

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

Form C-141  
Revised August 8, 2011

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

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

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: BP America	Contact: Steve Moskal
Address: 380 Airport Road, Durango, CO 81303	Telephone No.: 505-330-9179
Facility Name: Hughes B 005A	Facility Type: Natural gas well
Surface Owner: Federal	Mineral Owner: Federal
API No. 3004526837	

**LOCATION OF RELEASE**

Unit Letter E	Section 21	Township 29N	Range 08W	Feet from the 1,745	North/South Line North	Feet from the 1,085	East/West Line West	County: San Juan
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Latitude 36.71344° Longitude -107.68626°

**NATURE OF RELEASE**

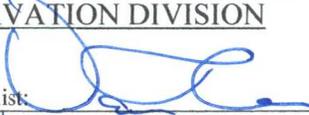
Type of Release: produced water	Volume of Release: 7.5 bbl	Volume Recovered: 7.0 bbl
Source of Release: Suspected integrity failure of below ground tank	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: September 20, 2016; 1:30 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <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. <b>NMOCD</b>	

**JUL 26 2018**

Describe Cause of Problem and Remedial Action Taken.\* During maintenance to remove sloughed soil surrounding below grade tank in a cellar, it was noted that the BGT was leaking. BP suspects that the tank had not been leaking but occurred during the cellar maintenance activity. Suspected leaking fluids from the tank were immediately collected with the vac-truck.

Describe Area Affected and Cleanup Action Taken.\* The fluid was removed from the tank. The tank was removed following 19.15.17. The sampling for BTEX, TPH via 8015 and chloride beneath both BGTs on site indicated no further action was required. Attached are the field report for each BGTs closed on the location.

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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Steve Moskal	Approved by Environmental Specialist: 	
Title: Field Environmental Coordinator	Approval Date: <u>7/30/2018</u>	Expiration Date:
E-mail Address: steven.moskal@bpx.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: July 25, 2018	Phone: 505-330-9179	

\* Attach Additional Sheets If Necessary

**NCS 1634053860**

CLIENT: <b>BP</b>	<b>BLAGG ENGINEERING, INC.</b> P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	API #: <b>3004526837</b> TANK ID (if applicable): <b>A</b>
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<b>FIELD REPORT:</b> (circle one): <input checked="" type="checkbox"/> BGT CONFIRMATION / <input type="checkbox"/> RELEASE INVESTIGATION / <input type="checkbox"/> OTHER:	PAGE #: <b>1</b> of <b>1</b>
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SITE INFORMATION:	SITE NAME: <b>HUGHES B # 5A</b>	DATE STARTED: <b>10/14/16</b>
QUAD/UNIT: <b>E</b> SEC: <b>21</b> TWP: <b>29N</b> RNG: <b>8W</b> PM: <b>NM</b> CNTY: <b>SJ</b> ST: <b>NM</b>		DATE FINISHED: _____
1/4 -1/4/FOOTAGE: <b>1,745'N / 1,085'W SW/NW</b> LEASE TYPE: <input checked="" type="checkbox"/> FEDERAL / <input type="checkbox"/> STATE / <input type="checkbox"/> FEE / <input type="checkbox"/> INDIAN		ENVIRONMENTAL SPECIALIST(S): <b>NJV</b>
LEASE #: <b>SF078046</b> PROD. FORMATION: <b>MV</b> CONTRACTOR: <b>STRIKE MBF - C. PARKS</b>		

