OIL CONS. DIV DIST. 3

SEP 03 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: Florance J 48A	Facility Type: Natural gas well

Surface Owner: Federal	Mineral Owner: Federal	API No. 300452X146 2

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: San Juan
O	23	30N	8W	960	North	1,105	East	

Latitude 36.79293 **Longitude** 107.64238

NATURE OF RELEASE

Type of Release: condensate	Volume of Release: unknown	Volume Recovered: none
Source of Release: Below Grade Tank (BGT) - 18 bbl, Tank B	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: May 7, 2014; 1:00 PM
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom? Buddy Shaw	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.* Sampling of the soil beneath the BGT was performed during removal to determine the existence of impacts. Soil analysis determine chloride levels below remediation standards, but TPH results of 54,000 ppm by 418.1 and 10,400 ppm by 8015D were above remediation standards. Combined BTEX was above standards with 156.7 ppm with benzene below standard at 0.50 ppm (via 8021B). A shallow excavation was advanced through sandstone bedrock. Hydrogen peroxide was applied to the broken up material.

Describe Area Affected and Cleanup Action Taken.* Sampling of the material below the BGT approximately 5 months after the application of hydrogen peroxide determine TPH levels to be below the site specific 5,000 ppm remediation standard with 1,200 ppm via 8015B (8,900 ppm via 418.1). Chloride, BTEX and benzene were below the site specific remediation standard as well.

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: 9/28/15 Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval: Attached ☐
Date: August 17, 2015 Phone: 505-326-9497	

* Attach Additional Sheets If Necessary

#NCS 1527156822

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BP AMERICA PRODUCTION COMPANY

FLORANCE J 048A – 18 BBL BGT (TANK ID: B) SOIL REMEDIATION

API #: 30-045-22146

Legal Description: (Unit Letter O, Sec. 23 -T30N -R8W, NMPM)

CHRONOLOGICAL EVENT SUMMATION

1. **May 7, 2014**: BP begins closure of 18 barrel below-grade tank (**BGT**) at the site. The BGT was initially installed by carving into bedrock sandstone which was observed at the ground surface in the immediate vicinity of the BGT location. Apparent hydrocarbon impacts to the soil and bedrock surface (sandstone) directly beneath the BGT was evident based on physical discoloration and strong odor. Blagg Engineering, Inc. (**BEI**) collected a five (5) point composite sample (**PCS**) beneath the BGT after its removal from the subsurface [**5PC-TB @ 2' (18)**]. Thereafter, BEI recommended to mix the impacted soil and sandstone surface with clean fill material and leave in place. The impacted soils was estimated at less than 1 cubic yard.

2. **May 8, 2014**: Preliminary lab results indicated the following results for **5PC-TB @ 2' (18)**;

   Total Petroleum Hydrocarbons (**TPH**) using US EPA Method 418.1 = 54,000 mg/Kg
   TPH using US EPA Method 8015B = 10,400 mg/Kg
   Benzene using US EPA Method 8021B = 0.50 mg/Kg
   Total benzene, toluene, ethylbenzene, total xylenes (**BTEX**) using US EPA Method 8021B = 156.7 mg/Kg
   Chloride using US EPA Method 300.0 = not detected (**ND**) at reporting limits of 30 mg/Kg

3. **February 4, 2015**: BP instructed BEI to apply concentrated hydrogen peroxide to the already blended soils and bedrock fragments at the BGT location.

4. **July 30, 2015**: BP instructed BEI to perform a subsequent sample event of the remediated material. A five (5) PCS was collected [**5PC-TB @ 2'-3' (18)**].

