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: Blanco LS 16	Facility Type: Natural gas well

Surface Owner: Federal	Mineral Owner: Federal	API No. 3004511746

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: San Juan
D	36	28N	8W	990	North	890	East	

Latitude 36.62255 **Longitude** 107.63848

NATURE OF RELEASE

Type of Release: oil/condensate	Volume of Release: unknown	Volume Recovered: none
Source of Release: below grade tank – 45 bbl	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: May 30, 2014; 9:55 AM
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.	

RECEIVED
MAR 05 2015
NMOCD
DIST. 3

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Sampling of the soil beneath the BGT was done during removal to ensure no soil impacts from the BGT. TPH was 8,720 ppm by Method 418.1 and was 5,250 ppm by Method 8015D. Benzene was 2.67 ppm and total BTEX was 189 ppm by Method 8021. Analysis results are attached. Impacted soil was excavated and removed.

Describe Area Affected and Cleanup Action Taken.* Sampling results during BGT removal indicated a release occurred. Impacted soil was excavated and transported to a landfarm for treatment and remediation was completed on June 12, 2014. Remaining soil samples were below 5,000 ppm TPH, which is the cleanup standard for this site. Approximately 130 cubic yards were transported to the IEI landfarm. The excavated area was backfilled and compacted and has been reclaimed since the well was plugged and abandoned. Attached is a remediation summary that includes soil lab analysis data, photos, site maps, and the final C-138 form.

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: Jeff Peace	OIL CONSERVATION DIVISION
Printed Name: Jeff Peace	Approved by Environmental Specialist:
Title: Field Environmental Coordinator	Approval Date: 4/13/15 Expiration Date:
E-mail Address: peace.jeffrey@bp.com	Conditions of Approval: Attached ☐
Date: March 3, 2015 Phone: 505-326-9479	

* Attach Additional Sheets If Necessary

#nCS 1510355134

27

BP AMERICA PRODUCTION COMPANY

BLANCO LS 16 – HISTORICAL (LEGACY) RELEASE CLEANUP

API #: 30-045-11746

Legal Description: (Unit Letter D, Sec. 36 – T28N - R8W, NMPM)

CHRONOLOGICAL EVENT SUMMATION

1. May 30, 2014: Soil impacts discovered (21' North 59° West of PxA Marker) while sampling for 45 barrel BGT closure at PxA well site. BGT appeared to have good integrity, original source event not evident, possible prior earthen pit in same area. Use backhoe to sample at BGT, collecting samples immediately below BGT and at 14' depth (maximum backhoe reach) for laboratory testing. Review of site criteria determines groundwater estimated at 300', no water sources within 1,000' and no surface waters within 1,000 feet. Determine NMOCD "Spill and Release Guideline" closure standard of 5,000 ppm TPH. BP initiates plan for cleanup effort.

2. June 9, 2014: BP begins remediation by excavation with trackhoe.

3. June 10, 2014: Excavation size 50' x 33' x 12' deep, L shaped, going around PxA Marker. Sample excavation for closure, plus sample outside excavation to SE of PxA marker to confirm no lateral movement of impacts.

4. June 12, 2014: Receive lab reports. Base 4-point composite TPH = 603 ppm, sidewall composite 4-point = 19.9 ppm (Envirotech Method 418.1) and 21.0 (Hall Method 418.1), TH-1 @ 11' TPH = 0.0 ppm.

CLIENT: BP

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

API #: 3004511746
TANK ID (if applicble): A

FIELD REPORT:

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

PAGE #: 1 of 2

SITE INFORMATION:

SITE NAME: BLANCO LS # 16

DATE STARTED: 05/30/14
DATE FINISHED:

QUAD/UNIT: D SEC: 36 TWP: 28N RNG: 8W PM: NM CNTY: SJ ST: NM

1/4 -1/4/FOOTAGE: 990'N / 890'E NE/NE LEASE TYPE: [FEDERAL] / STATE / FEE / INDIAN

ENVIRONMENTAL SPECIALIST(S): JCB

LEASE #: NM012201 PROD. FORMATION: PC CONTRACTOR: CROSSFIRE MBF - T. PETERSON

REFERENCE POINT:

WELL HEAD (W.H.) GPS COORD.: 36.62253 X 107.63834 GL ELEV.: 6,213'

1) 45 BGT (DW/DB)	GPS COORD.: 36.62255 X 107.63838	DISTANCE/BEARING FROM W.H.: 21', N59W
2)	GPS COORD.:	DISTANCE/BEARING FROM W.H.:
3)	GPS COORD.:	DISTANCE/BEARING FROM W.H.:
4)	GPS COORD.:	DISTANCE/BEARING FROM W.H.:

