

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 CONS. DIV DIST. 3

AUG 11 2015

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: Steve Moskal
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9497
Facility Name: Gallegos Canyon Unit 157E	Facility Type: Natural gas well

Surface Owner: Tribal	Mineral Owner: Federal	API No. 3004526382
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LOCATION OF RELEASE

Unit Letter E	Section 35	Township 28N	Range 13W	Feet from the 1,850	North/South Line North	Feet from the 810	East/West Line West	County: San Juan
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Latitude 36.62078° Longitude -108.19508°

NATURE OF RELEASE


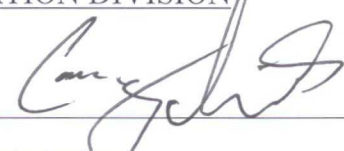
Type of Release: oil/condensate	Volume of Release: 254 Mcf	Volume Recovered: none
Source of Release: Below Grade Tank - 95 bbl	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: November 5, 2012; 3:06 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <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. * Hydrocarbon impacted soil was discovered during the removal of a 95 bbl fiberglass BGT. A drill rig equipped with a hollow stem auger was used to perform site delineation. The impacted soil was excavated and transported for offsite disposal.

Describe Area Affected and Cleanup Action Taken.* The area of excavation measured approximately 21' x 10' x 8' deep. Laboratory analysis of the samples collected from the extents of the excavation determined contamination below the soil remediation guidelines based on a site ranking of 10 points. A total of 48 cubic yards were excavated and transported for offsite disposal. Final reclamation will be completed upon well abandonment activities.

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: 8/12/15	Expiration Date:
E-mail Address: steven.moskal@bp.com		Conditions of Approval:	
Date: August 7, 2015 Phone: 505-326-9497		Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

#NCS 15 224 39 198

BP America: GCU 157E
(E) Sec 35 – T28N – R13W
API: 30-045-26398
San Juan County, New Mexico

Summary Record of Impact Remediation

November 5, 2012 Soils impacted with hydrocarbons encountered during removal of the 95 barrel fiberglass, square shaped BGT. Laboratory testing of soils immediately below the BGT determined the total petroleum hydrocarbon (TPH) content at 2,240 mg/Kg by U.S. EPA Method 8015B. Chlorides were tested at 410 mg/Kg, Benzene was non-detect and total BTEX was reported at 147 mg/Kg. The BGT was removed to allow a workover rig to commence with recompletion of the gas well.

The site NMOCD/BLM closure standard was determined at 1,000 ppm TPH based on:

Horizontal Distance to dry arroyo > 1,000 feet (0 points)
Nearest Water Well > 1,000 feet (0 points)
Depth to Groundwater Between 50 - 100 feet (10 points)

Note that this ranking was confirmed by NMOCD (Aztec) following a ranking criteria evaluation submitted by Blagg Engineering, Inc on behalf of BP on April 29, 2015.

April 9, 2015 A hollow-stem-auger drill rig was used to collect soil samples immediately below the center of the prior BGT location, and at a location approximately 25 feet north of the BGT location, to determine the extent of hydrocarbon impacts. Laboratory test results were as follows:

Sample ID	Sample Date	Map ID	TPH 8015B (mg/Kg)	Total BTEX (mg/Kg)	Chlorides (mg/Kg)
BH-1 @ 5'	4/9/2015	BH1	264	0.96	52
BH-1 @ 10'	4/9/2015	BH1	470	NA	NA
BH-1 @ 15'	4/9/2015	BH1	217	NA	NA
BH-1 @ 20'	4/9/2015	BH1	560	10.2	100
BH-2 @ 10'	4/9/2015	BH2	ND	ND	ND
BH-2 @ 20'	4/9/2015	BH2	ND	NA	NA

(Note that all these values were below the site closure standard of 1,000 ppm TPH)

May 21, 2015 Work crew initiates site remediation via excavation. The original BGT area was excavated to a dimension of 21' x 10' x 8' deep. Composite side walls and base were sampled for laboratory determination of TPH, BTEX and Chlorides. Laboratory test results were as follows:

Sample ID	Sample Date	Map ID	TPH 8015B (mg/Kg)	Total BTEX (mg/Kg)	Chlorides (mg/Kg)
East Wall 3-pt @ 3'-7'	5/21/2015	1	312	2.94	28.5
North Wall 3-pt @ 3'-7'	5/21/2015	2	ND	ND	ND
West Wall 3-pt @ 3'-7'	5/21/2015	3	64.9	0.64	79.9
South Wall 3-pt @ 3'-7'	5/21/2015	4	62.8	1.67	92.5
Base 5-pt @ 8'	5/21/2015	5	474	26.5	290

(Note that all these values were below the site closure standard of 1,000 ppm TPH)

May 22, 2015 Crew completes backfilling with clean fill. Approximate volume of soils removed and transported to BP Crouch Mesa Landfarm = 48 CY.

GCU 157E Wellhead

Excavation Perimeter
(21' x 10' x 8' Deep)

BH2



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

Project Name: GCU 157E
 Project Number: 03143-0424
 Project Manager: Jeff Blagg

Reported:
 26-May-15 15:23

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
East Wall 3-pt @ 3'-7'	P505059-01A	Soil	05/21/15	05/21/15	Glass Jar, 4 oz.
North Wall 3-pt @ 3'-7'	P505059-02A	Soil	05/21/15	05/21/15	Glass Jar, 4 oz.
West Wall 3-pt @ 3'-7'	P505059-03A	Soil	05/21/15	05/21/15	Glass Jar, 4 oz.
South Wall 3-pt @ 3'-7'	P505059-04A	Soil	05/21/15	05/21/15	Glass Jar, 4 oz.
Base 5-pt @ 8'	P505059-05A	Soil	05/21/15	05/21/15	Glass Jar, 4 oz.

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 Tulsa OK, 74121-2024

 Project Name: GCU 157E
 Project Number: 03143-0424
 Project Manager: Jeff Blagg

Reported:
 26-May-15 15:23

East Wall 3-pt @ 3'-7'
P505059-01 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
Toluene	0.11	0.10	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
Ethylbenzene	0.62	0.10	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
p,m-Xylene	1.88	0.20	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
o-Xylene	0.33	0.10	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
Total Xylenes	2.21	0.10	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
Total BTEX	2.94	0.10	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		133 %		50-150	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	96.0	9.97	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8015D	
Diesel Range Organics (C10-C28)	216	25.0	mg/kg	1	1521027	05/22/15	05/22/15	05/22/15	EPA 8015D	
Surrogate: o-Terphenyl		115 %		50-200	1521027	05/22/15	05/22/15	05/22/15	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		125 %		50-150	1521028	05/22/15	05/22/15	05/22/15	EPA 8015D	
Cation/Anion Analysis										
Chloride	28.5	9.92	mg/kg	1	1521029	05/22/15	05/22/15	05/22/15	EPA 300.0	

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 Project Name: GCU 157E
 Project Number: 03143-0424
 Project Manager: Jeff Blagg

 Reported:
 26-May-15 15:23

North Wall 3-pt @ 3'-7'
P505059-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		<i>114 %</i>		<i>50-150</i>	<i>1521028</i>	<i>05/22/15</i>	<i>05/22/15</i>	<i>EPA 8021B</i>	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	9.98	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1521027	05/22/15	05/22/15	EPA 8015D	
<i>Surrogate: o-Terphenyl</i>		<i>103 %</i>		<i>50-200</i>	<i>1521027</i>	<i>05/22/15</i>	<i>05/22/15</i>	<i>EPA 8015D</i>	
<i>Surrogate: 4-Bromochlorobenzene-FID</i>		<i>102 %</i>		<i>50-150</i>	<i>1521028</i>	<i>05/22/15</i>	<i>05/22/15</i>	<i>EPA 8015D</i>	
Cation/Anion Analysis									
Chloride	ND	9.94	mg/kg	1	1521029	05/22/15	05/22/15	EPA 300.0	