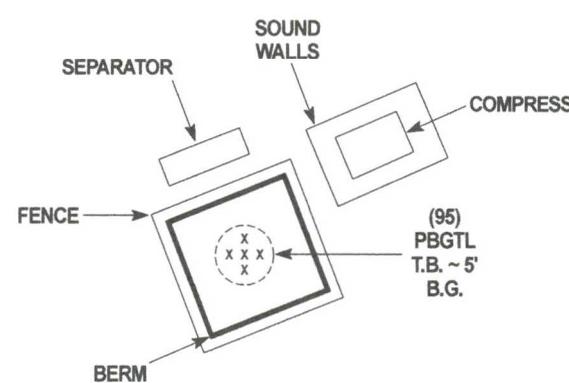
REFERENCE POINT:	WELL HEAD (W.H.) GPS COORD.: <b>36.71317 X 107.68628</b>	GL ELEV.: <b>6,449'</b>
1) <b>95 BGT (DW/DB) - A</b>	GPS COORD.: <b>36.71349 X 107.68606</b>	DISTANCE/BEARING FROM W.H.: <b>134', S32W</b>
2) _____	GPS COORD.: _____	DISTANCE/BEARING FROM W.H.: _____
3) _____	GPS COORD.: _____	DISTANCE/BEARING FROM W.H.: _____
4) _____	GPS COORD.: _____	DISTANCE/BEARING FROM W.H.: _____

SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # OR LAB USED: <b>HALL</b>	OVM READING (ppm)
1) SAMPLE ID: <b>5PC - TB @ 5' (95) - A</b>	SAMPLE DATE: <b>10/14/16</b> SAMPLE TIME: <b>0925</b> LAB ANALYSIS: <b>8015B/8021B/300.0 (CI)</b>	<b>NA</b>
2) SAMPLE ID: _____	SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____	
3) SAMPLE ID: _____	SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____	
4) SAMPLE ID: _____	SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____	

SOIL DESCRIPTION:	SOIL TYPE: <input checked="" type="checkbox"/> SAND / <input checked="" type="checkbox"/> SILTY SAND / <input type="checkbox"/> SILT / <input type="checkbox"/> SILTY CLAY / <input type="checkbox"/> CLAY / <input type="checkbox"/> GRAVEL / OTHER _____
SOIL COLOR: <b>MODERATE TO DARK YELLOWISH BROWN</b>	PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC
COHESION (ALL OTHERS): <input checked="" type="checkbox"/> NON COHESIVE / <input type="checkbox"/> SLIGHTLY COHESIVE / <input type="checkbox"/> COHESIVE / <input type="checkbox"/> HIGHLY COHESIVE	DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD
CONSISTENCY (NON COHESIVE SOILS): <input checked="" type="checkbox"/> LOOSE / <input checked="" type="checkbox"/> FIRM / <input type="checkbox"/> DENSE / <input type="checkbox"/> VERY DENSE	HC ODOR DETECTED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EXPLANATION - _____
MOISTURE: DRY / <input checked="" type="checkbox"/> SLIGHTLY MOIST / <input type="checkbox"/> MOIST / <input type="checkbox"/> WET / <input type="checkbox"/> SATURATED / <input type="checkbox"/> SUPER SATURATED	ANY AREAS DISPLAYING WETNESS: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EXPLANATION - _____
SAMPLE TYPE: GRAB / <input checked="" type="checkbox"/> COMPOSITE # OF PTS. <b>5</b>	
DISCOLORATION/STAINING OBSERVED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EXPLANATION - _____	

SITE OBSERVATIONS:	LOST INTEGRITY OF EQUIPMENT: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EXPLANATION - _____
APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EXPLANATION: _____	
EQUIPMENT SET OVER RECLAIMED AREA: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EXPLANATION - <b>105 BBL SHALLOW LOW PROFILE ABOVE-GRADE TANK TO BE SET ATOP BGT LOCATION.</b>	
OTHER: <b>NMOC D OR BLM REP. NOT PRESENT TO WITNESS CONFIRMATION SAMPLING.</b>	

SOIL IMPACT DIMENSION ESTIMATION: <b>NA</b> ft. X <b>NA</b> ft. X <b>NA</b> ft.	EXCAVATION ESTIMATION (Cubic Yards): <b>NA</b>
DEPTH TO GROUNDWATER: <b>&gt;100'</b> NEAREST WATER SOURCE: <b>&gt;1,000'</b> NEAREST SURFACE WATER: <b>&lt;200'</b>	NMOC D TPH CLOSURE STD: <b>100</b> ppm