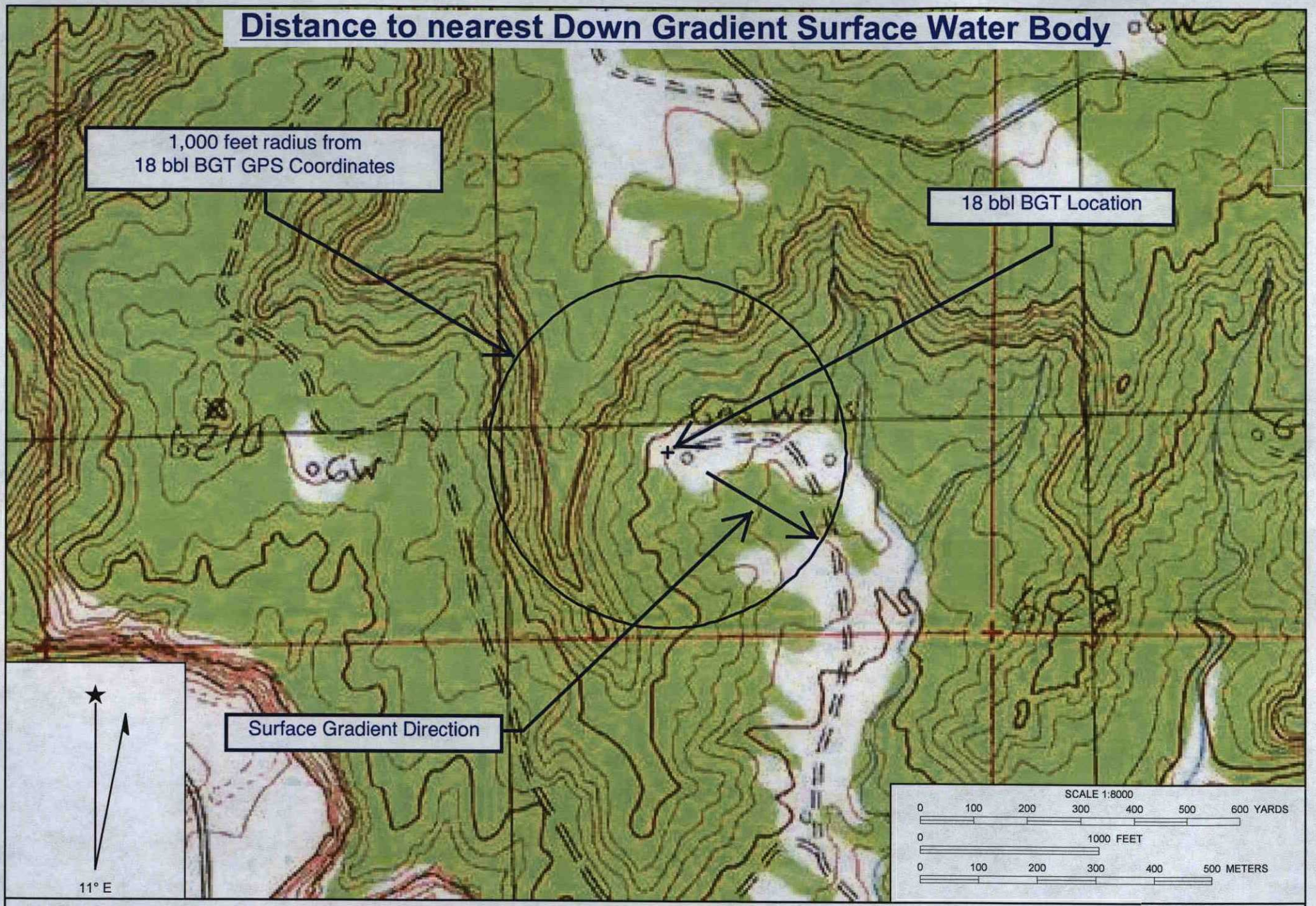
5. **August 10, 2015**: The final lab report was received and shows the following results;

   TPH using US EPA Method 418.1 = 8,900 mg/Kg
   TPH using US EPA Method 8015B = 1,200 mg/Kg
   Benzene using US EPA Method 8021B = ND at reporting limits of less than 0.050 mg/Kg
   BTEX using US EPA Method 8021B = ND at reporting limits of less than 0.10 mg/Kg
   Chloride using US EPA Method 300.0 = 110 mg/Kg

The New Mexico Oil Conservation Division's Spill and Release Guidelines, dated August 1993, gives the site a TPH closure standard of 5,000 mg/Kg based on (*see supporting topographic map on following page*):

