OIL CONS. DIV DIST. 3

AUG 11 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: Jeff Peace
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9479
Facility Name: GCU 228E	Facility Type: Natural gas well

Surface Owner: Tribal	Mineral Owner: Federal	API No. 3004525448

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: San Juan
F	21	28N	12W	2,320	North	1,800	West	

Latitude 36.64862 **Longitude** -108.11987

NATURE OF RELEASE

Type of Release: condensate/oil	Volume of Release: unknown	Volume Recovered: none
Source of Release: below grade tank	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: March 26, 2015; 3:14 PM
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 construction operations to remove the below grade tank (BGT) impacted soil was discovered under the tank. Visual observation showed no evidence of a release, but the lab report of soil analysis showed TPH of 610 ppm by Method 8015D, with DRO of 310 ppm, MRO of 300 ppm. The DRO and MRO exceed the BGT TPH limit of 100 ppm. Analysis results are attached.

Describe Area Affected and Cleanup Action Taken.* Soil samples beneath the BGT at five feet depth showed impacts. Soil was excavated to eight feet depth, and TPH from the bottom and the walls of the excavation were non-detect for TPH. 17 cubic yards of impacted soil were transported to the Envirotech landfarm for treatment. The excavation was backfilled with clean soil and is still within the active well area. Attached are the soil samples and the C-138 for the impacted soil.

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:	Attached ☐
Date: August 5, 2015 Phone: 505-326-9497		

* Attach Additional Sheets If Necessary

#NCS1509731333

17

BP AMERICA PRODUCTION COMPANY

GCU 228E – 95 BBL BGT (TANK ID: A) RELEASE CLEANUP

API #: 30-045-25448

Legal Description: (Unit Letter F, Sec. 21 -T28N -R12W, NMPM)

CHRONOLOGICAL EVENT SUMMATION

1. **March 24, 2015**: BP begins closure of 95 barrel below-grade tank (**BGT**) at the site. A five (5) point composite sample (**PCS**) was collected directly beneath the BGT position at approximately five (5) feet (**ft.**) below grade (**B.G.**) after its removal from the subsurface [**5PC-TB @ 5' (95)**]. No apparent evidence of a release was observed from the BGT bottom depth.

2. **March 25, 2015**: Preliminary lab results indicated the following results for **5PC-TB @ 5' (95)**;

   Total Petroleum Hydrocarbons (**TPH**) using US EPA Method 8015B = 610 mg/Kg
   Benzene using US EPA Method 8021B = not detected (**ND**) at reporting limits of 0.042 mg/Kg
   Total benzene, toluene, ethylbenzene, total xylenes (**BTEX**) using US EPA Method 8021B = ND at reporting limits of less than 0.084 mg/Kg
   Chloride using US EPA Method 300.0 = ND at reporting limits of 30 mg/Kg

3. **March 26, 2015**: To determine vertical extent of hydrocarbon impacts, a test hole was advanced beneath the center of BGT bottom position and sampled at eight (8) ft. B.G. [**TH1 @ 8' (95)**] for TPH 8015B only.

4. **March 27, 2015**: Preliminary lab results indicated the following results for **5PC-EB @ 8' (95)**;

   TPH using US EPA Method 8015B = ND at reporting limits of less than 9.8 mg/Kg

5. **March 30, 2015**: Approximately fifteen (15) cubic yards of soils were excavated beneath the BGT and transported to Envirotech's landfarm. Excavation dimensions were approximately 12 ft. X 12 ft. X 3 ft. depth. Subsequent composite samples were collected to confirm the vertical and lateral extent of hydrocarbon impacts [**vertical – 5PC-EB @ 8' (95); lateral – 4PC-SW @ 7' (95)**].

