

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

JAN 20 2017

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: Riddle C LS 003A	Facility Type: Natural gas well
Surface Owner: Federal	Mineral Owner: Federal
API No. 3004522450	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: San Juan
F	29	31N	09W	1,500	North	1,800	West	

Latitude 36.872138° Longitude -107.806329°

NATURE OF RELEASE

Type of Release: none	Volume of Release: unknown	Volume Recovered: N/A
Source of Release: below grade tank - 95 bbl	Date and Hour of Occurrence: none	Date and Hour of Discovery: none
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input 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.* Sampling of the soil beneath the BGT was done during removal. Soil analysis resulted with BTEX and chloride below BGT closure standards. TPH exceeded the BGT closure standard, but remained below the spill and release guidelines for a site ranking of 10. Field reports and laboratory results are attached.		
Describe Area Affected and Cleanup Action Taken.* No action necessary. Final laboratory analysis determined no remedial action is required.		
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>2/1/2017</u>	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: December 12, 2016	Phone: 505-326-9497	<u>NVE1703235219</u>

* Attach Additional Sheets If Necessary

CLIENT: BP	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	API #: 3004522450
		TANK ID (if applicable): B

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

PAGE #: **1** of **1**

SITE INFORMATION:	SITE NAME: RIDDLE C LS # 3A	DATE STARTED: 10/13/16
QUAD/UNIT: F SEC: 29 TWP: 31N RNG: 9W PM: NM CNTY: SJ ST: NM		DATE FINISHED:
1/4 - 1/4 FOOTAGE: 1,500'N / 1,800'W SE/NW LEASE TYPE: <input checked="" type="checkbox"/> FEDERAL / <input type="checkbox"/> STATE / <input type="checkbox"/> FEE / <input type="checkbox"/> INDIAN		ENVIRONMENTAL SPECIALIST(S): NJV
LEASE #: SF078319A PROD. FORMATION: MV CONTRACTOR: BP - A. SALAZAR		

REFERENCE POINT:	WELL HEAD (W.H.) GPS COORD.: 36.87241 X 107.80634	GL ELEV.: 6,290'
1) 95 BGT (SW/DB) - B	GPS COORD.: 36.872138 X 107.806329	DISTANCE/BEARING FROM W.H.: 92', S5W
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	OVM READING (ppm)
1) SAMPLE ID: 5PC - TB @ 5' (95)	SAMPLE DATE: 10/13/16 SAMPLE TIME: 1405 LAB ANALYSIS: 8015B/8021B/300.0 (CI)	NA
2) SAMPLE ID: GRAB @ 8' - (beneath 95 BGT)	SAMPLE DATE: 10/19/16 SAMPLE TIME: 1350 LAB ANALYSIS: 8015B	NA
3) SAMPLE ID:	SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS:	
4) SAMPLE ID:	SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS:	

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

SOIL COLOR: **MODERATE TO DARK YELLOWISH BROWN**

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

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

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

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

HC ODOR DETECTED: YES NO EXPLANATION -

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

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

ANY AREAS DISPLAYING WETNESS: YES NO EXPLANATION -

DISCOLORATION/STAINING OBSERVED: YES NO EXPLANATION -

SITE OBSERVATIONS: LOST INTEGRITY OF EQUIPMENT: YES NO EXPLANATION -

APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: YES NO EXPLANATION:

EQUIPMENT SET OVER RECLAIMED AREA: YES / NO EXPLANATION - **105 BBL SHALLOW LOW PROFILE ABOVE-GRADE TANK TO BE SET ATOP BGT LOCATION.**

OTHER: **CONFIRMATION SAMPLE EXCEEDED BGT PERMIT CLOSURE STANDARD FOR TPH. COLLECTED GRAB SAMPLE AT NORTHERN END & BENEATH NEWLY INSTALLED ABOVE-GRADE TANK BY ADVANCING HAND AUGER DIAGONALLY. NMOCD REP. NOT PRESENT TO WITNESS CONFIRMATION SAMPLING.**

SOIL IMPACT DIMENSION ESTIMATION: **NA** ft. X **NA** ft. X **NA** ft. EXCAVATION ESTIMATION (Cubic Yards): **NA**

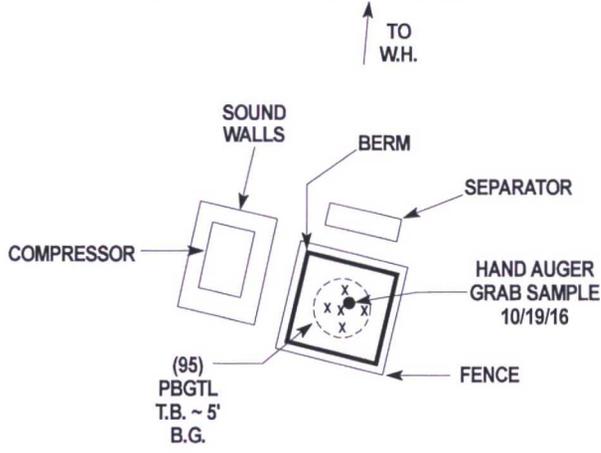
DEPTH TO GROUNDWATER: **<100'** NEAREST WATER SOURCE: **>1,000'** NEAREST SURFACE WATER: **<1,000'** NMOCD TPH CLOSURE STD: **100** ppm

