

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

DEC 23 2014

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	Contact: Jeff Peace
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9479
Facility Name: Heath Gas Com E 1	Facility Type: Natural gas well
Surface Owner: Federal	Mineral Owner: Federal
API No. 3004508463	

## LOCATION OF RELEASE

Unit Letter N	Section 8	Township 29N	Range 9W	Feet from the 990	North/South Line South	Feet from the 1,650	East/West Line West	County: San Juan
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Latitude 36.7532 Longitude 107.8053

## NATURE OF RELEASE

Type of Release: condensate/oil	Volume of Release: unknown	Volume Recovered: none
Source of Release: below grade tank -- 95 bbl	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: 5/27/2014; 3:20 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.\* Soil beneath the BGT showed evidence of impacts during removal. Soil analysis resulted in BTEX and chloride below standards, but TPH exceeded the standard. Analysis results are attached. Impacted soil was excavated.

Describe Area Affected and Cleanup Action Taken.\* Soils beneath the BGT were sampled and impacts were found immediately below the BGT. Impacted soil was excavated to 10 feet depth and soil samples remaining were below 100 ppm TPH. Approximately 25 cubic yards were taken to the landfarm for treatment and the excavation was backfilled with clean soil. Sample data, a photo of the excavation and a site map are attached.

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: <i>Jeff Peace</i>	OIL CONSERVATION DIVISION	
Printed Name: Jeff Peace	Approved by Environmental Specialist: <i>Carey Smith</i>	
Title: Field Environmental Coordinator	Approval Date: 1/13/15	Expiration Date:
E-mail Address: peace.jeffrey@bp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: December 22, 2014	Phone: 505-326-9479	

\* Attach Additional Sheets If Necessary

#NCS 1501341095

**BP America: Heath GC E 1**  
**(N) Sec 8 – T29N – R9W**  
**API: 30-045-08463**  
**San Juan County, New Mexico**

Summary Record of Impact Remediation

May 27, 2014 Soil impacts encountered during closure of 95 barrel BGT. Impacts appeared to be just below BGT only, with 2 to 3 inches of soil immediately below BGT showing discoloration and appearance of paraffin type hydrocarbon. Composite sample of soil immediately below this zone (from total depth of 5' below surface grade) tested DRO = 910 ppm, GRO = 10 ppm, Benzene = 0.0 ppm, Total BTEX = 0.28 ppm, Chloride = 0.0 ppm. Evaluation of site ranking criteria indicated a closure standard of 100 ppm TPH, with groundwater estimated at about 30 feet from ground surface based on pre-existing groundwater monitor wells in immediate area installed for monitoring a prior release at the nearby Heath GC G 1. Note that all wells down-gradient from Heath GC E 1 have always tested groundwater at non-detect for BTEX.

December 17, 2014 Move equipment on-site and initiate remediation of impacts by excavation.

December 19, 2014 Excavation size approximately 18' x 18' (top dimension), 14' x 14' (base dimension) x 10 deep. Collect composite sample of sidewalls from 5' – 10', and base composite at 10 foot depth. Field OVM = 0.0 on both samples. Lab TPH = 0.0 ppm on sidewall composite. Lab TPH = 24.4 ppm on base composite. Review lab results with NMOCD and receive approval to backfill. Total volume impacted soil transported to Envirotech Landfarm = 25 cubic yards.

BP America - Heath GC E1  
(N) Sec 8 - T29N - R9W

Excavation at 95 BGT:  
Top: 18' x 18'  
Base: 14' x 14'  
Depth: 10'