Horizontal Distance to a down gradient Surface Water Body (e.g. watercourse > 1,000 feet (0 points)
Well Head Protection Area (e.g. nearest water well or natural spring) > 1,000 feet (0 points)
Depth to Groundwater > 100 feet (0 points)

Distance to nearest Down Gradient Surface Water Body



BP - Florance J 048A
Unit Ltr O, Sec. 23, T30N, R8W
API #: 30-045-22146

18 bbl BGT (Tank ID: B)
36.79293°N, 107.64238°W

CLIENT: BP

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

API #: 3004522146

TANK ID (if applicble): B ~~& C~~

FIELD REPORT:

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

PAGE #: 1 of 1

SITE INFORMATION:

SITE NAME: FLORANCE J #48A

QUAD/UNIT: O SEC: 23 TWP: 30N RNG: 8W PM: NM CNTY: SJ ST: NM

1/4 -1/4/FOOTAGE: 1,060'S / 1,680'E SW/SE LEASE TYPE: FEDERAL / STATE / FEE / INDIAN

LEASE #: SF078385 PROD. FORMATION: MV CONTRACTOR: ELKHORN MBF - B. SCHURMAN

DATE STARTED: 05/07/14

DATE FINISHED:

ENVIRONMENTAL SPECIALIST(S): NJV

REFERENCE POINT:

WELL HEAD (W.H.) GPS COORD.: 36.79280 X 107.64201 GL ELEV.: 6,172'

1)	18 BGT (SW/SB) - B	GPS COORD.:	36.79293 X 107.64238	DISTANCE/BEARING FROM W.H.: 125', N72W
2)	~~95 BGT (SW/DB) - C~~	GPS COORD.:	~~36.79281 X 107.64183~~	DISTANCE/BEARING FROM W.H.: ~~55', S68E~~
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: HALL

						OVM READING (ppm)
1)	SAMPLE ID: 5 PC-TB @ 2' (18) - B	SAMPLE DATE: 05/07/14	SAMPLE TIME: 1250	LAB ANALYSIS: 418.1/8015B/8021B/300.0 (Cl)		NA
2)	SAMPLE ID: ~~5 PC-TB @ 6' (95) - C~~	SAMPLE DATE: ~~05/07/14~~	SAMPLE TIME: ~~1300~~	LAB ANALYSIS: ~~418.1/8015B/8021B/300.0 (Cl)~~		~~NA~~
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 BEDROCK (SANDSTONE)

SOIL COLOR: MOSTLY GRAYISH 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 - BENEATH 18 BGT (MEDIUM 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 - DISCOLORED SOIL @ 18 BGT ONLY.

ANY AREAS DISPLAYING WETNESS: YES / NO EXPLANATION -

SITE OBSERVATIONS:

LOST INTEGRITY OF EQUIPMENT: YES / NO EXPLANATION - 18 BGT ONLY

APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED : YES / NO EXPLANATION: 18 BGT ONLY

EQUIPMENT SET OVER RECLAIMED AREA: YES / NO EXPLANATION -

OTHER: BEDROCK SANDSTONE OUTCROP @ GROUND SURFACE THROUGHOUT NORTHERN HALF OF WELL PAD. 18 BGT INSTALLED BY CARVING INTO BEDROCK. IMPACTED SOIL VERY MINIMAL. WILL LEAVE IN PLACE.

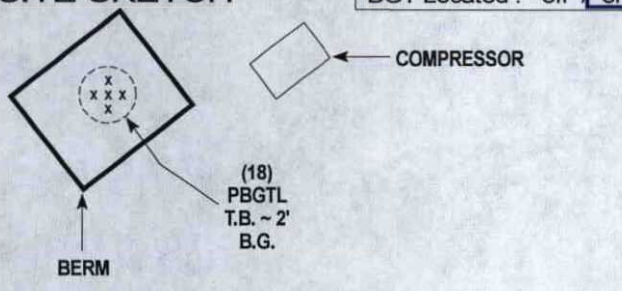
SOIL IMPACT DIMENSION ESTIMATION: 5 ft. X 5 ft. X 0.5 ft. EXCAVATION ESTIMATION (Cubic Yards) : <1

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



X - S.P.D.