SAMPLING DATA:

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

					OVM READING (ppm)
1) SAMPLE ID: 45 BGT @ 7'	SAMPLE DATE: 05/30/14	SAMPLE TIME: 0955	LAB ANALYSIS: 418.1/8015B/8021B/300.0 (Cl)		855
2) SAMPLE ID: 45 BGT @ 14'	SAMPLE DATE: 05/30/14	SAMPLE TIME: 1006	LAB ANALYSIS: 418.1/8015B/8021B/300.0 (Cl)		596
3) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:		
4) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:		

SOIL DESCRIPTION:

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

SOIL COLOR: DARK BROWN

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. NA

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

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 - STRONG FROM DISCOLORED SOIL.

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: NOT ASSOCIATED WITH BGT, APPEARS HISTORICAL IN ORIGIN.

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

OTHER: GAS WELL RECENTLY PLUGGED & ABANDONED (P & A).

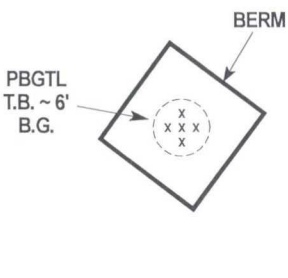
SOIL IMPACT DIMENSION ESTIMATION: ____ ft. X ____ ft. X ____ ft. EXCAVATION ESTIMATION (Cubic Yards) :

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1,000' NEAREST SURFACE WATER: >1,000' NMOCD TPH CLOSURE STD: 5,000 ppm

SITE SKETCH

BGT Located : off / [on] site

PLOT PLAN circle: attached



OVM CALIB. READ. = 52.9 ppm RF =0.52
OVM CALIB. GAS = 100 ppm
TIME: 6:15 (am)/pm DATE: 05/30/14

MISCELL. NOTES

WO: N15421192
PO #:
PK: ZFEIRK0SJS
PJ #:
Permit date(s): 06/09/10
OCD Appr. date(s): 01/16/14

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: ONSITE: 05/30/14

CLIENT: BP

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

API #: 3004511746
TANK ID (if applicble): A

FIELD REPORT:

(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:
REMEDIATION AT 45 bbl BGT

PAGE #: 2 of 2

SITE INFORMATION:

SITE NAME: BLANCO LS # 16

QUAD/UNIT: D SEC: 36 TWP: 28N RNG: 8W PM: NM CNTY: SJ ST: NM

1/4 -1/4/FOOTAGE: 990'N / 890'E NE/NE LEASE TYPE: FEDERAL / STATE / FEE / INDIAN

LEASE #: NM012201 PROD. FORMATION: PC CONTRACTOR: CROSSFIRE MBF - T. PETERSON

DATE STARTED: 06/10/14
DATE FINISHED:
ENVIRONMENTAL SPECIALIST(S): JCB

REFERENCE POINT:

WELL HEAD (W.H.) GPS COORD.: 36.62253 X 107.63834 GL ELEV.: 6,213'

1) 45 BGT (DW/DB)	GPS COORD.: 36.62255 X 107.63838	DISTANCE/BEARING FROM W.H.: 21', N59W
2)	GPS COORD.:	DISTANCE/BEARING FROM W.H.:
3)	GPS COORD.:	DISTANCE/BEARING FROM W.H.:
4)	GPS COORD.:	DISTANCE/BEARING FROM W.H.:

SAMPLING DATA:

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

							OVM READING (ppm)
1) SAMPLE ID:	BASE 4-pt. Comp.	SAMPLE DATE:	06/10/14	SAMPLE TIME:	1051	LAB ANALYSIS: 8015B / 8021B / 300.0 (Cl)	956
2) SAMPLE ID:	TH-1 @ 11'	SAMPLE DATE:	06/10/14	SAMPLE TIME:	1210	LAB ANALYSIS: 8015B / 8021B / 300.0 (Cl)	2.9
3) SAMPLE ID:	SIDEWALLS 4-pt. Comp.	SAMPLE DATE:	06/10/14	SAMPLE TIME:	1137	LAB ANALYSIS: 418.1 / 8015B / 8021B / 300.0 (Cl)	92
4) SAMPLE ID:	"	SAMPLE DATE:	"	SAMPLE TIME:	"	LAB ANALYSIS: " (HALL)	"

SOIL DESCRIPTION:

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

SOIL COLOR: DARK BROWN

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. 4

DISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION - IN EXCAVATED SOILS

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 - IN EXCAVATED SOILS

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: NOT ASSOCIATED WITH BGT, APPEARS HISTORICAL IN ORIGIN.