<b>SITE SKETCH</b> BGT Located : off / <input checked="" type="checkbox"/> on site      PLOT PLAN circle: <input checked="" type="checkbox"/> attached  <p style="text-align: right;"><b>X - S.P.D.</b></p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>OVM CALIB. READ. = <b>NA</b> ppm</td> <td>RF=0.52</td> </tr> <tr> <td>OVM CALIB. GAS = <b>NA</b> ppm</td> <td></td> </tr> <tr> <td>TIME: <b>NA</b> am/pm</td> <td>DATE: <b>NA</b></td> </tr> </table> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left;">MISCELL. NOTES</th> </tr> <tr> <td>WO:</td> <td></td> </tr> <tr> <td>REF #:</td> <td><b>P - 741</b></td> </tr> <tr> <td>VID:</td> <td><b>VHIXONEVB2</b></td> </tr> <tr> <td>PJ #:</td> <td></td> </tr> <tr> <td>Permit date(s):</td> <td><b>06/09/10</b></td> </tr> <tr> <td>OCD Appr. date(s):</td> <td><b>10/13/16</b></td> </tr> <tr> <td>Tank ID</td> <td>OVM = Organic Vapor Meter ppm = parts per million</td> </tr> <tr> <td><b>A</b></td> <td>BGT Sidewalls Visible: Y / <input checked="" type="checkbox"/> N</td> </tr> <tr> <td></td> <td>BGT Sidewalls Visible: Y / N</td> </tr> <tr> <td></td> <td>BGT Sidewalls Visible: Y / N</td> </tr> <tr> <td colspan="2">Magnetic declination: <b>10° E</b></td> </tr> </table>	OVM CALIB. READ. = <b>NA</b> ppm	RF=0.52	OVM CALIB. GAS = <b>NA</b> ppm		TIME: <b>NA</b> am/pm	DATE: <b>NA</b>	MISCELL. NOTES		WO:		REF #:	<b>P - 741</b>	VID:	<b>VHIXONEVB2</b>	PJ #:		Permit date(s):	<b>06/09/10</b>	OCD Appr. date(s):	<b>10/13/16</b>	Tank ID	OVM = Organic Vapor Meter ppm = parts per million	<b>A</b>	BGT Sidewalls Visible: Y / <input checked="" type="checkbox"/> N		BGT Sidewalls Visible: Y / N		BGT Sidewalls Visible: Y / N	Magnetic declination: <b>10° E</b>	
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TIME: <b>NA</b> am/pm	DATE: <b>NA</b>																														
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Magnetic declination: <b>10° E</b>																															

NOTES: <b>GOOGLE EARTH IMAGERY DATE: 3/16/2016.</b>	ONSITE: <b>10/14/16</b>
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**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Blagg Engineering

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

Project: Hughes B 5A

Collection Date: 10/14/2016 9:25:00 AM

Lab ID: 1610736-001

Matrix: MEOH (SOIL)

Received Date: 10/15/2016 1:15:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	10/17/2016 12:33:39 PM	28108
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/17/2016 10:47:08 AM	28084
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/17/2016 10:47:08 AM	28084
Surr: DNOP	99.4	70-130		%Rec	1	10/17/2016 10:47:08 AM	28084
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	10/17/2016 11:13:47 AM	28066
Surr: BFB	86.1	68.3-144		%Rec	1	10/17/2016 11:13:47 AM	28066
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	10/17/2016 11:13:47 AM	28066
Toluene	ND	0.039		mg/Kg	1	10/17/2016 11:13:47 AM	28066
Ethylbenzene	ND	0.039		mg/Kg	1	10/17/2016 11:13:47 AM	28066
Xylenes, Total	ND	0.079		mg/Kg	1	10/17/2016 11:13:47 AM	28066
Surr: 4-Bromofluorobenzene	97.4	80-120		%Rec	1	10/17/2016 11:13:47 AM	28066