Heath GC E 1 Wellhead

Google Earth

70 ft



**505-947-9900**

**BP AMERICA PRODUCTION COMPANY**

**HEATH GAS COM E 001**

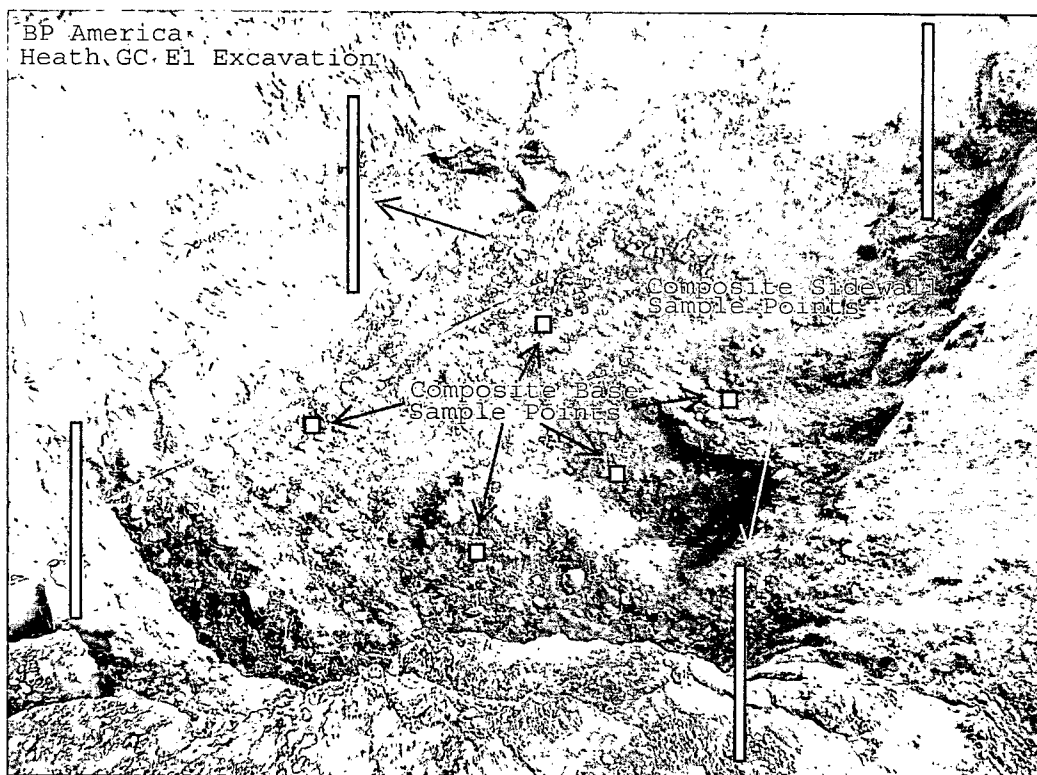
**API 3004508463 LEASE NMSF076337**

**990 FSL 1650 FWL (N) SEC 8 T29N R9W**

**San Juan County ELEV 5613**

**LAT 36° 44' 6.648"**

**LONG 107° 48' 19.152"**





BP America Production Co.  
PO Box 22024  
Tulsa OK, 74121-2024

Project Name: Heath GC E1  
Project Number: 03143-0424  
Project Manager: Jeff Blagg

Reported:  
19-Dec-14 12:19

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Sidewall 4-pt 5'-10'	P412061-01A	Soil	12/18/14	12/18/14	Glass Jar, 4 oz.
Base 5-pt @ 10'	P412061-02A	Soil	12/18/14	12/18/14	Glass Jar, 4 oz.

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BP America Production Co.  
 PO Box 22024  
 Tulsa OK, 74121-2024

 Project Name: Heath GC E1  
 Project Number: 03143-0424  
 Project Manager: Jeff Blagg

 Reported:  
 19-Dec-14 12:19

**Sidewall 4-pt 5'-10'**  
**P412061-01 (Solid)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organics by EPA 8021</b>									
Benzene	ND	0.10	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
o-Xylene	<b>0.13</b>	0.10	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
Total Xylenes	<b>0.13</b>	0.10	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
Total BTEX	<b>0.13</b>	0.10	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		105 %	50-150		1451026	12/18/14	12/18/14	EPA 8021B	
<b>Nonhalogenated Organics by 8015</b>									
Gasoline Range Organics (C6-C10)	ND	10.0	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1	1451025	12/18/14	12/18/14	EPA 8015D	
<i>Surrogate: o-Terphenyl</i>		111 %	50-200		1451025	12/18/14	12/18/14	EPA 8015D	
<i>Surrogate: 4-Bromochlorobenzene-FID</i>		93.6 %	50-150		1451026	12/18/14	12/18/14	EPA 8015D	
<b>Cation/Anion Analysis</b>									
Chloride	<b>45.3</b>	9.91	mg/kg	1	1451027	12/18/14	12/18/14	EPA 300.0	

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BP America Production Co.	Project Name:	Heath GC E1	Reported: 19-Dec-14 12:19
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Jeff Blagg	

