

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

OIL CONS. DIV DIST. 3

MAY 14 2015

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

Form C-141
Revised August 8, 2011

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 100	Facility Type: Natural gas well	
Surface Owner: Federal	Mineral Owner: Federal	API No. 3004520064

LOCATION OF RELEASE

Unit Letter P	Section 30	Township 30N	Range 8W	Feet from the 1,170	North/South Line South	Feet from the 945	East/West Line East	County: San Juan
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Latitude 36.77837 Longitude 107.71039

NATURE OF RELEASE

Type of Release: condensate/oil – historic release	Volume of Release: unknown	Volume Recovered: NA
Source of Release: unknown – likely earthen pit	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: 9/26/2013; 1:00 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		


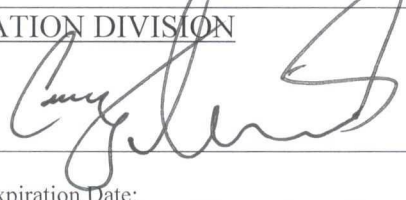
Describe Cause of Problem and Remedial Action Taken.

SUPPLEMENTAL INFORMATION

* Groundwater samples were taken after excavation of impacted soils was completed. Water samples were non-detect for BTEX, but sulfate and TDS were above the limits. A sample of produced water from another nearby BP operated Pictured Cliffs well was taken to determine if produced water had impacted the water samples taken at the Florance 100. The produced water sample analysis showed non-detect for sulfate and TDS of 820 ppm, indicating produced water was not responsible for the high levels of sulfate and TDS in the groundwater at the Florance 100. Water analysis data are attached.

Describe Area Affected and Cleanup Action Taken.*

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: Jeff Peace	Approved by Environmental Specialist: 	
Title: Field Environmental Coordinator	Approval Date: 6/30/15	Expiration Date:
E-mail Address: peace.jeffrey@bp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: May 8, 2015	Phone: 505-326-9479	

* Attach Additional Sheets If Necessary

#NCS 1518150466

BP AMERICA PRODUCTION COMPANY

FLORANCE # 100 (PC) - (Two unknown source release discoveries)

Unit Letter P, Section 30, T30N, R08W - API Number: 30-045-20064

Field & Laboratory Data from Groundwater Monitor Wells & Formation Produced Water

FIELD PARAMETERS								
SAMPLE ID	SAMPLE DATE	SAMPLE TIME	DEPTH TO WATER (feet)	TOTAL MW LENGTH (feet)	pH	Conductivity (µmhos/cm)	Temperature (°Celcius)	Volume Purged (gallons)
MW # 1 (background) 1	04/16/14	0920	21.48	35.34	6.50	1,100	13.3	6.75
" 2	11/05/14	1300	21.60	"	6.92	1,000	17.1	6.75
MW # 2 (source) 1	04/16/14	1025	23.78	36.26	6.51	1,800	14.2	6.25
" 2	11/05/14	1400	24.42	"	7.32	1,300	14.7	5.75
MW # 3 (source) 1	04/16/14	1130	28.69	34.09	6.52	1,500	14.4	2.75
" 2	11/05/14	1500	29.69	"	7.15	1,100	14.8	2.25
State GC BN 001 (PC) - 21 bbl BGT PRODUCED WATER	02/20/15	1035	NA	NA	NA	NA	NA	NA

NMWQCC STANDARDS - 6 - 9

LABORATORY PARAMETERS									
SAMPLE ID	Fluoride (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate- Nitrite as N (mg/L)	TDS (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl - benzene (µg/L)	Total Xylenes (µg/L)
MW # 1 (background) 1	ND	12	1,800	ND	3,100	ND	ND	ND	ND
" 2	NA	NA	1,700	NA	3,100	NA	NA	NA	NA
MW # 2 (source) 1	0.87	6.3	2,500	ND	4,000	ND	ND	ND	ND
" 2	NA	NA	2,500	NA	3,770	NA	NA	NA	NA
MW # 3 (source) 1	0.60	24	1,700	ND	2,960	ND	ND	ND	ND
" 2	NA	NA	1,700	NA	2,930	NA	NA	NA	NA
State GC BN 001 (PC) - 21 bbl BGT PRODUCED WATER	NA	NA	ND	ND	820	NA	NA	NA	NA
NMWQCC STANDARDS -	1.6	250	600	10	1,000	10	750	750	620

Notes:

Depth to water measured from casing top of monitor well.