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 Project Name: GCU 157E
 Project Number: 03143-0424
 Project Manager: Jeff Blagg

 Reported:
 26-May-15 15:23

West Wall 3-pt @ 3'-7'
P505059-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
p,m-Xylene	0.51	0.20	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
o-Xylene	0.13	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
Total Xylenes	0.64	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
Total BTEX	0.64	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		<i>116 %</i>		<i>50-150</i>	<i>1521028</i>	<i>05/22/15</i>	<i>05/22/15</i>	<i>EPA 8021B</i>	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	31.9	9.98	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8015D	
Diesel Range Organics (C10-C28)	33.0	25.0	mg/kg	1	1521027	05/22/15	05/22/15	EPA 8015D	
<i>Surrogate: o-Terphenyl</i>		<i>76.9 %</i>		<i>50-200</i>	<i>1521027</i>	<i>05/22/15</i>	<i>05/22/15</i>	<i>EPA 8015D</i>	
<i>Surrogate: 4-Bromochlorobenzene-FID</i>		<i>107 %</i>		<i>50-150</i>	<i>1521028</i>	<i>05/22/15</i>	<i>05/22/15</i>	<i>EPA 8015D</i>	
Cation/Anion Analysis									
Chloride	79.9	9.88	mg/kg	1	1521029	05/22/15	05/22/15	EPA 300.0	

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 Project Name: GCU 157E
 Project Number: 03143-0424
 Project Manager: Jeff Blagg

Reported:
 26-May-15 15:23

South Wall 3-pt @ 3'-7'
P505059-04 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								

Volatile Organics by EPA 8021

Benzene	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B
Toluene	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B
Ethylbenzene	0.21	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B
p,m-Xylene	1.12	0.20	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B
o-Xylene	0.33	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B
Total Xylenes	1.46	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B
Total BTEX	1.67	0.10	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8021B
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		<i>118 %</i>		<i>50-150</i>	<i>1521028</i>	<i>05/22/15</i>	<i>05/22/15</i>	<i>EPA 8021B</i>

Nonhalogenated Organics by 8015

Gasoline Range Organics (C6-C10)	62.8	9.98	mg/kg	1	1521028	05/22/15	05/22/15	EPA 8015D
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1521027	05/22/15	05/22/15	EPA 8015D
<i>Surrogate: o-Terphenyl</i>		<i>73.8 %</i>		<i>50-200</i>	<i>1521027</i>	<i>05/22/15</i>	<i>05/22/15</i>	<i>EPA 8015D</i>
<i>Surrogate: 4-Bromochlorobenzene-FID</i>		<i>112 %</i>		<i>50-150</i>	<i>1521028</i>	<i>05/22/15</i>	<i>05/22/15</i>	<i>EPA 8015D</i>

Cation/Anion Analysis

Chloride	92.5	9.96	mg/kg	1	1521029	05/22/15	05/22/15	EPA 300.0
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 Project Name: GCU 157E
 Project Number: 03143-0424
 Project Manager: Jeff Blagg

 Reported:
 26-May-15 15:23

Base 5-pt @ 8'
P505059-05 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.10	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
Toluene	1.70	0.10	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
Ethylbenzene	1.80	0.10	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
p,m-Xylene	18.3	0.20	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
o-Xylene	4.67	0.10	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
Total Xylenes	23.0	0.10	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
Total BTEX	26.5	0.10	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		120 %		50-150	1521028	05/22/15	05/22/15	05/22/15	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	362	9.97	mg/kg	1	1521028	05/22/15	05/22/15	05/22/15	EPA 8015D	
Diesel Range Organics (C10-C28)	112	24.9	mg/kg	1	1521027	05/22/15	05/22/15	05/22/15	EPA 8015D	
Surrogate: o-Terphenyl		75.2 %		50-200	1521027	05/22/15	05/22/15	05/22/15	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		104 %		50-150	1521028	05/22/15	05/22/15	05/22/15	EPA 8015D	
Cation/Anion Analysis										
Chloride	290	9.83	mg/kg	1	1521029	05/22/15	05/22/15	05/22/15	EPA 300.0	