**Base 5-pt @ 10'**  
**P412061-02 (Solid)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organics by EPA 8021</b>									
Benzene	ND	0.10	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
Toluene	0.14	0.10	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
p,m-Xylene	0.45	0.20	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
o-Xylene	0.10	0.10	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
Total Xylenes	0.55	0.10	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
Total BTEX	0.69	0.10	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		100 %	50-150		1451026	12/18/14	12/18/14	EPA 8021B	
<b>Nonhalogenated Organics by 8015</b>									
Gasoline Range Organics (C6-C10)	24.4	9.99	mg/kg	1	1451026	12/18/14	12/18/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1	1451025	12/18/14	12/18/14	EPA 8015D	
<i>Surrogate: o-Terphenyl</i>		118 %	50-200		1451025	12/18/14	12/18/14	EPA 8015D	
<i>Surrogate: 4-Bromochlorobenzene-FID</i>		89.9 %	50-150		1451026	12/18/14	12/18/14	EPA 8015D	
<b>Cation/Anion Analysis</b>									
Chloride	10.8	9.88	mg/kg	1	1451027	12/18/14	12/18/14	EPA 300.0	

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BP America Production Co.  
PO Box 22024  
Tulsa OK, 74121-2024

Project Name: Heath GC E1  
Project Number: 03143-0424  
Project Manager: Jeff Blagg

Reported:  
19-Dec-14 12:19

### Volatile Organics by EPA 8021 - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch 1451026 - Purge and Trap EPA 5030A

##### Blank (1451026-BLK1)

Prepared & Analyzed: 18-Dec-14

Benzene	ND	0.10	mg/kg							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
p,m-Xylene	ND	0.20	"							
o-Xylene	ND	0.10	"							
Total Xylenes	ND	0.10	"							
Total BTEX	ND	0.10	"							

Surrogate: 4-Bromochlorobenzene-PID 0.423 " 0.400 106 50-150

##### LCS (1451026-BS1)

Prepared & Analyzed: 18-Dec-14

Benzene	22.1	0.10	mg/kg	20.0		111	75-125			
Toluene	22.5	0.10	"	20.0		113	70-125			
Ethylbenzene	22.9	0.10	"	20.0		115	75-125			
p,m-Xylene	45.9	0.20	"	39.9		115	80-125			
o-Xylene	22.8	0.10	"	20.0		114	75-125			

Surrogate: 4-Bromochlorobenzene-PID 0.427 " 0.399 107 50-150

##### Matrix Spike (1451026-MS1)

Source: P412060-01

Prepared & Analyzed: 18-Dec-14

Benzene	20.7	0.10	mg/kg	20.0	ND	104	75-125			
Toluene	21.1	0.10	"	20.0	ND	106	70-125			
Ethylbenzene	21.4	0.10	"	20.0	ND	107	75-125			
p,m-Xylene	43.7	0.20	"	39.9	ND	109	80-125			
o-Xylene	21.5	0.10	"	20.0	0.14	107	75-125			

Surrogate: 4-Bromochlorobenzene-PID 0.429 " 0.399 107 50-150

##### Matrix Spike Dup (1451026-MSD1)

Source: P412060-01

Prepared & Analyzed: 18-Dec-14

Benzene	21.9	0.10	mg/kg	20.0	ND	110	75-125	5.76	15	
Toluene	22.5	0.10	"	20.0	ND	113	70-125	6.19	15	
Ethylbenzene	22.7	0.10	"	20.0	ND	114	75-125	5.95	15	
p,m-Xylene	46.3	0.20	"	39.9	ND	116	80-125	5.86	15	
o-Xylene	22.9	0.10	"	20.0	0.14	114	75-125	6.26	15	

Surrogate: 4-Bromochlorobenzene-PID 0.424 " 0.399 106 50-150

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BP America Production Co.	Project Name:	Heath GC E1	Reported: 19-Dec-14 12:19
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Jeff Blagg	