EQUIPMENT SET OVER RECLAIMED AREA: YES / NO EXPLANATION -

OTHER: GAS WELL RECENTLY PLUGGED & ABANDONED (P & A).

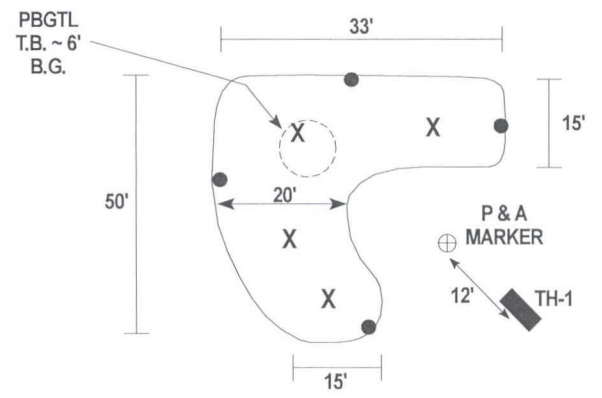
SOIL IMPACT DIMENSION ESTIMATION: 50' ft. X 33' ft. X 12' ft. EXCAVATION ESTIMATION (Cubic Yards): 500

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1,000' NEAREST SURFACE WATER: >1,000' NMOCD TPH CLOSURE STD: 5,000 ppm

SITE SKETCH

BGT Located: off / on site

PLOT PLAN circle: attached



N

EXCAVATION DEPTH = 12'

X - S.P.D. (base), ● - S.P.D. (sidewalls)

OVM CALIB. READ. = 52.1 ppm RF =0.52
OVM CALIB. GAS = 100 ppm
TIME: 6:20 (am)/pm DATE: 06/10/14

MISCELL. NOTES

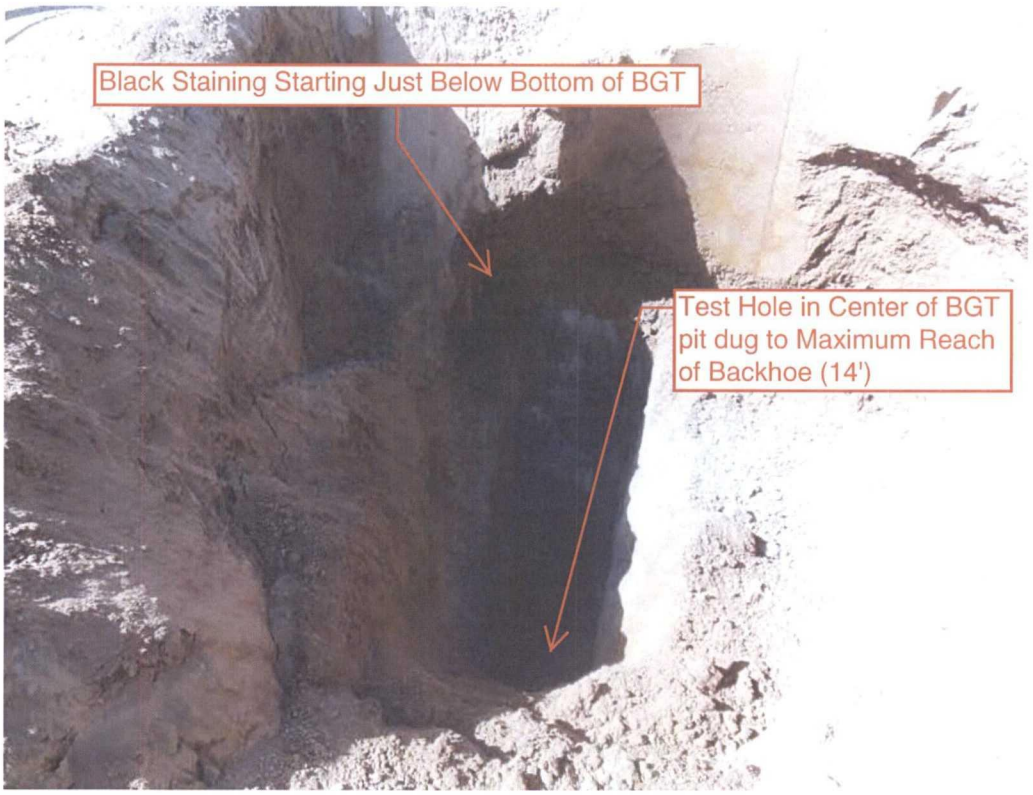
WO: N15421192
PO #:
PK: ZFEIRK0SJS
PJ #:
Permit date(s): 06/09/10
OCD Appr. date(s): 01/16/14