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Tulsa OK, 74121-2024

Project Name: GCU 157E
Project Number: 03143-0424
Project Manager: Jeff Blagg

Reported:
26-May-15 15:23

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
Batch 1521028 - Purge and Trap EPA 5030A										
Blank (1521028-BLK1)				Prepared: 22-May-15 Analyzed: 26-May-15						
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	0.409		"	0.399		103	50-150			
LCS (1521028-BS1)				Prepared: 22-May-15 Analyzed: 26-May-15						
Benzene	20.4	0.10	mg/kg	19.9		102	75-125			
Toluene	18.5	0.10	"	19.9		92.8	70-125			
Ethylbenzene	19.4	0.10	"	19.9		97.1	75-125			
p,m-Xylene	41.5	0.20	"	39.9		104	80-125			
o-Xylene	19.8	0.10	"	19.9		99.5	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.448		"	0.399		112	50-150			
Matrix Spike (1521028-MS1)				Source: P505059-01		Prepared: 22-May-15 Analyzed: 26-May-15				
Benzene	22.1	0.10	mg/kg	20.0	ND	110	75-125			
Toluene	19.6	0.10	"	20.0	0.11	97.4	70-125			
Ethylbenzene	21.0	0.10	"	20.0	0.62	102	75-125			
p,m-Xylene	44.5	0.20	"	40.0	1.88	107	80-125			
o-Xylene	23.1	0.10	"	20.0	0.33	114	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.451		"	0.400		113	50-150			
Matrix Spike Dup (1521028-MSD1)				Source: P505059-01		Prepared: 22-May-15 Analyzed: 26-May-15				
Benzene	22.8	0.10	mg/kg	20.0	ND	114	75-125	3.11	15	
Toluene	20.0	0.10	"	20.0	0.11	99.7	70-125	2.33	15	
Ethylbenzene	21.7	0.10	"	20.0	0.62	106	75-125	3.28	15	
p,m-Xylene	47.3	0.20	"	40.0	1.88	114	80-125	6.18	15	
o-Xylene	23.6	0.10	"	20.0	0.33	116	75-125	1.88	15	
Surrogate: 4-Bromochlorobenzene-PID	0.434		"	0.400		109	50-150			

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5796 US Highway 64, Farmington, NM 87401

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (505) 632-0615 Fx (505) 632-1865

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com
laboratory@envirotech-inc.com



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

Project Name: GCU 157E
Project Number: 03143-0424
Project Manager: Jeff Blagg

Reported:
26-May-15 15:23

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
Batch 1521027 - DRO Extraction EPA 3550M										
Blank (1521027-BLK1)				Prepared & Analyzed: 22-May-15						
Diesel Range Organics (C10-C28)	ND	24.9	mg/kg							
Surrogate: o-Terphenyl	232		"	120		193	50-200			
LCS (1521027-BS1)				Prepared & Analyzed: 22-May-15						
Diesel Range Organics (C10-C28)	569	24.9	mg/kg	499		114	38-132			
Surrogate: o-Terphenyl	234		"	120		195	50-200			
Matrix Spike (1521027-MS1)				Source: P505059-01		Prepared & Analyzed: 22-May-15				
Diesel Range Organics (C10-C28)	791	25.0	mg/kg	500	216	115	38-132			
Surrogate: o-Terphenyl	42.4		"	40.0		106	50-200			
Matrix Spike Dup (1521027-MSD1)				Source: P505059-01		Prepared & Analyzed: 22-May-15				
Diesel Range Organics (C10-C28)	786	24.9	mg/kg	499	216	114	38-132	0.541	20	
Surrogate: o-Terphenyl	41.4		"	39.9		104	50-200			