### Nonhalogenated Organics by 8015 - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1451025 - DRO Extraction EPA 3550M</b>										
<b>Blank (1451025-BLK1)</b>				Prepared & Analyzed: 18-Dec-14						
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg							
Surrogate: o-Terphenyl	39.1		"	39.9		98.1	50-200			
<b>LCS (1451025-BS1)</b>				Prepared & Analyzed: 18-Dec-14						
Diesel Range Organics (C10-C28)	508	29.9	mg/kg	499		102	38-132			
Surrogate: o-Terphenyl	45.1		"	39.9		113	50-200			
<b>Matrix Spike (1451025-MS1)</b>				Source: P412060-01		Prepared & Analyzed: 18-Dec-14				
Diesel Range Organics (C10-C28)	599	30.0	mg/kg	499	ND	120	38-132			
Surrogate: o-Terphenyl	50.6		"	39.9		127	50-200			
<b>Matrix Spike Dup (1451025-MSD1)</b>				Source: P412060-01		Prepared & Analyzed: 18-Dec-14				
Diesel Range Organics (C10-C28)	537	30.0	mg/kg	500	ND	108	38-132	10.8	20	
Surrogate: o-Terphenyl	47.0		"	40.0		118	50-200			

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BP America Production Co.	Project Name:	Heath GC E1	Reported: 19-Dec-14 12:19
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Jeff Blagg	

### Nonhalogenated Organics by 8015 - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1451026 - Purge and Trap EPA 5030A</b>										
<b>Blank (1451026-BLK1)</b>				Prepared & Analyzed: 18-Dec-14						
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg							
Surrogate: 4-Bromochlorobenzene-FID	0.380		"	0.400		95.1	50-150			
<b>LCS (1451026-BS1)</b>				Prepared & Analyzed: 18-Dec-14						
Gasoline Range Organics (C6-C10)	316	9.98	mg/kg	291		109	80-120			
Surrogate: 4-Bromochlorobenzene-FID	0.382		"	0.399		95.9	50-150			
<b>Matrix Spike (1451026-MS1)</b>				Source: P412060-01		Prepared & Analyzed: 18-Dec-14				
Gasoline Range Organics (C6-C10)	301	9.99	mg/kg	292	ND	103	75-125			
Surrogate: 4-Bromochlorobenzene-FID	0.382		"	0.399		95.7	50-150			
<b>Matrix Spike Dup (1451026-MSD1)</b>				Source: P412060-01		Prepared & Analyzed: 18-Dec-14				
Gasoline Range Organics (C6-C10)	319	9.99	mg/kg	292	ND	110	75-125	5.91	15	
Surrogate: 4-Bromochlorobenzene-FID	0.379		"	0.399		94.9	50-150			

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BP America Production Co.  
PO Box 22024  
Tulsa OK, 74121-2024

Project Name: Heath GC E1  
Project Number: 03143-0424  
Project Manager: Jeff Blagg

Reported:  
19-Dec-14 12:19

### Cation/Anion Analysis - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1451027 - Anion Extraction EPA 300.0</b>										
<b>Blank (1451027-BLK1)</b>				Prepared & Analyzed: 18-Dec-14						
Chloride	ND	9.91	mg/kg							
<b>LCS (1451027-BS1)</b>				Prepared & Analyzed: 18-Dec-14						
Chloride	478	9.92	mg/kg	496		96.4	90-110			
<b>Matrix Spike (1451027-MS1)</b>				<b>Source: P412060-01</b>		Prepared & Analyzed: 18-Dec-14				
Chloride	487	9.95	mg/kg	497	ND	98.0	80-120			
<b>Matrix Spike Dup (1451027-MSD1)</b>				<b>Source: P412060-01</b>		Prepared & Analyzed: 18-Dec-14				
Chloride	486	9.92	mg/kg	496	ND	97.9	80-120	0.326	20	

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# CHAIN OF CUSTODY RECORD

17631

Client: <b>BP America</b>			Project Name / Location: <b>HEATH GC E1</b>			ANALYSIS / PARAMETERS																	
Email results to: <b>JEFF PEACE</b> <b>JEFF BLAGG</b> <b>Nelson Velaz</b>			Sampler Name: <b>J. Blagg</b>			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact			
Client Phone No.: <b>505-320-1183</b>			Client No.: <b>03143-0424</b>																				
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative																		
					HNO <sub>3</sub>	HCl																	
<b>SIDEWALL 4-pt 5-10'</b>	<b>12/18/2014</b>	<b>0815</b>	<b>P412061-01</b>	<b>1 x 4 oz</b>				<b>X</b>	<b>X</b>										<b>X</b>			<b>✓</b>	<b>✓</b>
<b>BASE 5-pt @ -10'</b>	<b>"</b>	<b>0820</b>	<b>P412061-02</b>	<b>"</b>				<b>X</b>	<b>X</b>										<b>X</b>			<b>✓</b>	<b>✓</b>
Relinquished by: (Signature): <b>Jeff Blagg</b>					Date: <b>12/18/2014</b>	Time: <b>0859</b>	Received by: (Signature): <b>[Signature]</b>					Date: <b>12/18/14</b>	Time: <b>859</b>										
Relinquished by: (Signature):							Received by: (Signature):																
Sample Matrix																							
Soil <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>																							
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area.																							