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

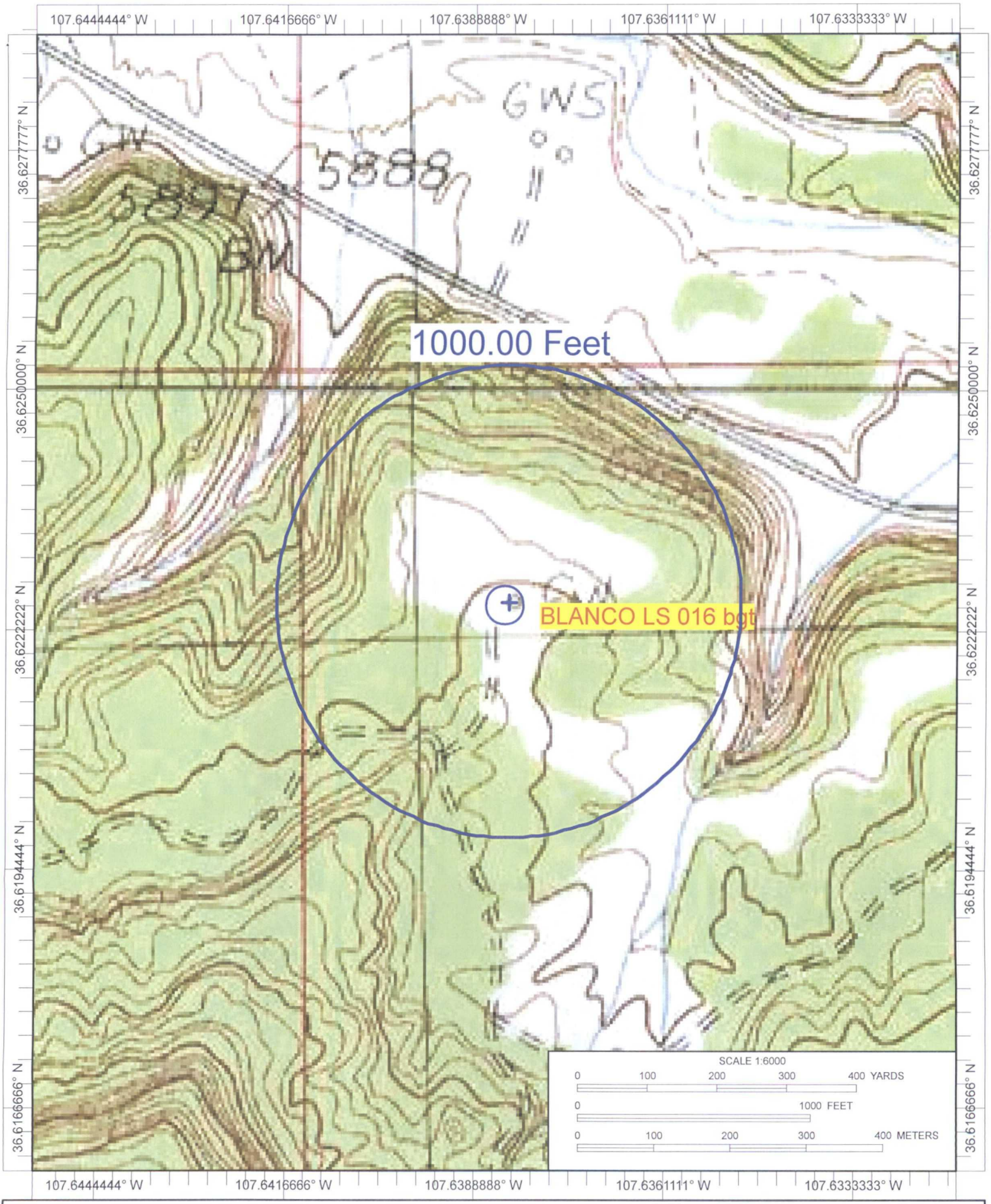
Magnetic declination: 10° E

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: ONSITE: 06/10/14


Black Staining Starting Just Below Bottom of BGT
Test Hole in Center of BGT pit dug to Maximum Reach of Backhoe (14')


Soil Sample for 14' Depth



BP - Blanco LS #16
Unit Ltr: D, Sec. 36, T28N, R8W, NMPM
API #: 3004511746
Federal lease: NM012201

45 bbl BGT Closure (DW/DB)
GPS: 36.62255 x 107.63838

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	Blanco LS 16	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Jeff Blagg	12-Jun-14 10:43

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Base 4-pt Comp	P406036-01A	Soil	06/10/14	06/10/14	Glass Jar, 4 oz.
Sidewall 4-pt Comp	P406036-02A	Soil	06/10/14	06/10/14	Glass Jar, 4 oz.
TH-1 @11'	P406036-03A	Soil	06/10/14	06/10/14	Glass Jar, 4 oz.