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

Project Name: GCU 157E
Project Number: 03143-0424
Project Manager: Jeff Blagg

Reported:
26-May-15 15:23

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
Batch 1521028 - Purge and Trap EPA 5030A										
Blank (1521028-BLK1)				Prepared: 22-May-15 Analyzed: 26-May-15						
Gasoline Range Organics (C6-C10)	ND	9.97	mg/kg							
Surrogate: 4-Bromochlorobenzene-FID	0.369		"	0.399		92.5	50-150			
LCS (1521028-BS1)				Prepared: 22-May-15 Analyzed: 26-May-15						
Gasoline Range Organics (C6-C10)	261	9.97	mg/kg	266		98.4	80-120			
Surrogate: 4-Bromochlorobenzene-FID	0.397		"	0.399		99.7	50-150			
Matrix Spike (1521028-MS1)				Source: P505059-01		Prepared: 22-May-15 Analyzed: 26-May-15				
Gasoline Range Organics (C6-C10)	372	9.99	mg/kg	266	96.0	104	75-125			
Surrogate: 4-Bromochlorobenzene-FID	0.423		"	0.400		106	50-150			
Matrix Spike Dup (1521028-MSD1)				Source: P505059-01		Prepared: 22-May-15 Analyzed: 26-May-15				
Gasoline Range Organics (C6-C10)	378	10.0	mg/kg	266	96.0	106	75-125	1.42	15	
Surrogate: 4-Bromochlorobenzene-FID	0.441		"	0.400		110	50-150			

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

Project Name: GCU 157E
Project Number: 03143-0424
Project Manager: Jeff Blagg

Reported:
26-May-15 15:23

Cation/Anion Analysis - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1521029 - Anion Extraction EPA 300.0										
Blank (1521029-BLK1)				Prepared & Analyzed: 22-May-15						
Chloride	ND	9.99	mg/kg							
LCS (1521029-BS1)				Prepared & Analyzed: 22-May-15						
Chloride	510	9.88	mg/kg	494		103	90-110			
Matrix Spike (1521029-MS1)				Source: P505059-01 Prepared & Analyzed: 22-May-15						
Chloride	574	9.96	mg/kg	498	28.5	110	80-120			
Matrix Spike Dup (1521029-MSD1)				Source: P505059-01 Prepared & Analyzed: 22-May-15						
Chloride	570	9.95	mg/kg	498	28.5	109	80-120	0.620	20	

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Client: BP America
 Project: GCU 157E
 Sampler: J. Blagg
 Phone: 505-320-1183
 Email(s): JEFF Peace / JEFF Blagg / Nelson Velaz
 Project Manager: J. Blagg

RUSH?

☒ 1d
☐ 3d

Lab Use Only		Analysis and Method								Lab Only	
Lab WO# P505059		GRO/DRO by 8015	BTX by 8021	TPH by 418.1	Chloride by 300.0					Lab Number	Correct Cont/Prsrv (s) Y/N
Job Number 03143-0424											

Page 1 of 1

Sample ID	Sample Date	Sample Time	Matrix	Containers QTY - Vol/TYPE/Preservative	GRO/DRO by 8015	BTX by 8021	TPH by 418.1	Chloride by 300.0												
EAST Wall 3-pt @ 3'-7'	5/21/2015	1338	SOIL	4oz x 1 x Cool	x	x		x											1	Y
NORTH Wall 3-pt @ 3'-7'	"	1340	"	"	x	x		x											2	Y
WEST Wall 3-pt @ 3'-7'	"	1343	"	"	x	x		x											3	Y
SOUTH Wall 3-pt @ 3'-7'	"	1349	"	"	x	x		x											4	Y
BASE 5-pt @ 8'	"	1346	"	"	x	x		x											5	Y

Relinquished by: (Signature) <i>Jeff Blagg</i>	Date 5/21/15	Time 1448	Received by: (Signature) <i>Donna Zappin</i>	Date 5/21/15	Time 1448	Lab Use Only					
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	**Received on Ice Y / N T1 <u>13.6</u> T2 <u>15.9</u> T3 <u>12.2</u> AVG Temp °C <u>13.9</u>					