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.

OVM CALIB. READ. = NA ppm RF =1.00

OVM CALIB. GAS = NA ppm

TIME: NA am/pm DATE: NA

MISCELL. NOTES

WO: N15182573

PO #: 4300261710

PK:

PJ #:

Permit date(s): 06/14/10

OCD Appr. date(s): 05/14/14

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

Magnetic declination: 10° E

NOTES: GOOGLE EARTH IMAGERY DATE: 05/02/2013. ONSITE: 05/07/14

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

May 15, 2014

Nelson Velez
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 320-3489
FAX (505) 632-3903

RE: Florance J #48A OrderNo.: 1405369

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/8/2014 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 **1405369**
Date Reported: **5/15/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Florance J #48A
Lab ID: 1405369-001 **Matrix:** SOIL

Client Sample ID: 5PC-TB @ 2' (18)-B
Collection Date: 5/7/2014 12:50:00 PM
Received Date: 5/8/2014 3:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	9300	1000		mg/Kg	100	5/13/2014 10:55:37 AM	13082
Surr: DNOP	0	57.9-140	S	%REC	100	5/13/2014 10:55:37 AM	13082
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	1100	97		mg/Kg	20	5/12/2014 5:29:54 PM	13090
Surr: BFB	205	74.5-129	S	%REC	20	5/12/2014 5:29:54 PM	13090
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.50	0.48		mg/Kg	20	5/12/2014 5:29:54 PM	13090
Toluene	6.2	0.97		mg/Kg	20	5/12/2014 5:29:54 PM	13090
Ethylbenzene	ND	0.97		mg/Kg	20	5/12/2014 5:29:54 PM	13090
Xylenes, Total	150	1.9		mg/Kg	20	5/12/2014 5:29:54 PM	13090
Surr: 4-Bromofluorobenzene	116	80-120		%REC	20	5/12/2014 5:29:54 PM	13090
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	5/13/2014 1:25:13 PM	13142
EPA METHOD 418.1: TPH						Analyst: **JME**	
Petroleum Hydrocarbons, TR	54000	2000		mg/Kg	100	5/13/2014 12:00:00 PM	13084

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 greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405369**

15-May-14

Client: Blagg Engineering
Project: Florance J #48A

Sample ID	**MB-13142**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**13142**		RunNo:	**18590**				
Prep Date:	**5/13/2014**	Analysis Date:	**5/13/2014**		SeqNo:	**536900**	Units:	**mg/Kg**		

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

Sample ID	**LCS-13142**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**13142**		RunNo:	**18590**				
Prep Date:	**5/13/2014**	Analysis Date:	**5/13/2014**		SeqNo:	**536901**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.1	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405369**

15-May-14

Client: Blagg Engineering
Project: Florance J #48A

Sample ID **MB-13084**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**
Client ID: **PBS**	Batch ID: **13084**	RunNo: **18548**
Prep Date: **5/9/2014**	Analysis Date: **5/13/2014**	SeqNo: **535923** 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-13084**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS**	Batch ID: **13084**	RunNo: **18548**
Prep Date: **5/9/2014**	Analysis Date: **5/13/2014**	SeqNo: **535924** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	91	20	100.0	0	91.2	80	120			

Sample ID **LCSD-13084**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02**	Batch ID: **13084**	RunNo: **18548**
Prep Date: **5/9/2014**	Analysis Date: **5/13/2014**	SeqNo: **535925** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	96	20	100.0	0	95.5	80	120	4.58	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#: **1405369**

15-May-14

Client: Blagg Engineering
Project: Florance J #48A

Sample ID **MB-13082**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **13082**	RunNo: **18502**
Prep Date: **5/9/2014**	Analysis Date: **5/9/2014**	SeqNo: **534127** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.2		10.00		81.9	57.9	140			

