OIL CONS. DIV DIST. 3

DEC 21 2015

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: BP	Contact: Steve Moskal
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9497
Facility Name: Hughes 003E	Facility Type: Natural gas well

Surface Owner: Federal	Mineral Owner: Federal	API No. 3004524999

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: San Juan
A	20	29N	8W	985	North	1,000	East	

Latitude 36.71529° **Longitude** -107.69321°

NATURE OF RELEASE

Type of Release: Historic Production Pit	Volume of Release: unknown	Volume Recovered: none
Source of Release: Discovery of historic production pit during BGT replacement.	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: October 28, 2015, 12:20PM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* During removal of BGT for upgrade, construction crew reported evidence of impacted soils below the BGT. The BGT and associated piping appeared to be in good, working condition. Further assessment found impacts of TPH above BGT closure standards at 6.0' below ground surface. Sandstone was encountered at 6 feet below ground surface.

Describe Area Affected and Cleanup Action Taken.* BP has excavated the impacted soils following the NMOCD soil remediation guidelines based on a site ranking of 10 points requiring a TPH closure standard of 1,000 ppm. Final excavation dimensions measured 18'x18'x7.5' deep. The BLM and NMOCD were notified of the closure sampling event, however neither party was able to attend (as documented in the attached email). Laboratory results for the closure samples were below laboratory detection limits for TPH and BTEX and below 60 ppm for chloride. Attached is the final laboratory report and photos documenting the sample locations. The excavation has been backfilled and the BGT will be upgraded as previously planned.

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 Approved by Environmental Specialist:	
Printed Name: Steve Moskal		
Title: Field Environmental Coordinator	Approval Date: 12/29/2015	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval:	Attached ☐
Date: December 21, 2015 Phone: 505-326-9497		

* Attach Additional Sheets If Necessary

NVF1535747613

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BP America: Hughes 3E

(A) Sec 20 – T29N – R8W

API: 30-045-24999

San Juan County, New Mexico

Summary Record of Impact Remediation

October 28, 2015 Soils impacted with hydrocarbons encountered during modification upgrade of 95 bbl BGT from single wall/single bottom to double wall/double bottom BGT. Impacts found immediately below BGT, but there was no evidence of an integrity issue with the BGT or piping. Suspected source from an historical overflow event.

Site Closure Standard Determined at 1,000 ppm TPH based on information from site BGT upgrade permit signed by NMOCD on Nov 20, 2015:

Horizontal Distance to Closest USGS Blue Line > 200 feet (10 points)
Nearest Water Well > 1,000 feet (0 points)
Depth to Groundwater >100 feet (0 points)

December 10, 2015 Initiate and complete remediation of site by excavation of impacts with trackhoe. Final excavation size 18' x 18' x 7.5' deep. Collect 3-point composite samples of NW, NW, SW and SE sidewalls and 5-point composite sample of base. Entire excavation in soft, purple colored shalestone.