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
laboratory@envirotech-inc.com

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	Blanco LS 16	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Jeff Blagg	12-Jun-14 10:43

Base 4-pt Comp

P406036-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Toluene	**1.41**	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Ethylbenzene	**1.66**	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
p,m-Xylene	**14.2**	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
o-Xylene	**2.02**	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Total Xylenes	**16.2**	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Total BTEX	**19.3**	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Surrogate: Bromochlorobenzene		*128 %*		*80-120*	*1424013*	*06/10/14*	*06/11/14*	*EPA 8021B*	*S-02*
Surrogate: 1,3-Dichlorobenzene		*129 %*		*80-120*	*1424013*	*06/10/14*	*06/11/14*	*EPA 8021B*	*S-02*
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	**370**	5.00	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8015D	
Diesel Range Organics (C10-C28)	**233**	29.9	mg/kg	1	1424012	06/10/14	06/11/14	EPA 8015D	
Cation/Anion Analysis									
Chloride	**45.4**	9.88	mg/kg	1	1424016	06/11/14	06/11/14	EPA 300.0	

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	Blanco LS 16	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Jeff Blagg	12-Jun-14 10:43

Sidewall 4-pt Comp

P406036-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
p,m-Xylene	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		*105 %*		*80-120*	*1424013*	*06/10/14*	*06/11/14*	*EPA 8021B*	
Surrogate: Bromochlorobenzene		*110 %*		*80-120*	*1424013*	*06/10/14*	*06/11/14*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1	1424012	06/10/14	06/11/14	EPA 8015D	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	**19.9**	19.9	mg/kg	1	1424021	06/11/14	06/11/14	EPA 418.1	
Cation/Anion Analysis									
Chloride	**175**	9.97	mg/kg	1	1424016	06/11/14	06/11/14	EPA 300.0	

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	Blanco LS 16	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Jeff Blagg	12-Jun-14 10:43

TH-1 @11'

P406036-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
p,m-Xylene	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		*102 %*		*80-120*	*1424013*	*06/10/14*	*06/11/14*	*EPA 8021B*	
Surrogate: Bromochlorobenzene		*108 %*		*80-120*	*1424013*	*06/10/14*	*06/11/14*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1	1424013	06/10/14	06/11/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1	1424012	06/10/14	06/11/14	EPA 8015D	
Cation/Anion Analysis									
Chloride	**71.1**	9.97	mg/kg	1	1424016	06/11/14	06/11/14	EPA 300.0	

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
laboratory@envirotech-inc.com

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	Blanco LS 16	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Jeff Blagg	12-Jun-14 10:43

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 1424013 - Purge and Trap EPA 5030A										
Blank (1424013-BLK1)				Prepared: 10-Jun-14 Analyzed: 11-Jun-14						
Benzene	ND	0.05	mg/kg							
Toluene	ND	0.05	"							
Ethylbenzene	ND	0.05	"							
p,m-Xylene	ND	0.05	"							
o-Xylene	ND	0.05	"							
Total Xylenes	ND	0.05	"							
Total BTEX	ND	0.05	"							
Surrogate: 1,3-Dichlorobenzene	*52.4*		*ug/L*	*50.0*		*105*	*80-120*			
Surrogate: Bromochlorobenzene	*53.4*		"	*50.0*		*107*	*80-120*			
Duplicate (1424013-DUP1)		**Source: P406032-01**		Prepared: 10-Jun-14 Analyzed: 11-Jun-14						
Benzene	ND	0.05	mg/kg		ND				30	
Toluene	ND	0.05	"		ND				30	
Ethylbenzene	ND	0.05	"		ND				30	
p,m-Xylene	ND	0.05	"		ND				30	
o-Xylene	ND	0.05	"		ND				30	
Surrogate: 1,3-Dichlorobenzene	*37.4*		*ug/L*	*50.0*		*74.9*	*80-120*			*Surr2*
Surrogate: Bromochlorobenzene	*38.8*		"	*50.0*		*77.6*	*80-120*			*Surr2*
Matrix Spike (1424013-MS1)		**Source: P406032-01**		Prepared: 10-Jun-14 Analyzed: 11-Jun-14						
Benzene	53.5		ug/L	50.0	ND	107	39-150			
Toluene	53.0		"	50.0	ND	106	46-148			
Ethylbenzene	53.0		"	50.0	ND	106	32-160			
p,m-Xylene	107		"	100	ND	107	46-148			
o-Xylene	53.8		"	50.0	ND	108	46-148			
Surrogate: 1,3-Dichlorobenzene	*52.9*		"	*50.0*		*106*	*80-120*			
Surrogate: Bromochlorobenzene	*54.9*		"	*50.0*		*110*	*80-120*			