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

**Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

<input type="checkbox"/> Sample(s) dropped off after hours to a secure drop off area.	Chain of Custody	Notes/Billing info: <u>Bill BP</u> <u>CONTACT: Jeff Peace</u>	<u>PARKEY: ZEVHOIREME</u>
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Analytical Report

Lab Order 1504518

Date Reported: 4/22/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: BH-1 @ 5'

Project: GCU 157E

Collection Date: 4/9/2015 8:50:00 AM

Lab ID: 1504518-001

Matrix: SOIL

Received Date: 4/11/2015 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	190	10		mg/Kg	1	4/14/2015 12:40:35 PM	18641
Surr: DNOP	107	63.5-128		%REC	1	4/14/2015 12:40:35 PM	18641
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	74	9.2		mg/Kg	2	4/17/2015 1:40:27 AM	18665
Surr: BFB	388	80-120	S	%REC	2	4/17/2015 1:40:27 AM	18665
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.092		mg/Kg	2	4/16/2015 2:12:21 AM	18665
Toluene	ND	0.092		mg/Kg	2	4/16/2015 2:12:21 AM	18665
Ethylbenzene	ND	0.092		mg/Kg	2	4/16/2015 2:12:21 AM	18665
Xylenes, Total	0.98	0.18		mg/Kg	2	4/16/2015 2:12:21 AM	18665
Surr: 4-Bromofluorobenzene	122	80-120	S	%REC	2	4/16/2015 2:12:21 AM	18665
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	52	30		mg/Kg	20	4/16/2015 12:49:00 PM	18724

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	Page 1 of 10
	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 Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1504518

Date Reported: 4/22/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: BH-1 @ 10'

Project: GCU 157E

Collection Date: 4/9/2015 9:00:00 AM

Lab ID: 1504518-002

Matrix: SOIL

Received Date: 4/11/2015 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	320	10		mg/Kg	1	4/14/2015 1:02:03 PM	18641
Surr: DNOP	103	63.5-128		%REC	1	4/14/2015 1:02:03 PM	18641
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	150	50		mg/Kg	10	4/17/2015 2:09:08 AM	18665
Surr: BFB	161	80-120	S	%REC	10	4/17/2015 2:09:08 AM	18665

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
	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 Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1504518

Date Reported: 4/22/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Project:** GCU 157E**Lab ID:** 1504518-003**Matrix:** SOIL**Client Sample ID:** BH-1 @ 15'**Collection Date:** 4/9/2015 9:18:00 AM**Received Date:** 4/11/2015 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	150	9.9		mg/Kg	1	4/14/2015 1:23:28 PM	18641
Surr: DNOP	104	63.5-128		%REC	1	4/14/2015 1:23:28 PM	18641
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	67	9.5		mg/Kg	2	4/17/2015 2:37:43 AM	18665
Surr: BFB	260	80-120	S	%REC	2	4/17/2015 2:37:43 AM	18665

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	Page 3 of 10
	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 Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1504518

Date Reported: 4/22/2015

CLIENT: Blagg Engineering

Client Sample ID: BH-1 @ 20'

Project: GCU 157E

Collection Date: 4/9/2015 9:40:00 AM

Lab ID: 1504518-004

Matrix: SOIL

Received Date: 4/11/2015 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	280	9.8		mg/Kg	1	4/14/2015 1:44:50 PM	18641
Surr: DNOP	104	63.5-128		%REC	1	4/14/2015 1:44:50 PM	18641
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	280	23		mg/Kg	5	4/14/2015 3:52:21 PM	18665
Surr: BFB	344	80-120	S	%REC	5	4/14/2015 3:52:21 PM	18665
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.23		mg/Kg	5	4/14/2015 3:52:21 PM	18665
Toluene	ND	0.23		mg/Kg	5	4/14/2015 3:52:21 PM	18665
Ethylbenzene	0.91	0.23		mg/Kg	5	4/14/2015 3:52:21 PM	18665
Xylenes, Total	9.3	0.47		mg/Kg	5	4/14/2015 3:52:21 PM	18665
Surr: 4-Bromofluorobenzene	124	80-120	S	%REC	5	4/14/2015 3:52:21 PM	18665
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	100	30		mg/Kg	20	4/16/2015 1:51:05 PM	18724