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

# 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:  
 Standard       Rush **SAME DAY**

Project Name:  
**HUGHES B # 5A**

Project #:

Project Manager:  
**NELSON VELEZ**

Sampler: **NELSON VELEZ** *NV*

On Ice:  Yes       No

Sample Temperature: *4/4*



## 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 + 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 <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	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)
10/14/16	0925	SOIL	5PC - TB @ 5' (95) - A	4 oz. - 1	Cool	1610736 -001	✓	✓									✓		✓	
<del>10/14/16</del>	<del>0915</del>	<del>SOIL</del>	<del>5PC TB @ 6' (21) - B</del>	<del>4 oz. - 1</del>	<del>Cool</del>	<del>-002</del>	<del>✓</del>	<del>✓</del>									<del>✓</del>		<del>✓</del>	

Date: <i>10/14/16</i>	Time: <i>1810</i>	Relinquished by: <i>[Signature]</i>	Received by: <i>Christine Weber</i>	Date: <i>10/14/16</i>	Time: <i>1810</i>
Date: <i>10/14/16</i>	Time: <i>2014</i>	Relinquished by: <i>Christine Weber</i>	Received by: <i>[Signature]</i>	Date: <i>10/15/16</i>	Time: <i>1315</i>

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

VID: **Vance Hixon**  
**VHIXONEVB2**

Reference #: **P - 741**

**Steve Moskal**  
**VMOS6HQFEC**

**John Ritchie**  
**VRITCJWFEC**

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.

**QC SUMMARY REPORT**  
**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1610736  
 18-Oct-16

**Client:** Blagg Engineering  
**Project:** Hughes B 5A

Sample ID <b>MB-28108</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>28108</b>	RunNo: <b>38011</b>								
Prep Date: <b>10/17/2016</b>	Analysis Date: <b>10/17/2016</b>	SeqNo: <b>1184848</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID <b>LCS-28108</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>28108</b>	RunNo: <b>38011</b>								
Prep Date: <b>10/17/2016</b>	Analysis Date: <b>10/17/2016</b>	SeqNo: <b>1184849</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	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#: 1610736  
18-Oct-16

Client: Blagg Engineering  
Project: Hughes B 5A

Sample ID	<b>LCS-28084</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>28084</b>	RunNo:	<b>37981</b>					
Prep Date:	<b>10/17/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1183848</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	62.6	124			
Surr: DNOP	4.6		5.000		91.8	70	130			

Sample ID	<b>MB-28084</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>28084</b>	RunNo:	<b>37981</b>					
Prep Date:	<b>10/17/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1183849</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.8	70	130			

Sample ID	<b>MB-28076</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>28076</b>	RunNo:	<b>37981</b>					
Prep Date:	<b>10/14/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1184449</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.6		10.00		85.7	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#: 1610736  
18-Oct-16

Client: Blagg Engineering  
Project: Hughes B 5A

Sample ID	<b>MB-28066</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>28066</b>	RunNo:	<b>37988</b>					
Prep Date:	<b>10/14/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1184548</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	810		1000		81.3	68.3	144			

Sample ID	<b>LCS-28066</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>28066</b>	RunNo:	<b>37988</b>					
Prep Date:	<b>10/14/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1184549</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	74.6	123			
Surr: BFB	890		1000		89.4	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#: 1610736  
 18-Oct-16

**Client:** Blagg Engineering  
**Project:** Hughes B 5A

Sample ID <b>MB-28066</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>28066</b>	RunNo: <b>37988</b>								
Prep Date: <b>10/14/2016</b>	Analysis Date: <b>10/17/2016</b>	SeqNo: <b>1184561</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	0.95		1.000		94.8	80	120			