SITE SKETCH BGT Located : off / on site PLOT PLAN circle: **attached**

OVM CALIB. READ. = **NA** ppm RF=0.52

OVM CALIB. GAS = **NA** ppm

TIME: **NA** am/pm DATE: **NA**



MISCELL. NOTES

WO:

REF #: **P - 694**

VID: **VHIXONEVB2**

PJ #:

Permit date(s): **06/02/10**

OCD Appr. date(s): **07/06/16**

Tank ID	OVM = Organic Vapor Meter ppm = parts per million	
B	BGT Sidewalls Visible: Y / <input checked="" type="checkbox"/> N	
	BGT Sidewalls Visible: Y / N	
	BGT Sidewalls Visible: Y / N	

Magnetic declination: **10° E**

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.

Analytical Report

Lab Order 1610685

Date Reported: 10/17/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 5PC-TB@5'(95)-B

Project: Riddle C LS 3A

Collection Date: 10/13/2016 2:05:00 PM

Lab ID: 1610685-002

Matrix: MEOH (SOIL)

Received Date: 10/14/2016 7:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	10/14/2016 12:04:43 PM	28074
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	110	9.8		mg/Kg	1	10/14/2016 12:58:34 PM	28064
Motor Oil Range Organics (MRO)	200	49		mg/Kg	1	10/14/2016 12:58:34 PM	28064
Surr: DNOP	118	70-130		%Rec	1	10/14/2016 12:58:34 PM	28064
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	10/14/2016 1:09:07 PM	28056
Surr: BFB	86.0	68.3-144		%Rec	1	10/14/2016 1:09:07 PM	28056
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	10/14/2016 1:09:07 PM	28056
Toluene	ND	0.035		mg/Kg	1	10/14/2016 1:09:07 PM	28056
Ethylbenzene	ND	0.035		mg/Kg	1	10/14/2016 1:09:07 PM	28056
Xylenes, Total	ND	0.070		mg/Kg	1	10/14/2016 1:09:07 PM	28056
Surr: 4-Bromofluorobenzene	93.2	80-120		%Rec	1	10/14/2016 1:09:07 PM	28056

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

Chain-of-Custody Record

Client: **BLAGG ENGR. / BP AMERICA**

Mailing Address: **P.O. BOX 87
BLOOMFIELD, NM 87413**

Phone #: **(505) 632-1199**

Email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation:
 NELAP Other _____

EDD (Type) _____

Turn-Around Time: **SAME DAY**

Standard Rush

Project Name: **RIDDLE C LS # 3A**

Project #:

Project Manager: **NELSON VELEZ**

Sampler: **NELSON VELEZ** *NV*

On Ice: Yes No

Sample Temperature: *2.0*



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	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 (soil - 300.0 / water - 300.1)	Grab sample	5 pt. composite sample	Air Bubbles (Y or N)	
1/13/16	1415	SOIL	5PC-TB @ 5' (95) - A	4 oz. - 1	Cool	1610655	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
1/13/16	1405	SOIL	5PC-TB @ 5' (95) - B	4 oz. - 1	Cool	1610655	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Date: 1/13/16	Time: 1518	Relinquished by: <i>[Signature]</i>	Received by: <i>Christa Wacker</i>	Date: 1/13/16	Time: 1518
Date: 1/13/16	Time: 2040	Relinquished by: <i>[Signature]</i>	Received by: <i>[Signature]</i>	Date: 10/14/16	Time: 0715

Remarks: **BILL DIRECTLY TO BP USING THE CIRCLED CONTACT WITH CORRESPONDING VID & REFERENCE # WHEN APPLICABLE;**

VID: **Vance Hixon VHIXONEVB2** **Steve Moskal VMOS6HQFEC** **John Ritchie VRITCJWFEC**

Reference # **P - 694**

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 noted on the analytical report.