Sample ID **LCS-13082**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **13082**	RunNo: **18502**
Prep Date: **5/9/2014**	Analysis Date: **5/9/2014**	SeqNo: **534128** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.5	60.8	145			
Surr: DNOP	4.3		5.000		85.5	57.9	140			

Sample ID **MB-13132**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **13132**	RunNo: **18557**
Prep Date: **5/13/2014**	Analysis Date: **5/13/2014**	SeqNo: **536327** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.3		10.00		83.4	57.9	140			

Sample ID **LCS-13132**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **13132**	RunNo: **18557**
Prep Date: **5/13/2014**	Analysis Date: **5/13/2014**	SeqNo: **536328** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0		5.000		79.7	57.9	140			

Sample ID **MB-13112**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **13112**	RunNo: **18557**
Prep Date: **5/12/2014**	Analysis Date: **5/13/2014**	SeqNo: **536644** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.9		10.00		88.8	57.9	140			

Sample ID **LCS-13112**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **13112**	RunNo: **18557**
Prep Date: **5/12/2014**	Analysis Date: **5/13/2014**	SeqNo: **536647** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.5	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#: **1405369**

15-May-14

Client: Blagg Engineering
Project: Florance J #48A

Sample ID	**MB-13119**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **13119**			RunNo: **18557**					
Prep Date:	**5/12/2014**	Analysis Date: **5/13/2014**			SeqNo: **536743**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		93.0	57.9	140			

Sample ID	**LCS-13119**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID: **13119**			RunNo: **18557**					
Prep Date:	**5/12/2014**	Analysis Date: **5/13/2014**			SeqNo: **536744**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.4	57.9	140			

Sample ID	**MB-13097**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **13097**			RunNo: **18557**					
Prep Date:	**5/9/2014**	Analysis Date: **5/14/2014**			SeqNo: **536755**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.9		10.00		89.3	57.9	140			

Sample ID	**LCS-13097**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID: **13097**			RunNo: **18557**					
Prep Date:	**5/9/2014**	Analysis Date: **5/14/2014**			SeqNo: **536756**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.4	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#: **1405369**

15-May-14

Client: Blagg Engineering
Project: Florance J #48A

Sample ID **MB-13090**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **13090**	RunNo: **18552**
Prep Date: **5/9/2014**	Analysis Date: **5/12/2014**	SeqNo: **535973** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	850		1000		85.0	74.5	129			

Sample ID **LCS-13090**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **13090**	RunNo: **18552**
Prep Date: **5/9/2014**	Analysis Date: **5/12/2014**	SeqNo: **535974** 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	91.1	71.7	134			
Surr: BFB	930		1000		93.4	74.5	129			

Sample ID **MB-13090 MK**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R18552**	RunNo: **18552**
Prep Date:	Analysis Date: **5/12/2014**	SeqNo: **535984** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	850		1000		85.0	74.5	129			

Sample ID **LCS-13090 MK**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R18552**	RunNo: **18552**
Prep Date:	Analysis Date: **5/12/2014**	SeqNo: **535985** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		93.4	74.5	129			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405369**

15-May-14

Client: Blagg Engineering
Project: Florance J #48A

Sample ID **MB-13090**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **13090**	RunNo: **18552**
Prep Date: **5/9/2014**	Analysis Date: **5/12/2014**	SeqNo: **536001** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID **LCS-13090**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **13090**	RunNo: **18552**
Prep Date: **5/9/2014**	Analysis Date: **5/12/2014**	SeqNo: **536002** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	107	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.7	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.4	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID **1405369-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **5PC-TB @ 2' (95)-C**	Batch ID: **13090**	RunNo: **18552**
Prep Date: **5/9/2014**	Analysis Date: **5/12/2014**	SeqNo: **536007** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.048	0.9625	0	94.4	67.4	135			
Toluene	0.86	0.048	0.9625	0.009048	88.6	72.6	135			
Ethylbenzene	0.87	0.048	0.9625	0	90.5	69.4	143			
Xylenes, Total	2.5	0.096	2.887	0.01380	86.1	70.8	144			
Surr: 4-Bromofluorobenzene	1.0		0.9625		104	80	120			