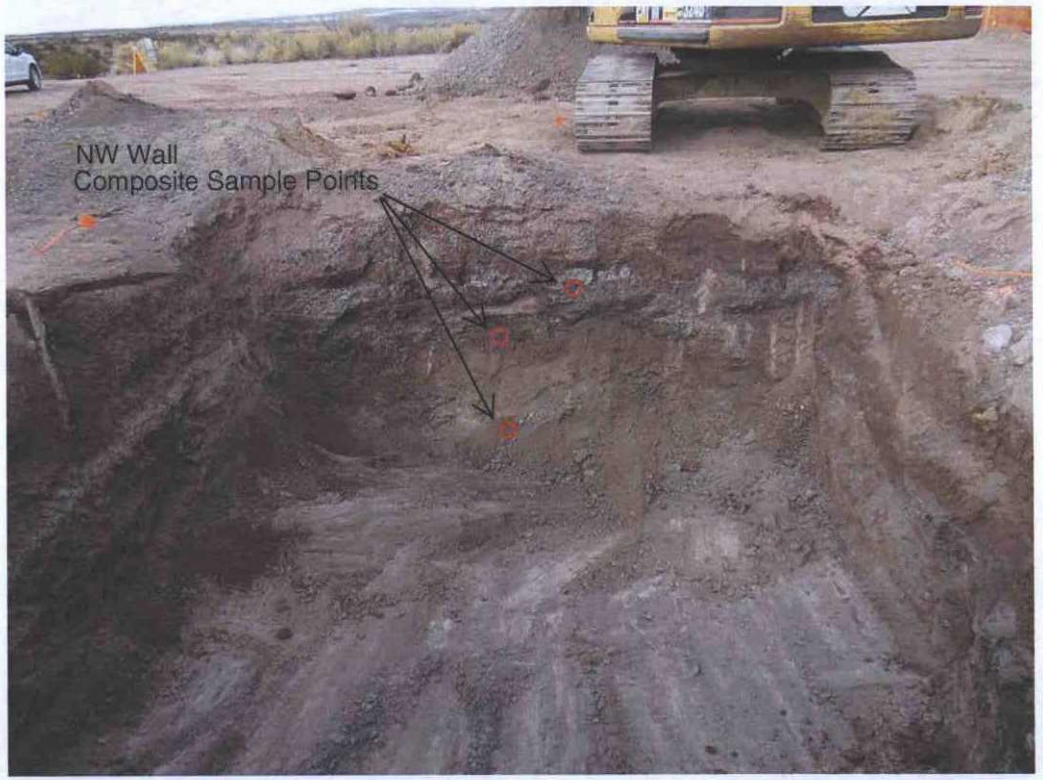
December 11, 2015 Receive rush laboratory lab reports. All samples test TPH (US EPA Method 8015) at non-detect, BTEX at non-detect and chlorides at < 60 mg/Kg. Excavation crew completes backfilling with clean soils. Impacted soils transported to JFJ Landfarm in San Juan County, New Mexico. Final C-138 soil volume = 60 cubic yards.


BP America
Hughes 3E
(A) Sec 20 - T29N - R8W
API: 30-045-24999
NW Wall
NE Wall
SW Wall
SE Wall
95 BGT Excavation on December 10, 2015
18' x 18' x 7.5' Deep
Field Samples Collected 12/10/2015 for Lab Testing (TPH, BTEX & Cl-)
Sample ID | Time | Field OVM | Lab TPH (8015)
NE Wall 3-point 2'-7' Depth | 1118 | 20.0 ppm | ND
NW Wall 3-point 2'-7' Depth | 1121 | 8.1 ppm | ND
SW Wall 3-point 2'-7' Depth | 1125 | 3.5 ppm | ND
SE Wall 3-point 2'-7' Depth | 1131 | 102 ppm | ND
Base 5-point @ 7.5' Depth | 1128 | 3.0 ppm | ND
Google earth
N
50 ft


SW Wall
Composite Sample Points


SE Wall
Composite Sample Points


NE Wall
Composite Sample Points


NW Wall
Composite Sample Points


Excavation Base
Composite Sample Points

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 15, 2015

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 320-1183
FAX

RE: Hughes 3E OrderNo.: 1512552

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 5 sample(s) on 12/11/2015 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1512552**
Date Reported: **12/15/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Hughes 3E
Lab ID: 1512552-001
Matrix: MEOH (SOIL)
Client Sample ID: NW Wall 3-pt 2'-7'
Collection Date: 12/10/2015 11:21:00 AM
Received Date: 12/11/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	31	30		mg/Kg	20	12/11/2015 11:12:39 AM	22775
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/11/2015 10:35:01 AM	22740
Surr: DNOP	92.8	70-130		%REC	1	12/11/2015 10:35:01 AM	22740
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/11/2015 9:46:50 AM	A30785
Surr: BFB	90.7	66.2-112		%REC	1	12/11/2015 9:46:50 AM	A30785
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.047		mg/Kg	1	12/11/2015 9:46:50 AM	C30785
Toluene	ND	0.047		mg/Kg	1	12/11/2015 9:46:50 AM	C30785
Ethylbenzene	ND	0.047		mg/Kg	1	12/11/2015 9:46:50 AM	C30785
Xylenes, Total	ND	0.094		mg/Kg	1	12/11/2015 9:46:50 AM	C30785
Surr: 4-Bromofluorobenzene	116	80-120		%REC	1	12/11/2015 9:46:50 AM	C30785