Groundwater standards are applied to values assigned in blue highlighted boxes or confirmed background levels, which ever is higher.

MW - Monitor well
µmhos/cm - Micromhos per centimeter
TDS - Total dissolved solids
mg/L - Milligram per Liter

µg/L - Microgram per liter
ND - Not detected at Reporting Limit
NA - Not available or applicable
NMWQCC - New Mexico Water Quality Control Commission

Analytical ReportLab Order **1502A24**Date Reported: **3/2/2015****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Blagg Engineering**Client Sample ID:** 21 BGT-Produced Water**Project:** State GC BN #1**Collection Date:** 2/20/2015 10:35:00 AM**Lab ID:** 1502A24-001**Matrix:** AQUEOUS**Received Date:** 2/25/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Sulfate	ND	0.50		mg/L	1	2/27/2015 5:19:28 AM	R24552
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	820	200	*	mg/L	1	2/27/2015 8:17:00 AM	17895

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#: 1502A24

02-Mar-15

Client: Blagg Engineering

Project: State GC BN #1

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R24552	RunNo:	24552					
Prep Date:		Analysis Date:	2/26/2015	SeqNo:	723037	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R24552	RunNo:	24552					
Prep Date:		Analysis Date:	2/26/2015	SeqNo:	723038	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	10	0.50	10.00	0	99.7	90	110			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R24552	RunNo:	24552					
Prep Date:		Analysis Date:	2/26/2015	SeqNo:	723091	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R24552	RunNo:	24552					
Prep Date:		Analysis Date:	2/26/2015	SeqNo:	723092	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.8	0.50	10.00	0	98.1	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#: 1502A24

02-Mar-15

Client: Blagg Engineering

Project: State GC BN #1

Sample ID	MB-17895	SampType:	MBLK	TestCode:	SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW	Batch ID:	17895	RunNo:	24545					
Prep Date:	2/25/2015	Analysis Date:	2/27/2015	SeqNo:	722782	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	LCS-17895	SampType: LCS			TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW	Batch ID: 17895			RunNo: 24545					
Prep Date:	2/25/2015	Analysis Date: 2/27/2015			SeqNo: 722783		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: **BLAGG**

Work Order Number: **1502A24**

RcptNo: **1**

Received by/date: *fm 02/25/15*

Logged By: **Ashley Gallegos**

2/25/2015 7:30:00 AM

Completed By: **Ashley Gallegos**

2/25/2015 9:48:12 AM

Reviewed By: *OS 02/25/15*

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐
- # of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax* ☐ In Person