6. **March 31, 2015**: Preliminary lab results indicated the following results for **5PC-EB@8'(95)**;

   TPH using US EPA Method 8015B = ND at reporting limits of less than 9.8 mg/Kg
   Benzene using US EPA Method 8021B = ND at reporting limits of 0.038 mg/Kg
   BTEX using US EPA Method 8021B = ND at reporting limits of less than 0.077 mg/Kg
   Chloride using US EPA Method 300.0 = ND at reporting limits of 30 mg/Kg

   Preliminary lab results indicated the following results for **4PC-SW @ 7' (95)**;

   TPH using US EPA Method 8015B = ND at reporting limits of less than 9.7 mg/Kg
   Benzene using US EPA Method 8021B = ND at reporting limits of 0.036 mg/Kg
   BTEX using US EPA Method 8021B = ND at reporting limits of less than 0.072 mg/Kg
   Chloride using US EPA Method 300.0 = ND at reporting limits of 30 mg/Kg

CLIENT: BP

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

API #: 3004525448
TANK ID (if applicble): A

FIELD REPORT:

(circle one): [BGT CONFIRMATION] / RELEASE INVESTIGATION / OTHER:

PAGE #: 1 of 1

SITE INFORMATION:

SITE NAME: GCU # 228E

QUAD/UNIT: F SEC: 21 TWP: 28N RNG: 12W PM: NM CNTY: SJ ST: NM

1/4 -1/4/FOOTAGE: 2,320'N / 1,800'W SE/NW LEASE TYPE: [FEDERAL] / STATE / FEE / INDIAN

LEASE #: SF078106 PROD. FORMATION: DK CONTRACTOR: STRIKE MBF - D. HAGA

DATE STARTED: 03/26/15
DATE FINISHED: 03/31/15
ENVIRONMENTAL SPECIALIST(S): NJV

REFERENCE POINT:

WELL HEAD (W.H.) GPS COORD.: 36.64866 X 108.11990 GL ELEV.: 5,544'

		GPS COORD.	DISTANCE/BEARING FROM W.H.
1)	95 BGT (SW/DB)	36.64879 X 108.11948	140', N82E
2)			
3)			
4)			

SAMPLING DATA:

CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL

	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	LAB ANALYSIS	OVM READING (ppm)
1)	TH1 @ 8' (95)	03/26/15	0845	TPH (8015B)	NA
2)	5PC - EB @ 8' (95)	03/30/15	1058	8015B/8021B/300.0 (Cl)	NA
3)	4PC - SW @ 7' (95)	03/30/15	1101	8015B/8021B/300.0 (Cl)	NA
4)					

SOIL DESCRIPTION:

SOIL TYPE: [SAND] / [SILTY SAND] / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER

SOIL COLOR: DARK YELLOWISH ORANGE

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

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

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

SAMPLE TYPE: [GRAB] / [COMPOSITE] - # OF PTS. 5

DISCOLORATION/STAINING OBSERVED: YES / [NO] EXPLANATION -

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

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

HC ODOR DETECTED: YES / [NO] EXPLANATION -

ANY AREAS DISPLAYING WETNESS: YES / [NO] EXPLANATION -

SITE OBSERVATIONS:

LOST INTEGRITY OF EQUIPMENT: YES / [NO] EXPLANATION -

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

EQUIPMENT SET OVER RECLAIMED AREA: YES / [NO] EXPLANATION -

OTHER: CONFIRMATION SAMPLE GREATER THAN CLOSURE PLAN STANDARD FOR TPH (610 mg/Kg). TEST HOLE ADVANCED TO 8 FT. BELOW GRADE. IMPACTED SOILS EXCAVATED & TRANSPORTED TO BP's CROUCH MESA FACILITY. INTERPRETED AS NON REPORTABLE RELEASE (based on impacted soils calc. qty).