Analytical Report

Lab Order 1610B03

Date Reported: 10/26/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GRAB @ 8' -(beneath 95 BGT)

Project: RIDDLE C LS 3A

Collection Date: 10/19/2016 1:50:00 PM

Lab ID: 1610B03-001

Matrix: SOIL

Received Date: 10/21/2016 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/25/2016 11:21:46 AM	28237
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/25/2016 11:21:46 AM	28237
Surr: DNOP	89.3	70-130		%Rec	1	10/25/2016 11:21:46 AM	28237
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/25/2016 10:59:06 PM	28236
Surr: BFB	86.7	68.3-144		%Rec	1	10/25/2016 10:59:06 PM	28236

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#: 1610B03

26-Oct-16

Client: Blagg Engineering
Project: RIDDLE C LS 3A

Sample ID	LCS-28237	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	28237	RunNo:	38183					
Prep Date:	10/24/2016	Analysis Date:	10/25/2016	SeqNo:	1191886	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	95.6	62.6	124			
Surr: DNOP	4.7		5.000		93.3	70	130			

Sample ID	MB-28237	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	28237	RunNo:	38183					
Prep Date:	10/24/2016	Analysis Date:	10/25/2016	SeqNo:	1191887	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	11		10.00		109	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#: 1610685

17-Oct-16

Client: Blagg Engineering

Project: Riddle C LS 3A

Sample ID	MB-28074	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	28074	RunNo:	37955					
Prep Date:	10/14/2016	Analysis Date:	10/14/2016	SeqNo:	1183509	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-28074	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	28074	RunNo:	37955					
Prep Date:	10/14/2016	Analysis Date:	10/14/2016	SeqNo:	1183510	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	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#: 1610685

17-Oct-16

Client: Blagg Engineering

Project: Riddle C LS 3A

Sample ID	LCS-28064	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	28064	RunNo:	37940					
Prep Date:	10/14/2016	Analysis Date:	10/14/2016	SeqNo:	1182487	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	101	62.6	124			
Surr: DNOP	4.6		5.000		91.3	70	130			

Sample ID	MB-28064	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	28064	RunNo:	37940					
Prep Date:	10/14/2016	Analysis Date:	10/14/2016	SeqNo:	1182488	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	10		10.00		99.7	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#: 1610685

17-Oct-16

Client: Blagg Engineering

Project: Riddle C LS 3A

Sample ID MB-28056	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 28056	RunNo: 37953								
Prep Date: 10/13/2016	Analysis Date: 10/14/2016	SeqNo: 1183188	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	990		1000		98.6	68.3	144			

Sample ID LCS-28056	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 28056	RunNo: 37953								
Prep Date: 10/13/2016	Analysis Date: 10/14/2016	SeqNo: 1183189	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	119	74.6	123			
Surr: BFB	1100		1000		108	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#: 1610685

17-Oct-16

Client: Blagg Engineering

Project: Riddle C LS 3A

Sample ID	MB-28056	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	28056	RunNo:	37953					
Prep Date:	10/13/2016	Analysis Date:	10/14/2016	SeqNo:	1183226	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	1.2		1.000		117	80	120			

Sample ID	LCS-28056	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	28056	RunNo:	37953					
Prep Date:	10/13/2016	Analysis Date:	10/14/2016	SeqNo:	1183228	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	106	75.2	115			
Toluene	1.0	0.050	1.000	0	103	80.7	112			
Ethylbenzene	1.0	0.050	1.000	0	101	78.9	117			
Xylenes, Total	3.0	0.10	3.000	0	100	79.2	115			
Surr: 4-Bromofluorobenzene	1.3		1.000		127	80	120			S

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 |



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: **1610685**

RcptNo: **1**

Received by/date: *[Signature]* *10/14/16*

Logged By: **Lindsay Mangin** 10/14/2016 7:15:00 AM *[Signature]*

Completed By: **Lindsay Mangin** 10/14/2016 7:58:45 AM *[Signature]*

Reviewed By: *[Signature]* *10/14/16*

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	2.0	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1610B03
26-Oct-16

Client: Blagg Engineering
Project: RIDDLE C LS 3A

Sample ID	MB-28236	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	28236	RunNo:	38202					
Prep Date:	10/24/2016	Analysis Date:	10/25/2016	SeqNo:	1192363	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	850		1000		85.0	68.3	144			

Sample ID	LCS-28236	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	28236	RunNo:	38202					
Prep Date:	10/24/2016	Analysis Date:	10/25/2016	SeqNo:	1192364	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.8	74.6	123			
Surr: BFB	950		1000		95.4	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 |



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: **1610B03**

RcptNo: **1**

Received by/date:

LC

10/21/16

Logged By: **Lindsay Mangin**

10/21/2016 8:15:00 AM

[Signature]

Completed By: **Lindsay Mangin**

10/21/2016 2:27:12 PM

[Signature]

Reviewed By:

AJ

10/24/16

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			

505-947-9900

BP AMERICA PRODUCTION COMPANY

RIDDLE C LS 003A

API 3004522450 LEASE NMSF078319A

1500 FNL 1800 FWL (F) SEC 29 T31N R9W

SAN JUAN COUNTY ELEV 6290

LAT 36° 52' 20.784"

LONG 107° 45' 22.788"