Regarding: _____

Client Instructions: _____

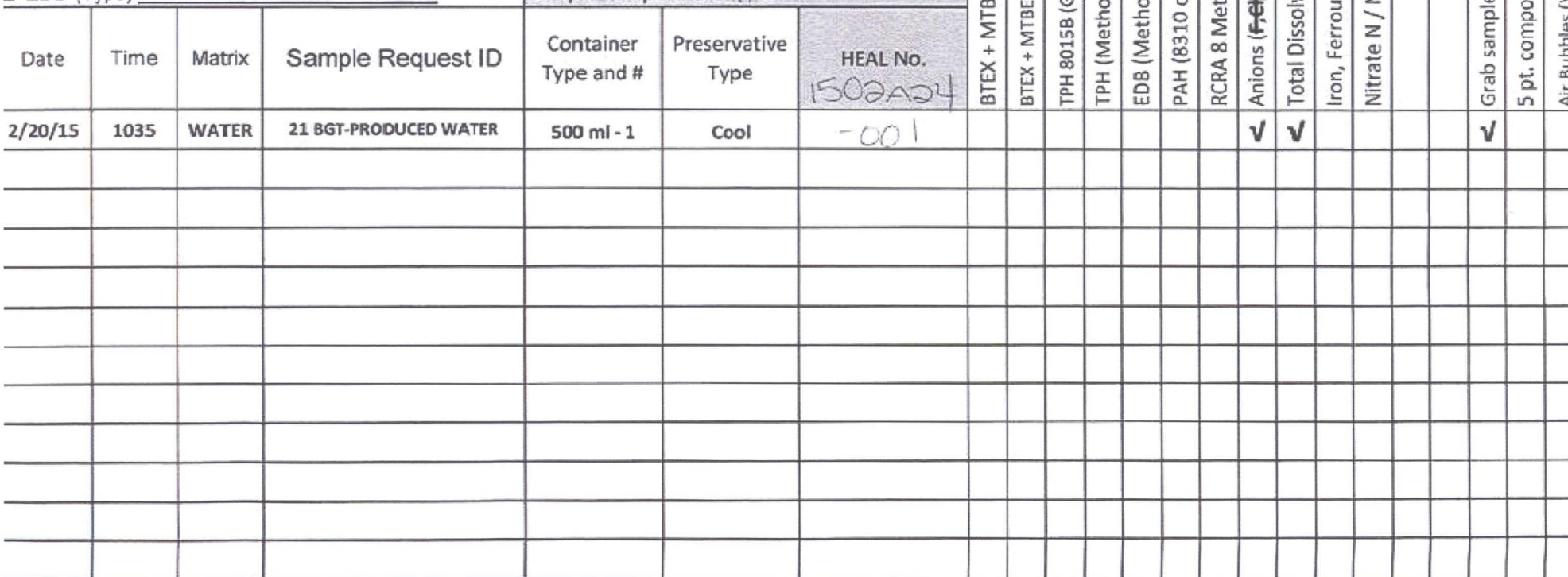
17. Additional remarks: _____

18. Cooler Information


Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	12	Good	Yes			

Chain-of-Custody Record		Turn-Around Time:
Client:	BLAGG ENGR. / BP AMERICA	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush _____
Mailing Address:	P.O. BOX 87	Project Name:
	BLOOMFIELD, NM 87413	STATE GC BN # 1
Phone #:	(505) 632-1199	Project #:
Email or Fax#:		Project Manager:
QA/QC Package:		NELSON VELEZ
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		
Accreditation:		Sampler: NELSON VELEZ
<input type="checkbox"/> NELAP <input type="checkbox"/> Other _____		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> EDD (Type) _____		Sample Temperature: 1.2

Sample Temperature: 2



Paykey: ZEVH01REME

Received by:	Date	Time
	17/35/15	0738

To: Brandon Powell, Cory Smith, NMOCD

From: Jeff Peace, BP

Date: August 29, 2014

Re: Florance 100 closure report

Brandon and Cory,

The attached map shows the locations of the three groundwater monitor wells BP installed at the Florance 100 after remediation of impacted soil was completed. All three monitor wells were non-detect for BTEX, but closure was not approved due to the high concentrations of sulfate in the monitor wells. This is the first time BP has had a remediation denied when BTEX concentrations were below the standards, and BP does not understand the denial due to sulfate since it is not the standard use to determine impacts to groundwater.

In spite of this, BP believes the data show the groundwater in the vicinity of the Florance 100 is normally high for sulfate and TDS. The upgradient well, MW No. 1 has sulfate of 1,800 mg/l and TDS of 3,100 mg/l. The two wells in the source area where excavation of impacted soil was done had sulfate of 2,500 mg/l and 1,700 mg/l, and TDS of 4,000 mg/l and 2,960 mg/l. This results in one of the monitor wells in the source area with sulfate and TDS concentrations less than those of the upgradient monitor well, and the other with concentrations of those constituents in the same range.