Sample ID **1405369-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **5PC-TB @ 2' (95)-C**	Batch ID: **13090**	RunNo: **18552**
Prep Date: **5/9/2014**	Analysis Date: **5/12/2014**	SeqNo: **536008** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.048	0.9606	0	98.3	67.4	135	3.90	20	
Toluene	0.88	0.048	0.9606	0.009048	90.7	72.6	135	2.14	20	
Ethylbenzene	0.89	0.048	0.9606	0	92.2	69.4	143	1.62	20	
Xylenes, Total	2.6	0.096	2.882	0.01380	88.9	70.8	144	2.95	20	
Surr: 4-Bromofluorobenzene	0.98		0.9606		102	80	120	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

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: 1405369 RcptNo: 1

Received by/date: 05/08/14

Logged By: Lindsay Mangin 5/8/2014 3:00:00 PM

Completed By: Lindsay Mangin 5/9/2014 6:36:19 AM

Reviewed By: 05/09/14

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° 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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: BLAGG ENGR. / BP AMERICA	☑ Standard ☐ Rush
	Project Name: FLORANCE J # 48A
Mailing Address: P.O. BOX 87 BLOOMFIELD, NM 87413	Project #:
Phone #: (505) 632-1199	
email or Fax#:	Project Manager: NELSON VELEZ
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)	Sampler: NELSON VELEZ
Accreditation: ☐ NELAP ☐ Other	On Ice: ☑ Yes ☐ No
☐ EDD (Type)	Sample Temperature: 1.0

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1405269	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
5/7/14	1250	SOIL	5PC - TB @ 2' (18) - B	4 oz. - 1	Cool	-001	✓		✓	✓								✓			✓
~~5/7/14~~	~~1300~~	~~SOIL~~	~~5PC - TB @ 2' (95) - C~~	~~4 oz. - 1~~	~~Cool~~	-002	✓		✓	✓								✓			✓

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/8/14	807		Christine Walker	5/8/14	807
5/8/14	1335			05/08/14	1500

Remarks:

Send invoice to :

Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, NM 87413

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.

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

August 10, 2015

Nelson Velez
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 320-3489
FAX (505) 632-3903

RE: Florance J #48A OrderNo.: 1508024

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/1/2015 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 **1508024**
Date Reported: **8/10/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Florance J #48A
Lab ID: 1508024-001 **Matrix:** SOIL

Client Sample ID: 5PC-TB @ 2'-3' (18)-B
Collection Date: 7/30/2015 12:40:00 PM
Received Date: 8/1/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	8900	2000		mg/Kg	100	8/7/2015	20635
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	110	30		mg/Kg	20	8/6/2015 11:52:27 AM	20649
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	1200	990		mg/Kg	100	8/7/2015 1:34:15 PM	20585
Surr: DNOP	0	57.9-140	S	%REC	100	8/7/2015 1:34:15 PM	20585
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/5/2015 10:25:10 AM	20592
Surr: BFB	93.2	75.4-113		%REC	1	8/5/2015 10:25:10 AM	20592
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.050		mg/Kg	1	8/5/2015 10:25:10 AM	20592
Toluene	ND	0.050		mg/Kg	1	8/5/2015 10:25:10 AM	20592
Ethylbenzene	ND	0.050		mg/Kg	1	8/5/2015 10:25:10 AM	20592
Xylenes, Total	ND	0.10		mg/Kg	1	8/5/2015 10:25:10 AM	20592
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	8/5/2015 10:25:10 AM	20592

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#: **1508024**

10-Aug-15

Client: Blagg Engineering
Project: Florance J #48A

Sample ID	**MB-20649**	SampType: **MBLK**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID: **20649**			RunNo: **28030**					
Prep Date:	**8/6/2015**	Analysis Date: **8/6/2015**			SeqNo: **843926**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-20649**	SampType: **LCS**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID: **20649**			RunNo: **28030**					
Prep Date:	**8/6/2015**	Analysis Date: **8/6/2015**			SeqNo: **843927**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.9	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#: **1508024**