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
	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 Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1504518

Date Reported: 4/22/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: BH-2 @ 10'

Project: GCU 157E

Collection Date: 4/9/2015 11:04:00 AM

Lab ID: 1504518-005

Matrix: SOIL

Received Date: 4/11/2015 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/14/2015 2:06:18 PM	18641
Surr: DNOP	106	63.5-128		%REC	1	4/14/2015 2:06:18 PM	18641
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	4/14/2015 4:21:06 PM	18665
Surr: BFB	96.5	80-120		%REC	1	4/14/2015 4:21:06 PM	18665
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.046		mg/Kg	1	4/14/2015 4:21:06 PM	18665
Toluene	ND	0.046		mg/Kg	1	4/14/2015 4:21:06 PM	18665
Ethylbenzene	ND	0.046		mg/Kg	1	4/14/2015 4:21:06 PM	18665
Xylenes, Total	ND	0.091		mg/Kg	1	4/14/2015 4:21:06 PM	18665
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	4/14/2015 4:21:06 PM	18665
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	4/16/2015 2:03:29 PM	18724

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
	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 Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1504518

Date Reported: 4/22/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: BH-2 @ 20'

Project: GCU 157E

Collection Date: 4/9/2015 11:50:00 AM

Lab ID: 1504518-006

Matrix: SOIL

Received Date: 4/11/2015 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/14/2015 2:27:39 PM	18641
Surr: DNOP	94.6	63.5-128		%REC	1	4/14/2015 2:27:39 PM	18641
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/14/2015 4:49:47 PM	18665
Surr: BFB	91.0	80-120		%REC	1	4/14/2015 4:49:47 PM	18665

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	Page 6 of 10
	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 Not In Range	
	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#: 1504518

22-Apr-15

Client: Blagg Engineering

Project: GCU 157E

Sample ID	MB-18724	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	18724	RunNo:	25587					
Prep Date:	4/16/2015	Analysis Date:	4/16/2015	SeqNo:	758048	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-18724	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	18724	RunNo:	25587					
Prep Date:	4/16/2015	Analysis Date:	4/16/2015	SeqNo:	758049	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.3	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 Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1504518

22-Apr-15

Client: Blagg Engineering

Project: GCU 157E

Sample ID	MB-18641	SampType: MBLK			TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 18641			RunNo: 25489					
Prep Date:	4/13/2015	Analysis Date: 4/14/2015			SeqNo: 754938		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	9.9		10.00		98.8	63.5	128			

Sample ID	LCS-18641		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 18641		RunNo: 25489					
Prep Date:	4/13/2015		Analysis Date: 4/14/2015		SeqNo: 754939		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.0	67.8	130			
Surr: DNOP	4.9		5.000		97.6	63.5	128			

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 Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1504518

22-Apr-15

Client: Blagg Engineering

Project: GCU 157E

Sample ID	MB-18665		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 18665		RunNo: 25496					
Prep Date:	4/13/2015		Analysis Date: 4/14/2015		SeqNo: 755452		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	870		1000		87.2	80	120			

Sample ID	LCS-18665		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 18665		RunNo: 25496					
Prep Date:	4/13/2015		Analysis Date: 4/14/2015		SeqNo: 755453		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	64	130			
Surr: BFB	960		1000		96.3	80	120			

Sample ID	MB-18710		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 18710		RunNo: 25555					
Prep Date:	4/15/2015		Analysis Date: 4/16/2015		SeqNo: 757273		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		93.2	80	120			

Sample ID	LCS-18710		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 18710		RunNo: 25555					
Prep Date:	4/15/2015		Analysis Date: 4/16/2015		SeqNo: 757274		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		95.8	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 Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1504518