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	Blanco LS 16	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Jeff Blagg	12-Jun-14 10:43

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 1424012 - DRO Extraction EPA 3550C										
Blank (1424012-BLK1)				Prepared: 10-Jun-14 Analyzed: 11-Jun-14						
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg							
Duplicate (1424012-DUP1)		Source: P406032-01		Prepared: 10-Jun-14 Analyzed: 11-Jun-14						
Diesel Range Organics (C10-C28)	ND	30.0	mg/kg		ND				30	
Matrix Spike (1424012-MS1)		Source: P406032-01		Prepared: 10-Jun-14 Analyzed: 12-Jun-14						
Diesel Range Organics (C10-C28)	253		mg/L	250	24.3	91.4	75-125			

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Analytical Laboratory

BP America Production Co.	Project Name:	Blanco LS 16	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Jeff Blagg	12-Jun-14 10:43

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 1424013 - Purge and Trap EPA 5030A										
Blank (1424013-BLK1)				Prepared: 10-Jun-14 Analyzed: 11-Jun-14						
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg							
Duplicate (1424013-DUP1)		**Source: P406032-01**		Prepared: 10-Jun-14 Analyzed: 11-Jun-14						
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg		ND				30	
Matrix Spike (1424013-MS1)		**Source: P406032-01**		Prepared: 10-Jun-14 Analyzed: 11-Jun-14						
Gasoline Range Organics (C6-C10)	0.49		mg/L	0.450	ND	110	75-125			

BP America Production Co.	Project Name:	Blanco LS 16	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Jeff Blagg	12-Jun-14 10:43

Total Petroleum Hydrocarbons by 418.1 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1424021 - 418 Freon Extraction										
Blank (1424021-BLK1)				Prepared & Analyzed: 11-Jun-14						
Total Petroleum Hydrocarbons	ND	20.0	mg/kg							
Duplicate (1424021-DUP1)		**Source: P406036-02**		Prepared & Analyzed: 11-Jun-14						
Total Petroleum Hydrocarbons	27.9	20.0	mg/kg		ND				30	
Matrix Spike (1424021-MS1)		**Source: P406036-02**		Prepared & Analyzed: 11-Jun-14						
Total Petroleum Hydrocarbons	1880	20.0	mg/kg	2020	ND	93.3	80-120			

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BP America Production Co.	Project Name:	Blanco LS 16	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Jeff Blagg	12-Jun-14 10:43

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 1424016 - Anion Extraction EPA 300.0										
Blank (1424016-BLK1)				Prepared & Analyzed: 11-Jun-14						
Chloride	ND	9.93	mg/kg							
LCS (1424016-BS1)				Prepared & Analyzed: 11-Jun-14						
Chloride	498	9.96	mg/kg	498		100	90-110			
Matrix Spike (1424016-MS1)	**Source: P406036-01**			Prepared & Analyzed: 11-Jun-14						
Chloride	562	9.86	mg/kg	493	45.4	105	80-120			
Matrix Spike Dup (1424016-MSD1)	**Source: P406036-01**			Prepared & Analyzed: 11-Jun-14						
Chloride	562	9.84	mg/kg	492	45.4	105	80-120	0.0831	20	

CHAIN OF CUSTODY RECORD

17063

Client:	Project Name / Location:
Blagg Engineering / BP	Blanco LS 16
Email results to: Jeffcblagg@AOL.com peace.jeffrey@BP.com	Sampler Name: Jeff Blagg
Client Phone No.: 505-320-1183	Client No.: 03143-0424

Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative HNO_3	Preservative HCl	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Base 4-pt comp	6/10/14	1051	P406030-01	1 x 4oz			X	X								X				X	X
Sidewall 4-pt comp	"	1137	P406030-02	"			X	X							X	X				X	X
TH-1 @ 11'	"	1210	P406030-03	"			X	X								X				X	X
								RUSH ASAP													
								Bill BP													
								PAYKEY: ~~BP~~ ZFEIRKOSJS													
								Contact: Jeff Peace													

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Jeff Blagg	6/10/14	1422	Miriam Jo	6/10/14	14:22
Relinquished by: (Signature)			Received by: (Signature)		

Sample Matrix
Soil ☒ Solid ☐ Sludge ☐ Aqueous ☐ Other ☐ _____

☐ Sample(s) dropped off after hours to secure drop off area.

