sampler: <u>J. BLAGG</u>	
<input type="checkbox"/> NELAP	<input type="checkbox"/> Other _____	
<input type="checkbox"/> EDD (Type) _____	On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Sample Temperature: <u>21</u>	

☒ Standard      ☐ Rush

GCU 363

Project #:

Project Manager:

J. Blagg

Sampler: J., BlAGG

On Ice: ☒ Yes ☐ No

Sample Temperature: 20

[illegible]

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/10/2016	1710	Jill Bogg	Christine Wale	3/10/16	1710
Date:	Time:	Relinquished by:	Received by:	Date	Time
3/10/16	2046	Christine Wale	[Signature]	03/11/16	0945

Remarks: Bill BP  
CONTACT: STEVE MOSKAL  
VID: VM086HQFEC

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.