22-Apr-15

Client: Blagg Engineering

Project: GCU 157E

Sample ID	MB-18665	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID: 18665			RunNo: 25496					
Prep Date:	4/13/2015	Analysis Date: 4/14/2015			SeqNo: 755514		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	0.98		1.000		97.8	80	120			

Sample ID	LCS-18665		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 18665		RunNo: 25496					
Prep Date:	4/13/2015		Analysis Date: 4/14/2015		SeqNo: 755515		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	111	76.6	128			
Toluene	1.0	0.050	1.000	0	102	75	124			
Ethylbenzene	1.1	0.050	1.000	0	109	79.5	126			
Xylenes, Total	3.3	0.10	3.000	0	110	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID	MB-18710	SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS	Batch ID:	18710		RunNo:	25555				
Prep Date:	4/15/2015	Analysis Date:	4/16/2015		SeqNo:	757283	Units:	%REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.92		1.000		92.4	80	120			

Sample ID	LCS-18710		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 18710		RunNo: 25555					
Prep Date:	4/15/2015		Analysis Date: 4/16/2015		SeqNo: 757284		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		103	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 Not In Range
RL Reporting Detection Limit



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: **1504518**

RcptNo: **1**

Received by/date:

AF

04/11/15

Logged By: **Ashley Gallegos**

4/11/2015 8:10:00 AM

AG

Completed By: **Ashley Gallegos**

4/13/2015 7:19:33 AM

AG

Reviewed By:

mg

04/13/15

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

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

Special Handling (if applicable)

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

Person Notified:

Date

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good	Yes			

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: GCU 157E

Project #:	
------------	--

Project Manager:
J. Blagg

Sampler: I - BLA66

On Ice	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Sample Temperature:	3.1°C	

Container Type and #	Preservative Type	HEAL No. 1504518
-------------------------	----------------------	---------------------

402x1	COOL	-001
ii	"	-1003

11	11	-003
11	11	-004

u	u	-005
u	u	-0010

		000

Received by:	Date	Time
<i>[Signature]</i>	9/11/15	8:10

Received by: / Date Time



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

	X	X	X	X	BTEX + MIBE + TMB's (8021)
					BTEX + MTBE + TPH (Gas only)
	X	X	X	X	TPH 8015B (GRO / DRO / TREO)
					TPH (Method 418.1)
					EDB (Method 504.1)
					PAH's (8310 or 8270 SIMS)
					RCRA 8 Metals
					Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)
					8081 Pesticides / 8082 PCB's
					8260B (VOA)
					8270 (Semi-VOA)
	X	X	X	X	CHLORIDE
					Air Bubbles (Y or N)

Remarks: Bill BP
CONTACT: JEFF PEACE
PARKER: ZEVHOLREME
PROJECT: P-120

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

03143-1011

Form C-138
Revised March 12, 2007

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

BP America Production Co. * 200 Energy Court * Farmington, NM 87401

2. Originating Site: Gallegos Canyon Unit 157E well site - NW/4 Section 35, T28N, R13W

May 2015

3. Location of Material (Street Address, City, State or ULSTR): Gallegos Canyon Unit 157E well site - NW/4 Section 35, T28N, R13W

or

Physical Address: 200 Energy Court, Farmington, NM 87401

1. Source and Description of Waste:

Soil impacted due to condensate leak from below-grade tank

Estimated Volume 50 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 48 yd³ bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Jeff Peace *Jeff Peace*, representative or authorized agent for BP America Production Company do hereby
Generator Signature

certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☒ Monthly ☐ Weekly ☐ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Jeff Peace *Jeff Peace*, representative for BP America do hereby certify that
Representative/Agent Signature

representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

6. Transporter: Crossfire

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech Soil Remediation Facility / Permit No. NM 01-0011

Address of Facility: # 43 CR 7175, South of Bloomfield, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Running

TITLE: Waste Coordinator DATE: 5-22-15

SIGNATURE: *Kendra Running*
Surface Waste Management Facility Authorized Agent

TELEPHON 505-632-1782 FAX NO.: 505-632-1876 or 505-334-1003