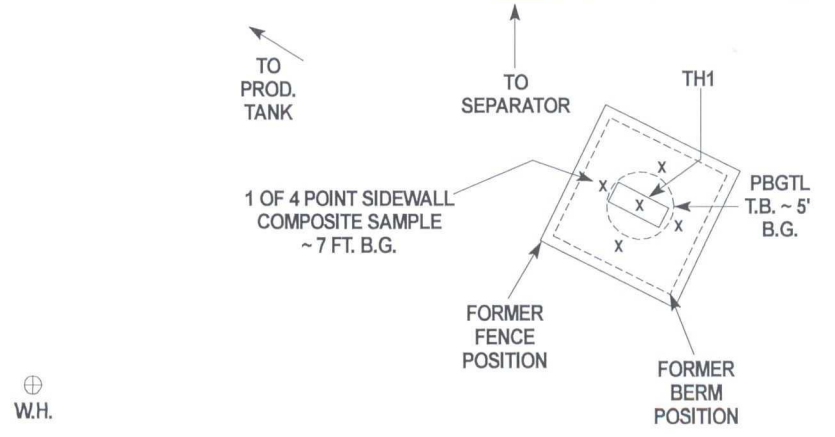
SOIL IMPACT DIMENSION ESTIMATION: 12 ft. X 12 ft. X 3 ft. EXCAVATION ESTIMATION (Cubic Yards) : 15

DEPTH TO GROUNDWATER: <50' NEAREST WATER SOURCE: >1,000' NEAREST SURFACE WATER: <1,000' NMOCD TPH CLOSURE STD: 100 ppm

SITE SKETCH

BGT Located : off / [on] site

PLOT PLAN circle: attached



OVM CALIB. READ. = NA ppm RF =0.52
OVM CALIB. GAS = NA ppm
TIME: NA am/pm DATE: NA

MISCELL. NOTES

WO:
REF. #: P - 16
PK: ZEVH01BGT2
PJ #:
Permit date(s): 06/14/10
OCD Appr. date(s): 11/18/14

Tank ID	OVM = Organic Vapor Meter ppm = parts per million
A	BGT Sidewalls Visible: Y / (N)
	BGT Sidewalls Visible: Y / N
	BGT Sidewalls Visible: Y / N

Magnetic declination: 10° E

NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD; T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA - NOT APPLICABLE OR NOT AVAILABLE; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM.

NOTES: GOOGLE EARTH IMAGERY DATE: 03/15/2015. ONSITE: 03/24/15, 03/26/15, 03/30/15

Analytical Report
Lab Order **1503C72**
Date Reported: **3/30/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU #228E
Lab ID: 1503C72-001 **Matrix:** SOIL

Client Sample ID: TH1 @ 8' (95)
Collection Date: 3/26/2015 8:45:00 AM
Received Date: 3/27/2015 7:30:00 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	3/27/2015 11:41:35 AM	18374
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/27/2015 11:41:35 AM	18374
Surr: DNOP	97.4	63.5-128		%REC	1	3/27/2015 11:41:35 AM	18374
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	3/27/2015 9:26:13 AM	18358
Surr: BFB	91.4	80-120		%REC	1	3/27/2015 9:26:13 AM	18358

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C72**

30-Mar-15

Client: Blagg Engineering
Project: GCU #228E

Sample ID **MB-18374**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **18374**	RunNo: **25115**
Prep Date: **3/27/2015**	Analysis Date: **3/27/2015**	SeqNo: **741645** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		94.3	63.5	128			

Sample ID **LCS-18374**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **18374**	RunNo: **25115**
Prep Date: **3/27/2015**	Analysis Date: **3/27/2015**	SeqNo: **741646** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.6	67.8	130			
Surr: DNOP	4.9		5.000		97.1	63.5	128			

Sample ID **MB-18350**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **18350**	RunNo: **25115**
Prep Date: **3/26/2015**	Analysis Date: **3/27/2015**	SeqNo: **741755** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.4		10.00		93.8	63.5	128			

Sample ID **LCS-18350**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **18350**	RunNo: **25115**
Prep Date: **3/26/2015**	Analysis Date: **3/27/2015**	SeqNo: **741859** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		99.6	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#: **1503C72**

30-Mar-15

Client: Blagg Engineering
Project: GCU #228E

Sample ID	**MB-18358**	SampType: **MBLK**		TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **18358**		RunNo: **25120**					
Prep Date:	**3/26/2015**	Analysis Date: **3/27/2015**		SeqNo: **742138**		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	970		1000		96.9	80	120			