**envirotech**  
Analytical Laboratory

**RUSH ASAP**  
**BILL BP**  
**Billing CODES TO FOLLOW**

**8-6**  
**7-1**

CLIENT: <b>BP</b>	<b>BLAGG ENGINEERING, INC.</b> <b>P.O. BOX 87, BLOOMFIELD, NM 87413</b> <b>(505) 632-1199</b>	API #: <b>3004508463</b> TANK ID (if applicable): <b>A</b>
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<b>FIELD REPORT:</b> (circle one): <b>BGT CONFIRMATION</b> / RELEASE INVESTIGATION / OTHER:	PAGE #: <b>1</b> of <b>1</b>
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<b>SITE INFORMATION:</b>	SITE NAME: <b>HEATH GC E #1</b>	DATE STARTED: <b>05/27/14</b>
QUAD/UNIT: <b>N</b> SEC: <b>8</b> TWP: <b>29N</b> RNG: <b>9W</b> PM: <b>NM</b> CNTY: <b>SJ</b> ST: <b>NM</b>	DATE FINISHED:	ENVIRONMENTAL SPECIALIST(S): <b>NJV</b>
1/4 - 1/4 FOOTAGE: <b>990'S / 1,650'W</b> <b>SE/SW</b> LEASE TYPE: <b>FEDERAL</b> / STATE / FEE / INDIAN	ELKHORN LEASE #: <b>NM073269</b> PROD. FORMATION: <b>MV</b> CONTRACTOR: <b>MBF - S. PEREZ</b>	

<b>REFERENCE POINT:</b>	WELL HEAD (W.H.) GPS COORD.: <b>36.73518 X 107.80524</b> GL ELEV.: <b>5,613'</b>	
1) <b>95 BGT SW/DB</b>	GPS COORD.: <b>36.73541 X 107.80523</b>	DISTANCE/BEARING FROM W.H.: <b>91', N6E</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.:

<b>SAMPLING DATA:</b>	CHAIN OF CUSTODY RECORD(S) # OR LAB USED: <b>HALL</b>	OVM READING (ppm)
1) SAMPLE ID: <b>5 PC-TB @ 5' (95)</b>	SAMPLE DATE: <b>05/27/14</b> SAMPLE TIME: <b>1520</b> LAB ANALYSIS: <b>418.1/8015B/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:	

<b>SOIL DESCRIPTION:</b>	SOIL TYPE: <b>SAND / SILTY SAND</b> SILT / SILTY CLAY / CLAY / GRAVEL / OTHER
SOIL COLOR: <b>DARK YELLOWISH ORANGE</b>	PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC
COHESION (ALL OTHERS): <b>NON COHESIVE</b> / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE	DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD
CONSISTENCY (NON COHESIVE SOILS): <b>LOOSE / FIRM</b> / DENSE / VERY DENSE	HC ODOR DETECTED: <b>YES</b> NO EXPLANATION - <b>SLIGHTLY IN DISCOLORED SOIL ONLY.</b>
MOISTURE: DRY / <b>SLIGHTLY MOIST</b> / MOIST / WET / SATURATED / SUPER SATURATED	ANY AREAS DISPLAYING WETNESS: YES <b>NO</b> EXPLANATION -
SAMPLE TYPE: GRAB <b>COMPOSITE</b> # OF PTS. <b>5</b>	DISCOLORATION/STAINING OBSERVED: <b>YES</b> NO EXPLANATION - <b>2 - 3 INCHES DIRECTLY BENEATH BGT, NOT SAMPLED.</b>