Based on this information, BP believes the sulfate and TDS concentrations in the monitor wells reflect natural or background conditions and are not the result of the impacted soil excavated at the Florance 100 site. Therefore BP believes the C-141 final report for the remediation should be approved by NMOCD.

If you have any questions or need additional information please let me know.

Sincerely yours,



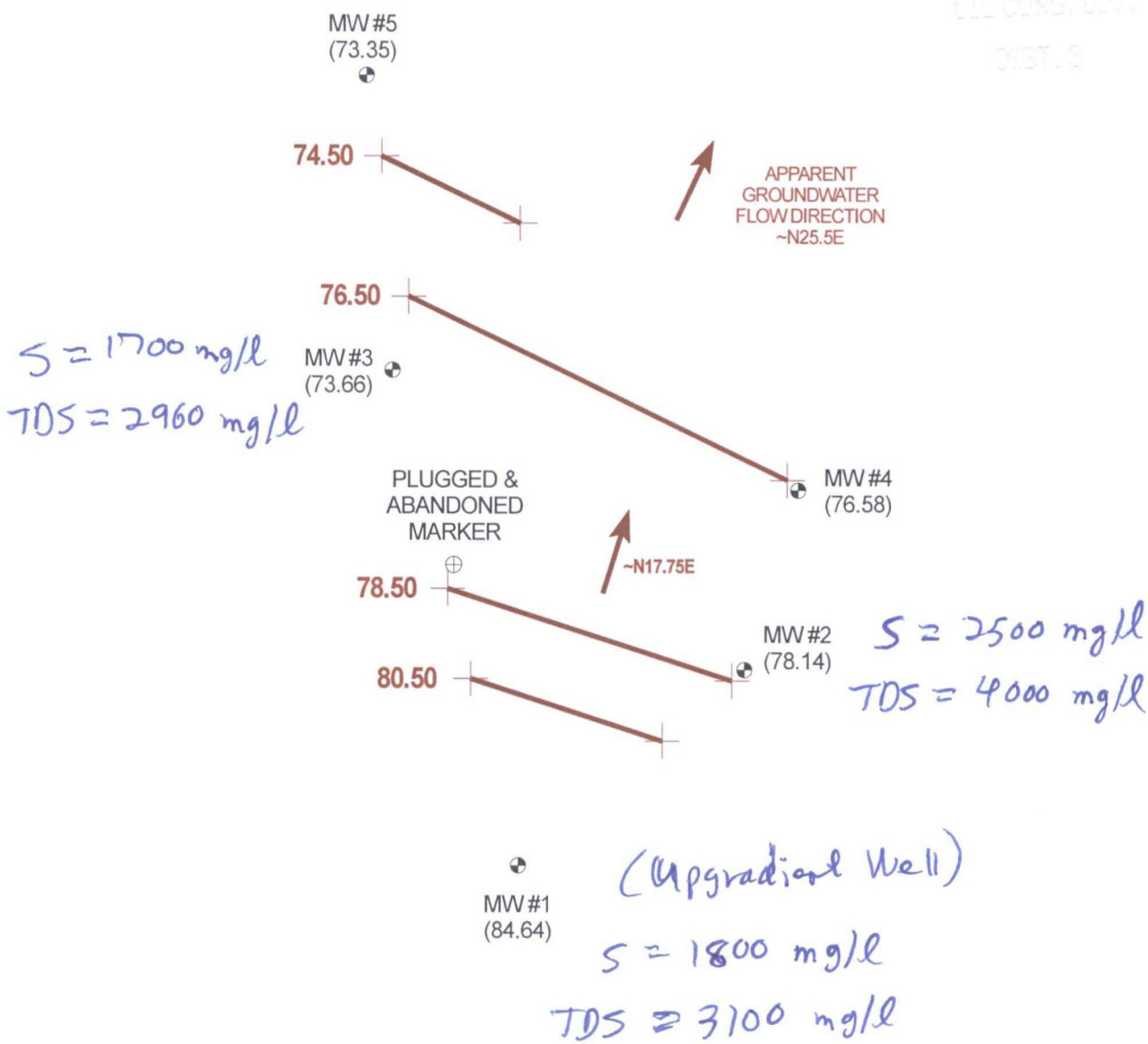
Jeff Peace, PE

Area Environmental Advisor

(505) 326-9479

Peace.jeffrey@bp.com

FIGURE 2
(2nd 1/4, 2014)



0 40 80 FT.

MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE PLUGGED & ABANDONED MARKER (BRUNTON COMPASS AND LASER RANGE FINDER). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

Top of Well Elevation	
MW #1	(106.12)
MW #2	(101.92)
MW #3	(102.35)
MW #4	(100.06)
MW #5	(100.00)
(Initial Reference Point)	
Groundwater Elevation as of 04/18/14.	

BP AMERICA PRODUCTION CO.

FLORANCE# 100

SE/4 SE/4 SEC. 30, T30N, R08W

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW SURVEY

DRAWN BY: NJV

FILENAME: FLORANCE 100-GW01.SKF

DRAFTED: 04-18-14 NJV

GROUNDWATER

CONTOUR

MAP

04/14

BP AMERICA PRODUCTION COMPANY

Florance # 100 - (Release of Unknown Source[s])

Unit Letter P, Section 30, T30N, R08W - API Number: 30-045-20064

SAMPLE ID		SAMPLE DATE	SAMPLE TIME	APPROX. DEPTH TO WATER BELOW GRADE (feet)	APPROX. TOTAL DEPTH OF TEST WELL BELOW GRADE (feet)	Conductivity (µmhos/cm)	Temperature (°Celcius)	Volume Purged (gallons)	pH	TDS (mg/L)	Sulfate (mg/L)	Iron (mg/L)	Benzene (ppb)	Toluene (ppb)	Ethyl - benzene (ppb)	Total Xylenes (ppb)