6.6 7.2 7.9 (7.2)

envirotech Analytical Laboratory

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Analytical Report
Lab Order **1406466**
Date Reported: **6/12/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Blanco LS 16
Lab ID: 1406466-001

Client Sample ID: Sidewall 4-pt Comp
Collection Date: 6/10/2014 11:37:00 AM
Matrix: MEOH (SOIL) **Received Date:** 6/11/2014 9:03:00 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	6/11/2014 11:32:13 AM	13630
Surr: DNOP	82.9	57.9-140		%REC	1	6/11/2014 11:32:13 AM	13630
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg	1	6/11/2014 10:14:22 AM	R19201
Surr: BFB	94.3	80-120		%REC	1	6/11/2014 10:14:22 AM	R19201
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.054		mg/Kg	1	6/11/2014 10:14:22 AM	R19201
Toluene	ND	0.054		mg/Kg	1	6/11/2014 10:14:22 AM	R19201
Ethylbenzene	ND	0.054		mg/Kg	1	6/11/2014 10:14:22 AM	R19201
Xylenes, Total	ND	0.11		mg/Kg	1	6/11/2014 10:14:22 AM	R19201
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	6/11/2014 10:14:22 AM	R19201
EPA METHOD 300.0: ANIONS						Analyst: **SRM**	
Chloride	150	30		mg/Kg	20	6/11/2014 11:28:18 AM	13631
EPA METHOD 418.1: TPH						Analyst: **JME**	
Petroleum Hydrocarbons, TR	21	20		mg/Kg	1	6/11/2014 12:00:00 PM	13610

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2.
RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406466**

12-Jun-14

Client: Blagg Engineering
Project: Blanco LS 16

Sample ID	**MB-13631**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**13631**	RunNo:	**19205**					
Prep Date:	**6/11/2014**	Analysis Date:	**6/11/2014**	SeqNo:	**555325**	Units:	**mg/Kg**			

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

Sample ID	**LCS-13631**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**13631**	RunNo:	**19205**					
Prep Date:	**6/11/2014**	Analysis Date:	**6/11/2014**	SeqNo:	**555326**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.3	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 greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406466**

12-Jun-14

Client: Blagg Engineering
Project: Blanco LS 16

Sample ID **MB-13610**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**
Client ID: **PBS**	Batch ID: **13610**	RunNo: **19175**
Prep Date: **6/10/2014**	Analysis Date: **6/11/2014**	SeqNo: **554456** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID **LCS-13610**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS**	Batch ID: **13610**	RunNo: **19175**
Prep Date: **6/10/2014**	Analysis Date: **6/11/2014**	SeqNo: **554457** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	104	80	120			

Sample ID **LCSD-13610**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02**	Batch ID: **13610**	RunNo: **19175**
Prep Date: **6/10/2014**	Analysis Date: **6/11/2014**	SeqNo: **554458** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	103	80	120	1.35	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406466**

12-Jun-14

Client: Blagg Engineering
Project: Blanco LS 16

Sample ID **MB-13578**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **13578**	RunNo: **19152**
Prep Date: **6/9/2014**	Analysis Date: **6/10/2014**	SeqNo: **553568** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		116	57.9	140			

Sample ID **LCS-13578**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **13578**	RunNo: **19152**
Prep Date: **6/9/2014**	Analysis Date: **6/10/2014**	SeqNo: **553571** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		95.5	57.9	140			

Sample ID **MB-13630**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **13630**	RunNo: **19186**
Prep Date: **6/11/2014**	Analysis Date: **6/11/2014**	SeqNo: **554717** 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	9.2		10.00		92.3	57.9	140			

Sample ID **LCS-13630**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **13630**	RunNo: **19186**
Prep Date: **6/11/2014**	Analysis Date: **6/11/2014**	SeqNo: **554718** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	108	60.8	145			
Surr: DNOP	4.7		5.000		94.5	57.9	140			

Sample ID **1406466-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **Sidewall 4-pt Comp**	Batch ID: **13630**	RunNo: **19152**
Prep Date: **6/11/2014**	Analysis Date: **6/11/2014**	SeqNo: **554722** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	10	49.85	9.843	94.7	40.1	152			
Surr: DNOP	4.4		4.985		87.4	57.9	140			

Sample ID **1406466-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **Sidewall 4-pt Comp**	Batch ID: **13630**	RunNo: **19152**
Prep Date: **6/11/2014**	Analysis Date: **6/11/2014**	SeqNo: **554723** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	10	49.80	9.843	95.9	40.1	152	1.03	32.1	
Surr: DNOP	4.2		4.980		83.9	57.9	140	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406466**

12-Jun-14

Client: Blagg Engineering
Project: Blanco LS 16

Sample ID	**MB-13606**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID: **13606**			RunNo: **19186**				
Prep Date:	**6/10/2014**	Analysis Date: **6/11/2014**			SeqNo: **554751**	Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		104	57.9	140			