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Hughes 3E
Lab ID: 1512552-002
Matrix: MEOH (SOIL)
Client Sample ID: NE Wall 3-pt 2'-7'
Collection Date: 12/10/2015 11:18:00 AM
Received Date: 12/11/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	38	30		mg/Kg	20	12/11/2015 11:25:04 AM	22775
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/11/2015 10:56:21 AM	22740
Surr: DNOP	92.2	70-130		%REC	1	12/11/2015 10:56:21 AM	22740
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	12/11/2015 10:11:29 AM	A30785
Surr: BFB	95.7	66.2-112		%REC	1	12/11/2015 10:11:29 AM	A30785
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.037		mg/Kg	1	12/11/2015 10:11:29 AM	C30785
Toluene	ND	0.037		mg/Kg	1	12/11/2015 10:11:29 AM	C30785
Ethylbenzene	ND	0.037		mg/Kg	1	12/11/2015 10:11:29 AM	C30785
Xylenes, Total	ND	0.074		mg/Kg	1	12/11/2015 10:11:29 AM	C30785
Surr: 4-Bromofluorobenzene	124	80-120	S	%REC	1	12/11/2015 10:11:29 AM	C30785

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: SW Wall 3-pt 2'-7'
Project: Hughes 3E
Collection Date: 12/10/2015 11:25:00 AM
Lab ID: 1512552-003
Matrix: MEOH (SOIL)
Received Date: 12/11/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	32	30		mg/Kg	20	12/11/2015 11:37:28 AM	22775
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/11/2015 11:17:58 AM	22740
Surr: DNOP	94.7	70-130		%REC	1	12/11/2015 11:17:58 AM	22740
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	12/11/2015 10:36:06 AM	A30785
Surr: BFB	97.1	66.2-112		%REC	1	12/11/2015 10:36:06 AM	A30785
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.045		mg/Kg	1	12/11/2015 10:36:06 AM	C30785
Toluene	ND	0.045		mg/Kg	1	12/11/2015 10:36:06 AM	C30785
Ethylbenzene	ND	0.045		mg/Kg	1	12/11/2015 10:36:06 AM	C30785
Xylenes, Total	ND	0.090		mg/Kg	1	12/11/2015 10:36:06 AM	C30785
Surr: 4-Bromofluorobenzene	123	80-120	S	%REC	1	12/11/2015 10:36:06 AM	C30785

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Hughes 3E
Lab ID: 1512552-004
Matrix: MEOH (SOIL)
Client Sample ID: SE Wall 3-pt 2'-7'
Collection Date: 12/10/2015 11:31:00 AM
Received Date: 12/11/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	56	30		mg/Kg	20	12/11/2015 11:49:52 AM	22775
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/11/2015 11:39:23 AM	22740
Surr: DNOP	94.9	70-130		%REC	1	12/11/2015 11:39:23 AM	22740
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	12/11/2015 11:00:52 AM	A30785
Surr: BFB	113	66.2-112	S	%REC	1	12/11/2015 11:00:52 AM	A30785
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.041		mg/Kg	1	12/11/2015 11:00:52 AM	C30785
Toluene	ND	0.041		mg/Kg	1	12/11/2015 11:00:52 AM	C30785
Ethylbenzene	ND	0.041		mg/Kg	1	12/11/2015 11:00:52 AM	C30785
Xylenes, Total	ND	0.082		mg/Kg	1	12/11/2015 11:00:52 AM	C30785
Surr: 4-Bromofluorobenzene	127	80-120	S	%REC	1	12/11/2015 11:00:52 AM	C30785