10-Aug-15

Client: Blagg Engineering
Project: Florance J #48A

Sample ID **MB-20635**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**
Client ID: **PBS**	Batch ID: **20635**	RunNo: **28040**
Prep Date: **8/6/2015**	Analysis Date: **8/7/2015**	SeqNo: **844238** 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-20635**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS**	Batch ID: **20635**	RunNo: **28040**
Prep Date: **8/6/2015**	Analysis Date: **8/7/2015**	SeqNo: **844239** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	93	20	100.0	0	93.4	83.6	116			

Sample ID **LCSD-20635**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02**	Batch ID: **20635**	RunNo: **28040**
Prep Date: **8/6/2015**	Analysis Date: **8/7/2015**	SeqNo: **844240** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	97	20	100.0	0	97.3	83.6	116	4.16	20	

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#: **1508024**

10-Aug-15

Client: Blagg Engineering
Project: Florance J #48A

Sample ID **MB-20585**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **20585**	RunNo: **27958**
Prep Date: **8/4/2015**	Analysis Date: **8/5/2015**	SeqNo: **841771** 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	9.4		10.00		93.8	57.9	140			

Sample ID **LCS-20585**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **20585**	RunNo: **27958**
Prep Date: **8/4/2015**	Analysis Date: **8/5/2015**	SeqNo: **841772** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.9	57.4	139			
Surr: DNOP	4.7		5.000		93.3	57.9	140			

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#: **1508024**

10-Aug-15

Client: Blagg Engineering
Project: Florance J #48A

Sample ID **LCS-20592**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **20592**	RunNo: **27987**
Prep Date: **8/4/2015**	Analysis Date: **8/5/2015**	SeqNo: **842530** 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	104	79.6	122			
Surr: BFB	1000		1000		99.7	75.4	113			

Sample ID **MB-20592**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **20592**	RunNo: **27987**
Prep Date: **8/4/2015**	Analysis Date: **8/5/2015**	SeqNo: **842531** 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	910		1000		90.9	75.4	113			

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#: **1508024**

10-Aug-15

Client: Blagg Engineering
Project: Florance J #48A

Sample ID **LCS-20592**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **20592**	RunNo: **27987**
Prep Date: **8/4/2015**	Analysis Date: **8/5/2015**	SeqNo: **842733** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	111	76.6	128			
Toluene	1.1	0.050	1.000	0	109	75	124			
Ethylbenzene	1.1	0.050	1.000	0	108	79.5	126			
Xylenes, Total	3.4	0.10	3.000	0	115	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID **MB-20592**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **20592**	RunNo: **27987**
Prep Date: **8/4/2015**	Analysis Date: **8/5/2015**	SeqNo: **842734** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

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: 1508024 | RcptNo: 1

Received by/date: 08/01/15

Logged By: Ashley Gallegos | 8/1/2015 8:00:00 AM

Completed By: Ashley Gallegos | 8/3/2015 12:04:36 PM

Reviewed By: 08/03/15

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	3.2	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

Project Name:
FLORANCE J # 48A

Project #:

Project Manager:
NELSON VELEZ

Sampler: NELSON VELEZ NV

On Ice: ☑ Yes ☐ No

Sample Temperature: 3.2

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. 1508024	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / ~~MRO~~) NV	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	Air Bubbles (Y or N)
7/30/15	1240	SOIL	SPC-TB @ 2'-3' (18)-B	4 oz.-1	Cool	-001	✓		✓	✓								✓			✓	

Date: 7/31/15 Time: 1526 Relinquished by: [signature]
Received by: [signature] Date: 7/31/15 Time: 1526