<b>SITE OBSERVATIONS:</b>	LOST INTEGRITY OF EQUIPMENT: YES <b>NO</b> EXPLANATION -
APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: YES <b>NO</b> EXPLANATION:	EQUIPMENT SET OVER RECLAIMED AREA: <b>YES</b> NO EXPLANATION - <b>PRODUCTION TANK BERM PARTIALLY ATOP BGT POSITION.</b>
OTHER: <b>BOTTOM HALF OF BGT SIDEWALL WAS BURIED. DISCOLORED SOIL CONSISTED OF HEAVIER, PARAFFIN TYPE HYDROCARBONS.</b>	

SOIL IMPACT DIMENSION ESTIMATION: <b>10</b> ft. X <b>10.5</b> ft. X <b>0.25</b> ft.	EXCAVATION ESTIMATION (Cubic Yards): <b>&lt;1</b>
DEPTH TO GROUNDWATER: <b>&lt;50'</b>	NEAREST WATER SOURCE: <b>&gt;1,000'</b> NEAREST SURFACE WATER: <b>&lt;1,000'</b> NMOC DTPH CLOSURE STD: <b>100</b> ppm

<b>SITE SKETCH</b>	BGT Located: off <input checked="" type="checkbox"/> on site	PLOT PLAN circle: <b>attached</b>
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>		

<b>MISCELL. NOTES</b>	
WO: <b>N15442433</b>	
PO #:	
PK: <b>ZEvh01BGT2</b>	
PJ #: <b>Z2-006Q0</b>	
Permit date(s): <b>06/14/10</b>	
OCD Appr. date(s): <b>02/28/14</b>	
Tank ID	OVM = Organic Vapor Meter ppm = parts per million <b>A</b> BGT Sidewalls Visible: <b>(Y)</b> N
	BGT Sidewalls Visible: Y / N
	BGT Sidewalls Visible: Y / N
Magnetic declination: <b>10° E</b>	

NOTES: <b>GOOGLE EARTH IMAGERY DATE: 11/07/13.</b>	ONSITE: <b>05/27/14</b>
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**Analytical Report**

Lab Order 1405D13

Date Reported: 6/6/2014

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Blagg Engineering**Client Sample ID:** 5 PC - TB @ 5' (95)**Project:** Heath GC E #1**Collection Date:** 5/27/2014 3:20:00 PM**Lab ID:** 1405D13-001**Matrix:** SOIL**Received Date:** 5/30/2014 11:12:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	910	100		mg/Kg	10	6/3/2014 5:39:34 PM	13463
Surr: DNOP	0	57.9-140	S	%REC	10	6/3/2014 5:39:34 PM	13463
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	10	4.8		mg/Kg	1	6/2/2014 4:11:43 PM	13451
Surr: BFB	137	80-120	S	%REC	1	6/2/2014 4:11:43 PM	13451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	6/2/2014 4:11:43 PM	13451
Toluene	ND	0.048		mg/Kg	1	6/2/2014 4:11:43 PM	13451
Ethylbenzene	ND	0.048		mg/Kg	1	6/2/2014 4:11:43 PM	13451
Xylenes, Total	0.28	0.096		mg/Kg	1	6/2/2014 4:11:43 PM	13451
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	6/2/2014 4:11:43 PM	13451
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	ND	30		mg/Kg	20	6/4/2014 10:55:00 AM	13512
<b>EPA METHOD 418.1: TPH</b>							Analyst: <b>BCN</b>
Petroleum Hydrocarbons, TR	3800	200		mg/Kg	10	6/4/2014	13465

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
	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
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1405D13

06-Jun-14

Client: Blagg Engineering

Project: Heath GC E #1

Sample ID	MB-13512	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	13512	RunNo:	19055					
Prep Date:	6/4/2014	Analysis Date:	6/4/2014	SeqNo:	550654	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-13512	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	13512	RunNo:	19055					
Prep Date:	6/4/2014	Analysis Date:	6/4/2014	SeqNo:	550655	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1405D13

06-Jun-14

Client: Blagg Engineering

Project: Heath GC E #1

Sample ID	MB-13465	SampType:	MBLK	TestCode:	EPA Method 418.1: TPH					
Client ID:	PBS	Batch ID:	13465	RunNo:	19032					
Prep Date:	6/2/2014	Analysis Date:	6/4/2014	SeqNo:	550010	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	LCS-13465	SampType: LCS			TestCode: EPA Method 418.1: TPH					
Client ID:	LCSS	Batch ID: 13465			RunNo: 19032					
Prep Date:	6/2/2014	Analysis Date: 6/4/2014			SeqNo: 550011		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	96	20	100.0	0	96.3	80	120			