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Hughes 3E
Lab ID: 1512552-005
Matrix: MEOH (SOIL)
Client Sample ID: Base 5-pt 7.5'
Collection Date: 12/10/2015 11:28:00 AM
Received Date: 12/11/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/11/2015 12:02:17 PM	22775
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/11/2015 12:00:52 PM	22740
Surr: DNOP	92.3	70-130		%REC	1	12/11/2015 12:00:52 PM	22740
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	12/11/2015 11:25:35 AM	A30785
Surr: BFB	98.6	66.2-112		%REC	1	12/11/2015 11:25:35 AM	A30785
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.038		mg/Kg	1	12/11/2015 11:25:35 AM	C30785
Toluene	ND	0.038		mg/Kg	1	12/11/2015 11:25:35 AM	C30785
Ethylbenzene	ND	0.038		mg/Kg	1	12/11/2015 11:25:35 AM	C30785
Xylenes, Total	ND	0.077		mg/Kg	1	12/11/2015 11:25:35 AM	C30785
Surr: 4-Bromofluorobenzene	126	80-120	S	%REC	1	12/11/2015 11:25:35 AM	C30785

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1512552**

15-Dec-15

Client: Blagg Engineering
Project: Hughes 3E

Sample ID	**MB-22775**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**22775**		RunNo:	**30809**				
Prep Date:	**12/14/2015**	Analysis Date:	**12/11/2015**		SeqNo:	**941358**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-22775**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**22775**		RunNo:	**30809**				
Prep Date:	**12/14/2015**	Analysis Date:	**12/11/2015**		SeqNo:	**941359**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1512552**

15-Dec-15

Client: Blagg Engineering
Project: Hughes 3E

Sample ID **MB-22740**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **22740**	RunNo: **30776**
Prep Date: **12/11/2015**	Analysis Date: **12/11/2015**	SeqNo: **940038** 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	9.1		10.00		91.1	70	130			

Sample ID **LCS-22740**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **22740**	RunNo: **30776**
Prep Date: **12/11/2015**	Analysis Date: **12/11/2015**	SeqNo: **940272** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.6	57.4	139			
Surr: DNOP	4.2		5.000		85.0	70	130			

Sample ID **1512552-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **NW Wall 3-pt 2'-7'**	Batch ID: **22740**	RunNo: **30776**
Prep Date: **12/11/2015**	Analysis Date: **12/11/2015**	SeqNo: **940538** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.5	47.57	3.829	86.1	31.2	162			
Surr: DNOP	4.2		4.757		87.9	70	130			

Sample ID **1512552-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **NW Wall 3-pt 2'-7'**	Batch ID: **22740**	RunNo: **30776**
Prep Date: **12/11/2015**	Analysis Date: **12/11/2015**	SeqNo: **940539** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.51	3.829	92.0	31.2	162	11.6	31.7	
Surr: DNOP	4.5		5.051		88.8	70	130	0	0	

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1512552**

15-Dec-15

Client: Blagg Engineering
Project: Hughes 3E

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **A30785**	RunNo: **30785**
Prep Date:	Analysis Date: **12/11/2015**	SeqNo: **940837** 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	920		1000		91.5	66.2	112			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **A30785**	RunNo: **30785**
Prep Date:	Analysis Date: **12/11/2015**	SeqNo: **940838** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.0	79.6	122			
Surr: BFB	1100		1000		106	66.2	112			

Sample ID **1512552-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **NW Wall 3-pt 2'-7'**	Batch ID: **A30785**	RunNo: **30785**
Prep Date:	Analysis Date: **12/11/2015**	SeqNo: **940839** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.7	23.58	0	90.8	62.5	151			
Surr: BFB	1100		943.4		112	66.2	112			S

Sample ID **1512552-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **NW Wall 3-pt 2'-7'**	Batch ID: **A30785**	RunNo: **30785**
Prep Date:	Analysis Date: **12/11/2015**	SeqNo: **940840** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.7	23.59	0	88.5	62.5	151	2.50	22.1	
Surr: BFB	1100		943.5		113	66.2	112	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1512552**

15-Dec-15

Client: Blagg Engineering
Project: Hughes 3E

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **C30785**	RunNo: **30785**
Prep Date:	Analysis Date: **12/11/2015**	SeqNo: **940861** 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	1.2		1.000		116	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **C30785**	RunNo: **30785**
Prep Date:	Analysis Date: **12/11/2015**	SeqNo: **940862** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.050	1.000	0	95.8	80	120			
Toluene	0.91	0.050	1.000	0	91.3	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.3	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.4	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		134	80	120			S