Sample ID	**LCS-13606**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID: **13606**			RunNo: **19186**				
Prep Date:	**6/10/2014**	Analysis Date: **6/11/2014**			SeqNo: **554756**	Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.2		5.000		105	57.9	140			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406466**

12-Jun-14

Client: Blagg Engineering
Project: Blanco LS 16

Sample ID **MB-13607 MK**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R19201**	RunNo: **19201**
Prep Date:	Analysis Date: **6/11/2014**	SeqNo: **555171** 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	900		1000		89.9	80	120			

Sample ID **LCS-13607 MK**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R19201**	RunNo: **19201**
Prep Date:	Analysis Date: **6/11/2014**	SeqNo: **555172** 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	92.1	71.7	134			
Surr: BFB	940		1000		94.1	80	120			

Sample ID **MB-13607**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **13607**	RunNo: **19201**
Prep Date: **6/10/2014**	Analysis Date: **6/11/2014**	SeqNo: **555180** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		89.9	80	120			

Sample ID **LCS-13607**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **13607**	RunNo: **19201**
Prep Date: **6/10/2014**	Analysis Date: **6/11/2014**	SeqNo: **555181** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		94.1	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406466**

12-Jun-14

Client: Blagg Engineering
Project: Blanco LS 16

Sample ID **MB-13607 MK** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **R19201** RunNo: **19201**
Prep Date: Analysis Date: **6/11/2014** SeqNo: **555207** 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		106	80	120			

Sample ID **LCS-13607 MK** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **R19201** RunNo: **19201**
Prep Date: Analysis Date: **6/11/2014** SeqNo: **555208** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.050	1.000	0	98.8	80	120			
Toluene	0.96	0.050	1.000	0	96.4	80	120			
Ethylbenzene	0.98	0.050	1.000	0	97.6	80	120			
Xylenes, Total	3.0	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		114	80	120			

Sample ID **MB-13607** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **13607** RunNo: **19201**
Prep Date: **6/10/2014** Analysis Date: **6/11/2014** SeqNo: **555210** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID **LCS-13607** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **13607** RunNo: **19201**
Prep Date: **6/10/2014** Analysis Date: **6/11/2014** SeqNo: **555211** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		114	80	120			

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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: 1406466 | RcptNo: 1

Received by/date: 06/11/14

Logged By: **Lindsay Mangin** 6/11/2014 9:03:00 AM

Completed By: **Lindsay Mangin** 6/11/2014 9:08:51 AM

Reviewed By: JO 06/11/2014

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?	FedEx		

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 ENGINEERING INC.
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: ASAP SAME DAY
☐ Standard ☒ Rush
Project Name: BLANCO LS 16
Project #:
Project Manager: JEFF BLAGG
Sampler: JEFF BLAGG
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

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. 1406466	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)
4/10/2014	1137	SOIL	SIDEWALL 4-pt COMP.	4oz x 1	COOL	-001	X		X	X								X				

Date: 4/10/14 Time: 1449 Relinquished by: Jeff Blagg
Received by: Christine Walker Date Time: 4/10/14 1449
Date: 4/10/14 Time: 1657 Relinquished by: Christine Walker
Received by: Date Time: 04/11/14 0903

Remarks: BILL BP
PAYKEY: ZFEIRKOSJS
CONTACT: JEFF PEACE

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.

6-9-14

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
220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C
Revised March 12

"Surface Waste Management Facility Ope
and Generator shall maintain and mak
documentation available for Division inspe

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

BP AMERICA 200 ENERGY COURT FARMINGTON NEW MEXICO 87401

2. Originating Site: Work Order # N1542.1192

Blanco 05/16 Pay Key ZFEIRK0555

3. Location of Material (Street Address, City, State or ULSTR):

UL D SECTION 36 TOWNSHIP 28N RANGE 8W to/11/14-140c

4. Source and Description of Waste: Hydrocarbon impacted soil discovered during decommishing of location. NMOCD PIA marker @/10/14-140cy

Estimated Volume 800 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 130 yd³ / bb

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I Bob Kruger 505-634-8301, representative or authorized agent for: BP AMERICA do hereby
Generator Signature and Phone#

certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 19 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 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. (Che 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 _____, representative for ACT, 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 sampl have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The result of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: Crossfire

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: BP Amco NM-02-003

Address of Facility: 49 CR 3150 Aztec NM 87410

CL-2116
Ph-7

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: Lynn Gaechter TITLE: Administrative Office DATE 6/9/14

SIGNATURE: _____ TELEPHONE NO.: 505-632-1782

Surface Waste Management Facility Authorized Agent