Sample ID <b>LCS-28066</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>28066</b>	RunNo: <b>37988</b>								
Prep Date: <b>10/14/2016</b>	Analysis Date: <b>10/17/2016</b>	SeqNo: <b>1184562</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.6	75.2	115			
Toluene	0.96	0.050	1.000	0	96.1	80.7	112			
Ethylbenzene	0.99	0.050	1.000	0	98.6	78.9	117			
Xylenes, Total	2.9	0.10	3.000	0	97.9	79.2	115			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	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: **1610736**

RcptNo: **1**

Received by/date:

*[Signature]* 10/15/16

Logged By: **Lindsay Mangin**

10/15/2016 1:15:00 PM

*[Signature]*

Completed By: **Lindsay Mangin**

10/15/2016 2:10:50 PM

*[Signature]*

Reviewed By:

*[Signature]* 10/17/16

### 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:	<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	4.4	Good	Yes			

CLIENT: <b>BP</b>	<b>BLAGG ENGINEERING, INC.</b> P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	API #: <b>3004526837</b> TANK ID (if applicable): <b>B</b>
-------------------	---	---

<b>FIELD REPORT:</b> (circle one): <input checked="" type="checkbox"/> BGT CONFIRMATION / <input type="checkbox"/> RELEASE INVESTIGATION / <input type="checkbox"/> OTHER:	PAGE #: <b>1</b> of <b>1</b>
--	------------------------------

SITE INFORMATION:	SITE NAME: <b>HUGHES B # 5A</b>	DATE STARTED: <b>10/14/16</b>
QUAD/UNIT: <b>E</b> SEC: <b>21</b> TWP: <b>29N</b> RNG: <b>8W</b> PM: <b>NM</b> CNTY: <b>SJ</b> ST: <b>NM</b>		DATE FINISHED:
1/4 -1/4/FOOTAGE: <b>1,745'N / 1,085'W</b> <b>SW/NW</b> LEASE TYPE: <input checked="" type="checkbox"/> FEDERAL / <input type="checkbox"/> STATE / <input type="checkbox"/> FEE / <input type="checkbox"/> INDIAN		ENVIRONMENTAL SPECIALIST(S): <b>NJV</b>
LEASE #: <b>SF078046</b> PROD. FORMATION: <b>MV</b> CONTRACTOR: <b>STRIKE MBF - C. PARKS</b>		

REFERENCE POINT:	WELL HEAD (W.H.) GPS COORD.: <b>36.71317 X 107.68628</b>	GL ELEV.: <b>6,449'</b>
1) <b>21 BGT (SW/DB) - B</b>	GPS COORD.: <b>36.71325 X 107.68591</b>	DISTANCE/BEARING FROM W.H.: <b>101', S32E</b>
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: <b>HALL</b>	OVM READING (ppm)
1) SAMPLE ID: <b>5PC - TB @ 6' (21) - B</b>	SAMPLE DATE: <b>10/14/16</b> SAMPLE TIME: <b>0915</b> LAB ANALYSIS: <b>8015B/8021B/300.0 (CI)</b>	<b>NA</b>
2) SAMPLE ID: _____	SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____	_____
3) SAMPLE ID: _____	SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____	_____
4) SAMPLE ID: _____	SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____	_____