Sample ID	LCSD-13465	SampType: LCSD			TestCode: EPA Method 418.1: TPH					
Client ID:	LCSS02	Batch ID: 13465			RunNo: 19032					
Prep Date:	6/2/2014	Analysis Date: 6/4/2014			SeqNo: 550012		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	99	20	100.0	0	99.2	80	120	2.91	20	

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1405D13

06-Jun-14

Client: Blagg Engineering

Project: Heath GC E #1

Sample ID	MB-13463		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	13463		RunNo:	18981				
Prep Date:	6/2/2014		Analysis Date:	6/2/2014		SeqNo:	548848		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	8.2		10.00		82.1	57.9	140				

Sample ID	LCS-13463		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 13463		RunNo: 18981					
Prep Date:	6/2/2014		Analysis Date: 6/2/2014		SeqNo: 548849		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	96.0	60.8	145			
Surr: DNOP	4.3		5.000		85.9	57.9	140			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
O RSD is greater than RSDlimit  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
P Sample pH greater than 2.  
RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1405D13

06-Jun-14

Client: Blagg Engineering

Project: Heath GC E #1

Sample ID	MB-13451		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	13451		RunNo:	18991				
Prep Date:	5/30/2014		Analysis Date:	6/2/2014		SeqNo:	548681		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		84.6	80	120				

Sample ID	LCS-13451		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 13451		RunNo: 18991					
Prep Date:	5/30/2014		Analysis Date: 6/2/2014		SeqNo: 548682		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.4	71.7	134			
Surr: BFB	930		1000		93.2	80	120			

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1405D13

06-Jun-14

Client: Blagg Engineering

Project: Heath GC E #1

Sample ID	MB-13451		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	13451		RunNo:	18991			
Prep Date:	5/30/2014		Analysis Date:	6/2/2014		SeqNo:	548779		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	LCS-13451		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	13451		RunNo:	18991			
Prep Date:	5/30/2014		Analysis Date:	6/2/2014		SeqNo:	548780		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	114	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

## Qualifiers:

- |   |  |
|---|--|
| * Value exceeds Maximum Contaminant Level.        | B Analyte detected in the associated Method Blank    |
| 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               |
| O RSD is greater than RSDlimit                    | P Sample pH greater than 2.                          |
| R RPD outside accepted recovery limits            | RL Reporting Detection Limit                         |
| S Spike Recovery outside accepted recovery limits |  |



4901 Hawkins NE  
Albuquerque, NM 87105  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: BLAGG

Work Order Number: 1405D13

RcptNo: 1

Received by/date:

CS

05/30/14

Logged By: Michelle Garcia

5/30/2014 11:12:00 AM

Michelle Garcia

Completed By: Michelle Garcia

5/30/2014 3:11:48 PM

Michelle Garcia

Reviewed By:

[Signature]

05/30/14

### 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	2.1	Good	Yes			

Chain-of-Custody Record		Field Record Time:	
Client: <b>BLAGG ENGR. / BP AMERICA</b>	<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush	
Mailing Address: <b>P.O. BOX 87</b>	Project Name: <b>Heath GCE # 1</b>		
<b>BLOOMFIELD, NM 87413</b>	Project #:		
Phone #: <b>(505) 632-1199</b>	Project Manager:		
email or Fax#:	<b>NELSON VELEZ</b>		
QA/QC Package:			
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Level 4 (Full Validation)		
Accreditation:	Sampler: <b>NELSON VELEZ</b> <i>NV</i>		
<input type="checkbox"/> NELAP	<input type="checkbox"/> Other	On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> EDD (Type)	Sample Temperature: <b>2.1°</b>		

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

[illegible]

Date: 5/29/14	Time: 1444	Relinquished by: <i>[Signature]</i>	Received by: <i>Christie Waaler</i>	Date 5/29/14	Time 1444
Date: 5/29/14	Time: 1747	Relinquished by: <i>Christie Waaler</i>	Received by: <i>Julia Sore</i>	Date 05/30/14	Time 11:22

Remarks:

**BILL DIRECTLY TO BP:**

Jeff Peace, 200 Energy Court, Farmington, NM 87401

Work Order: N15442433 Paykey: ZEVB01BGT2

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.