Sample ID **1512552-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **NE Wall 3-pt 2'-7'**	Batch ID: **C30785**	RunNo: **30785**
Prep Date:	Analysis Date: **12/11/2015**	SeqNo: **940863** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.65	0.037	0.7429	0	87.3	69.6	136			
Toluene	0.66	0.037	0.7429	0	89.4	76.2	134			
Ethylbenzene	0.71	0.037	0.7429	0	95.8	75.8	137			
Xylenes, Total	2.0	0.074	2.229	0	90.9	78.9	133			
Surr: 4-Bromofluorobenzene	1.0		0.7429		135	80	120			S

Sample ID **1512552-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **NE Wall 3-pt 2'-7'**	Batch ID: **C30785**	RunNo: **30785**
Prep Date:	Analysis Date: **12/11/2015**	SeqNo: **940864** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.64	0.037	0.7429	0	86.5	69.6	136	0.909	20	
Toluene	0.65	0.037	0.7429	0	87.2	76.2	134	2.51	20	
Ethylbenzene	0.69	0.037	0.7429	0	92.6	75.8	137	3.40	20	
Xylenes, Total	2.0	0.074	2.229	0	88.7	78.9	133	2.51	20	
Surr: 4-Bromofluorobenzene	1.0		0.7429		139	80	120	0	0	S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1512552** RcptNo: 1

Received by/date: 12/11/15

Logged By: **Joe Archuleta** **12/11/2015 7:00:00 AM**

Completed By: **Joe Archuleta** **12/11/2015 7:26:47 AM**

Reviewed By: 12/11/15

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

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good	Yes			

Chain-of-Custody Record

Client: BP America
BLAGG Engineering
Mailing Address:

Phone #: 505-320-1183
Email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush ASAP SAME DAY
Project Name: HUGHES 3E
Project #:
Project Manager: J. BLAGG
Sampler: J. BLAGG
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.5

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. 1512552	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	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)	CHLORIDE				Air Bubbles (Y or N)
12/10/2015	1121	SOIL	NW WALL 3-PT @ 2'-7'	4oz x1	COOL	-001	X		X									X				
"	1118	"	NE WALL 3-PT @ 2'-7'	"	"	-002	X		X									X				
"	1125	"	SW WALL 3-PT @ 2'-7'	"	"	-003	X		X									X				
"	1131	"	SE WALL 3-PT @ 2'-7'	"	"	-004	X		X									X				
"	1128	"	BASE 5-PT @ 7½'	"	"	-005	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/10/15	1259	Jeff Blagg	Chris Walker	12/10/15	1259
12/10/15	1840	Chris Walker	Jose Acosta	12/11/15	0700

Remarks: Bill BP
VID: VHIXONEVRM
REF: P-451
Contact: Steve MOSKAL

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.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-138
Revised August 1, 2011

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
BP America Production Co. 200 Energy Ct. Farmington, NM 87401

2. **Originating Site:**
Hughes 003E
Paykey: VHIXONEV RM

3. **Location of Material (Street Address, City, State or ULSTR):**
QRT/QRT: NE/NE Unit: A Section: 20 T29N R08W

4. **Source and Description of Waste:** Hydrocarbon impacted soils

Estimated Volume 200 ☒ yd³ / ☐ bbls Known Volume (to be entered by the operator at the end of the haul) 60 ☒ yd³ / ☐ bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Steve Moskal, representative or authorized agent for BP America Production Company do hereby 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 was lous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CF 61, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-ha (Check the appropriate items)

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

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

Steve Moskal, representative for BP America Production Company authorize IEI to complete ired testing/sign the Generator Waste Testing Certification.

I, K Selph, representative for IEI do hereby certif representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and amples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMA esults of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Sectic 19.15.36 NMAC.

5. **Transporter:**
Crossfire

OCD Permitted Surface Waste Management Facility

PH=8
CL=2132

Name and Facility Permit #: Industrial Ecosystems Inc., JFJ Waste Management Facility (JFJ), Permit NM-01-0010B

Address of Facility: #49 CR 3150 Aztec, NM

Method of Treatment and/or Disposal:

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

aste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: K Selph TITLE: Clerk DATE: 12/11/15

SIGNATURE: K Selph TELEPHONE NO.: 632-1782

Surface Waste Management Facility Authorized Agent

12/2