SOIL DESCRIPTION:	SOIL TYPE: <input checked="" type="checkbox"/> SAND / <input checked="" type="checkbox"/> SILTY SAND / <input type="checkbox"/> SILT / <input type="checkbox"/> SILTY CLAY / <input type="checkbox"/> CLAY / <input type="checkbox"/> GRAVEL / OTHER _____
SOIL COLOR: <b>DARK YELLOWISH ORANGE</b>	PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC
COHESION (ALL OTHERS): <input checked="" type="checkbox"/> NON COHESIVE / <input type="checkbox"/> SLIGHTLY COHESIVE / <input type="checkbox"/> COHESIVE / <input type="checkbox"/> HIGHLY COHESIVE	DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD
CONSISTENCY (NON COHESIVE SOILS): <input checked="" type="checkbox"/> LOOSE / <input checked="" type="checkbox"/> FIRM / <input type="checkbox"/> DENSE / <input type="checkbox"/> VERY DENSE	HC ODOR DETECTED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EXPLANATION - _____
MOISTURE: DRY / <input checked="" type="checkbox"/> SLIGHTLY MOIST / <input type="checkbox"/> MOIST / <input type="checkbox"/> WET / <input type="checkbox"/> SATURATED / <input type="checkbox"/> SUPER SATURATED	ANY AREAS DISPLAYING WETNESS: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EXPLANATION - _____
SAMPLE TYPE: GRAB / <input checked="" type="checkbox"/> COMPOSITE # OF PTS. <b>5</b>	DISCOLORATION/STAINING OBSERVED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EXPLANATION - _____

SITE OBSERVATIONS:	LOST INTEGRITY OF EQUIPMENT: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EXPLANATION - _____
APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EXPLANATION: _____	
EQUIPMENT SET OVER RECLAIMED AREA: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EXPLANATION - _____	
OTHER: <b>NMOCED OR BLM REP. NOT PRESENT TO WITNESS CONFIRMATION SAMPLING.</b>	

SOIL IMPACT DIMENSION ESTIMATION: <b>NA</b> ft. X <b>NA</b> ft. X <b>NA</b> ft.	EXCAVATION ESTIMATION (Cubic Yards): <b>NA</b>
DEPTH TO GROUNDWATER: <b>&gt;100'</b> NEAREST WATER SOURCE: <b>&gt;1,000'</b> NEAREST SURFACE WATER: <b>&lt;1,000'</b>	NMOCED TPH CLOSURE STD: <b>1,000</b> ppm

SITE SKETCH	BGT Located : off / <input checked="" type="checkbox"/> on site	PLOT PLAN circle: <input checked="" type="checkbox"/> attached	OVM CALIB. READ. = <b>NA</b> ppm RF=0.52
			OVM CALIB. GAS = <b>NA</b> ppm
			TIME: <b>NA</b> am/pm DATE: <b>NA</b>

MISCELL. NOTES

WO: \_\_\_\_\_

REF #: **P - 741**

VID: **VHIXONEVB2**

PJ #: \_\_\_\_\_

Permit date(s): **06/09/10**

OCD Appr. date(s): **10/13/16**

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

Magnetic declination: **10° E**

X - S.P.D.

NOTES: <b>GOOGLE EARTH IMAGERY DATE: 3/16/2016.</b>	ONSITE: <b>10/14/16</b>
---	-------------------------

Analytical Report

Lab Order 1610736

Date Reported: 10/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 5PC-TB @ 6'(21)-B

Project: Hughes B 5A

Collection Date: 10/14/2016 9:15:00 AM

Lab ID: 1610736-002

Matrix: MEOH (SOIL)

Received Date: 10/15/2016 1:15:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	10/17/2016 1:10:52 PM	28108
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/17/2016 11:08:37 AM	28084
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/17/2016 11:08:37 AM	28084
Surr: DNOP	97.4	70-130		%Rec	1	10/17/2016 11:08:37 AM	28084
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	10/17/2016 11:37:18 AM	28066
Surr: BFB	83.4	68.3-144		%Rec	1	10/17/2016 11:37:18 AM	28066
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.021		mg/Kg	1	10/17/2016 11:37:18 AM	28066
Toluene	ND	0.042		mg/Kg	1	10/17/2016 11:37:18 AM	28066
Ethylbenzene	ND	0.042		mg/Kg	1	10/17/2016 11:37:18 AM	28066
Xylenes, Total	ND	0.083		mg/Kg	1	10/17/2016 11:37:18 AM	28066
Surr: 4-Bromofluorobenzene	95.9	80-120		%Rec	1	10/17/2016 11:37:18 AM	28066