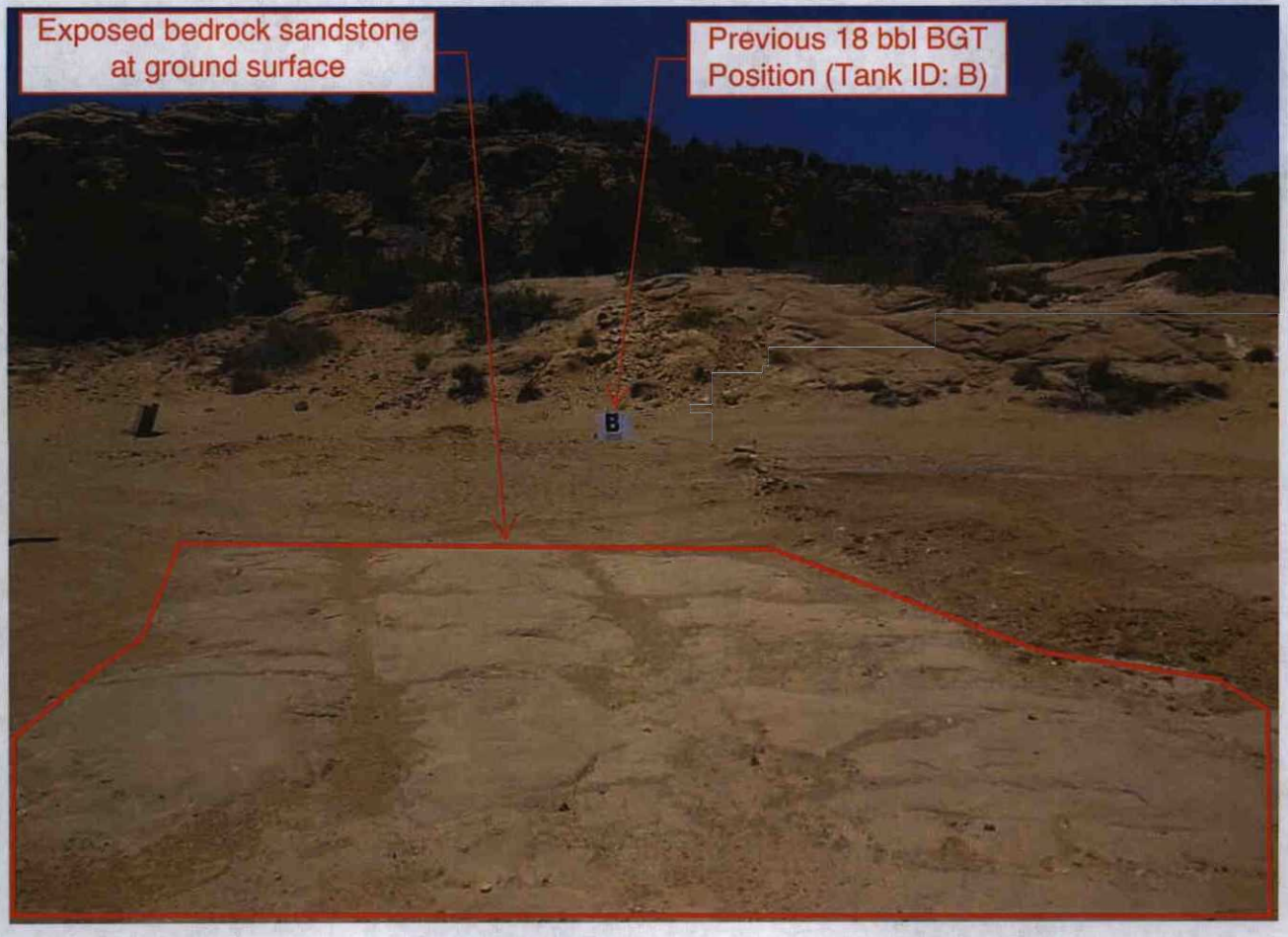
Date: 7/21/15 Time: 1719 Relinquished by: [signature]
Received by: [signature] Date: 7/31/15 Time: 0800

Remarks:

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

Reference #: Paykey: ZEVH01BGT2


505-947-9900
BP AMERICA PRODUCTION COMPANY
FLORANCE J 048A
API 3004522146 LEASE NMSF078385
1060 FSL 1680 FEL (O) SEC 23 T30N R8W
San Juan County ELEV 6172
LAT 36° 47' 34.404"
LONG 107°38' 31.056"


Exposed bedrock sandstone at ground surface
Previous 18 bbl BGT Position (Tank ID: B)
B