Sample ID	**LCS-18358**	SampType: **LCS**		TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **18358**		RunNo: **25120**					
Prep Date:	**3/26/2015**	Analysis Date: **3/27/2015**		SeqNo: **742139**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	64	130			
Surr: BFB	870		1000		86.6	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

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: 1503C72 RcptNo: 1

Received by/date: CM 03/27/15

Logged By: Anne Thorne 3/27/2015 7:30:00 AM Anne Thorne

Completed By: Anne Thorne 3/27/2015 Anne Thorne

Reviewed By: 03/27/15

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 ☑	
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	2.3	Good	Yes			

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

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

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush SAME DAY

Project Name: GCU # 228E

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.3

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 1503C72	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	5 pt. composite sample	
3/26/15	0845	SOIL	TH1 @ 8' (95)	4 oz. - 1	Cool	-001			✓											✓		

Remarks:

BILL DIRECTLY TO BP:
Jeff Peace, 200 Energy Court, Farmington, NM 87401

Reference #: P-16 Paykey: ZEVH01BGT2

Date	Time	Relinquished by:	Received by:	Date	Time
3/26/15	1432			3/26/15	1432
3/26/15	1720			03/27/15	0730

Analytical Report
Lab Order **1503D64**
Date Reported: **4/1/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU #228E
Lab ID: 1503D64-001 **Matrix:** SOIL

Client Sample ID: 5 PC-EB @ 8' (95)
Collection Date: 3/30/2015 10:58:00 AM
Received Date: 3/31/2015 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/31/2015 12:45:53 PM	18433
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/31/2015 12:45:53 PM	18433
Surr: DNOP	99.5	63.5-128		%REC	1	3/31/2015 12:45:53 PM	18433
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	3/31/2015 10:55:42 AM	18423
Surr: BFB	101	80-120		%REC	1	3/31/2015 10:55:42 AM	18423
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.038		mg/Kg	1	3/31/2015 10:55:42 AM	18423
Toluene	ND	0.038		mg/Kg	1	3/31/2015 10:55:42 AM	18423
Ethylbenzene	ND	0.038		mg/Kg	1	3/31/2015 10:55:42 AM	18423
Xylenes, Total	ND	0.077		mg/Kg	1	3/31/2015 10:55:42 AM	18423
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	3/31/2015 10:55:42 AM	18423
EPA METHOD 300.0: ANIONS						Analyst: **SRM**	
Chloride	ND	30		mg/Kg	20	3/31/2015 11:06:28 AM	18435

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU #228E
Lab ID: 1503D64-002 **Matrix:** SOIL

Client Sample ID: 4 PC-SW @ 7' (95)
Collection Date: 3/30/2015 11:01:00 AM
Received Date: 3/31/2015 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/31/2015 12:24:27 PM	18433
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/31/2015 12:24:27 PM	18433
Surr: DNOP	95.0	63.5-128		%REC	1	3/31/2015 12:24:27 PM	18433
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	3/31/2015 11:24:29 AM	18423
Surr: BFB	92.6	80-120		%REC	1	3/31/2015 11:24:29 AM	18423
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.036		mg/Kg	1	3/31/2015 11:24:29 AM	18423
Toluene	ND	0.036		mg/Kg	1	3/31/2015 11:24:29 AM	18423
Ethylbenzene	ND	0.036		mg/Kg	1	3/31/2015 11:24:29 AM	18423
Xylenes, Total	ND	0.072		mg/Kg	1	3/31/2015 11:24:29 AM	18423
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	3/31/2015 11:24:29 AM	18423
EPA METHOD 300.0: ANIONS						Analyst: **SRM**	
Chloride	ND	30		mg/Kg	20	3/31/2015 11:18:53 AM	18435

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503D64**

01-Apr-15

Client: Blagg Engineering
Project: GCU #228E

Sample ID	**MB-18435**	SampType: **MBLK**		TestCode: **EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID: **18435**		RunNo: **25209**					
Prep Date:	**3/31/2015**	Analysis Date: **3/31/2015**		SeqNo: **745174**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-18435**	SampType: **LCS**		TestCode: **EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID: **18435**		RunNo: **25209**					
Prep Date:	**3/31/2015**	Analysis Date: **3/31/2015**		SeqNo: **745175**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	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#: **1503D64**