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

# 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:  
 Standard       Rush **SAME DAY**

Project Name:  
**HUGHES B # 5A**

Project #:

Project Manager:  
**NELSON VELEZ**

Sampler: **NELSON VELEZ** *NV*

On Ice:  Yes       No

Sample Temperature: *2/4*



## 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 + TPH'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 <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	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)
<del>10/14/16</del>	<del>0925</del>	<del>SOIL</del>	<del>5PC - TB @ 5' (05) - A</del>	<del>4 oz. - 1</del>	<del>Cool</del>	<del>1610736</del>	<del>✓</del>	<del>✓</del>	<del>✓</del>									<del>✓</del>	<del>✓</del>		
10/14/16	0915	SOIL	5PC - TB @ 6' (21) - B	4 oz. - 1	Cool	-002	✓	✓	✓									✓		✓	

Date: *10/14/16* Time: *1810* Relinquished by: *[Signature]* Received by: *[Signature]* Date Time: *10/14/16 1810*

Date: *10/14/16* Time: *2014* Relinquished by: *[Signature]* Received by: *[Signature]* Date Time: *10/15/16 1315*

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

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

Reference # **P - 741**

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.

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1610736  
18-Oct-16

**Client:** Blagg Engineering  
**Project:** Hughes B 5A

Sample ID	<b>MB-28108</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>28108</b>	RunNo:	<b>38011</b>					
Prep Date:	<b>10/17/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1184848</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	<b>LCS-28108</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>28108</b>	RunNo:	<b>38011</b>					
Prep Date:	<b>10/17/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1184849</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	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#: 1610736

18-Oct-16

Client: Blagg Engineering

Project: Hughes B 5A

Sample ID	<b>LCS-28084</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>28084</b>	RunNo:	<b>37981</b>					
Prep Date:	<b>10/17/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1183848</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	62.6	124			
Surr: DNOP	4.6		5.000		91.8	70	130			

Sample ID	<b>MB-28084</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>28084</b>	RunNo:	<b>37981</b>					
Prep Date:	<b>10/17/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1183849</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.8	70	130			

Sample ID	<b>MB-28076</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>28076</b>	RunNo:	<b>37981</b>					
Prep Date:	<b>10/14/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1184449</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.6		10.00		85.7	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#: 1610736

18-Oct-16

Client: Blagg Engineering

Project: Hughes B 5A

Sample ID	<b>MB-28066</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>28066</b>	RunNo:	<b>37988</b>					
Prep Date:	<b>10/14/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1184548</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	810		1000		81.3	68.3	144			

Sample ID	<b>LCS-28066</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>28066</b>	RunNo:	<b>37988</b>					
Prep Date:	<b>10/14/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1184549</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	74.6	123			
Surr: BFB	890		1000		89.4	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#: 1610736  
 18-Oct-16

Client: Blagg Engineering  
 Project: Hughes B 5A

Sample ID	<b>MB-28066</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>28066</b>	RunNo:	<b>37988</b>					
Prep Date:	<b>10/14/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1184561</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	0.95		1.000		94.8	80	120			

Sample ID	<b>LCS-28066</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>28066</b>	RunNo:	<b>37988</b>					
Prep Date:	<b>10/14/2016</b>	Analysis Date:	<b>10/17/2016</b>	SeqNo:	<b>1184562</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.6	75.2	115			
Toluene	0.96	0.050	1.000	0	96.1	80.7	112			
Ethylbenzene	0.99	0.050	1.000	0	98.6	78.9	117			
Xylenes, Total	2.9	0.10	3.000	0	97.9	79.2	115			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	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: **1610736**

RcptNo: **1**

Received by/date:

*[Signature]* 10/15/16

Logged By: **Lindsay Mangin**

10/15/2016 1:15:00 PM

*[Signature]*

Completed By: **Lindsay Mangin**

10/15/2016 2:10:50 PM

*[Signature]*

Reviewed By:

*[Signature]* 10/17/16

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

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.4	Good	Yes			