01-Apr-15

Client: Blagg Engineering
Project: GCU #228E

Sample ID **MB-18433**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **18433**	RunNo: **25173**
Prep Date: **3/31/2015**	Analysis Date: **3/31/2015**	SeqNo: **744150** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		91.4	63.5	128			

Sample ID **LCS-18433**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **18433**	RunNo: **25173**
Prep Date: **3/31/2015**	Analysis Date: **3/31/2015**	SeqNo: **744151** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.9	67.8	130			
Surr: DNOP	4.8		5.000		95.9	63.5	128			

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503D64**

01-Apr-15

Client: Blagg Engineering
Project: GCU #228E

Sample ID	**LCS-18423**	SampType: **LCS**		TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **18423**		RunNo: **25192**					
Prep Date:	**3/30/2015**	Analysis Date: **3/31/2015**		SeqNo: **744986**		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	101	64	130			
Surr: BFB	970		1000		96.6	80	120			

Sample ID	**MB-18423**	SampType: **MBLK**		TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **18423**		RunNo: **25192**					
Prep Date:	**3/30/2015**	Analysis Date: **3/31/2015**		SeqNo: **744987**		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		92.0	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#: **1503D64**

01-Apr-15

Client: Blagg Engineering
Project: GCU #228E

Sample ID **LCS-18423**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **18423**	RunNo: **25192**
Prep Date: **3/30/2015**	Analysis Date: **3/31/2015**	SeqNo: **744994** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.050	1.000	0	119	76.6	128			
Toluene	1.1	0.050	1.000	0	110	75	124			
Ethylbenzene	1.1	0.050	1.000	0	110	79.5	126			
Xylenes, Total	3.2	0.10	3.000	0	108	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID **MB-18423**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **18423**	RunNo: **25192**
Prep Date: **3/30/2015**	Analysis Date: **3/31/2015**	SeqNo: **744995** 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	1.1		1.000		107	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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

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: 1503D64 | RcptNo: 1

Received by/date: AS 03/31/15

Logged By: Anne Thorne 3/31/2015 8:45:00 AM Anne Thorne

Completed By: Anne Thorne 3/31/2015 Anne Thorne

Reviewed By: JA 03/31/15

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 ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

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

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

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

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

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

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush **SAME DAY**

Project Name:
GCU # 228E

Project #:

Project Manager:
NELSON VELEZ

Sampler: **NELSON VELEZ** NV

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.6

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. 1503014	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	Cpt. composite sample
3/30/15	1058	SOIL	5PC-EB@8'(95)	4oz.-1	Cool	-001	✓		✓									✓			5
3/30/15	1101	SOIL	4PC-SW@7'(95)	4oz.-1	Cool	-002	✓		✓									✓			4

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/30/15	1445				
3/30/15	1855	Christy Waeler		03/31/15	0845

Remarks:
BILL DIRECTLY TO BP:
Jeff Peace, 200 Energy Court, Farmington, NM 87401
Reference #: P-16 Paykey: ZEV H01BGTZ

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 03143-1065
Energy Minerals and Natural Resources

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

Form C-138
Revised March 12, 2007

*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 Court, Farmington, NM 87401

2. **Originating Site: Gallegos Canyon Unit 228E - NW/4 Section 21, T28N, R12W** April 2015

3. **Location of Material (Street Address, City, State or ULSTR): Gallegos Canyon Unit 228E - NW/4 Section 21, T28N, R12W**

or Physical Address: 200 Energy Court, Farmington, NM 87401

4. **Source and Description of Waste:**
Contaminated soil from a possible condensate or oil leak or spill from a below grade tank

Estimated Volume 20 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) 17 yd^3 / 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:** ~~Strike~~ Caulder

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 Runung TITLE: Waste Coordinator DATE: 4-1-15

SIGNATURE: Kendra Runung TELEPHON 505-632-1782 FAX NO.: 505-632-1876 or 505-334-1003
Surface Waste Management Facility Authorized Agent