MW # 1 (background)		04/16/14	0920	19.08	32.94	1,100	13.3	6.75	6.50	3,100	1,800	0.22	ND	ND	ND	ND
MW # 2 (source)		04/16/14	1025	21.58	34.06	1,800	14.2	6.25	6.51	4,000	2,500	1.1	ND	ND	ND	ND
MW # 3 (source)		04/16/14	1130	26.39	31.79	1,500	14.4	2.75	6.52	2,960	1,700	0.30	ND	ND	ND	ND
NMWQCC STANDARDS (groundwater) -									6 - 9	1,000	600	1.0	10	750	750	620

Notes:

TDS - Total dissolved solids
mg/L - Milligram per Liter.
ppb - Parts per billion or microgram per liter (µg/L).

ND - Not detected at Reporting Limit.
NMWQCC - New Mexico Water Quality Control Commission.



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

April 24, 2014

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

RE: Florance #100

OrderNo.: 1404805

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/17/2014 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 qualifiers 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,

A handwritten signature in dark ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW #1
 Project: Florance #100 Collection Date: 4/16/2014 9:20:00 AM
 Lab ID: 1404805-001 Matrix: AQUEOUS Received Date: 4/17/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	4/17/2014 11:48:46 PM	R18059
Toluene	ND	1.0		µg/L	1	4/17/2014 11:48:46 PM	R18059
Ethylbenzene	ND	1.0		µg/L	1	4/17/2014 11:48:46 PM	R18059
Xylenes, Total	ND	2.0		µg/L	1	4/17/2014 11:48:46 PM	R18059
Surr: 4-Bromofluorobenzene	91.8	82.9-139		%REC	1	4/17/2014 11:48:46 PM	R18059
EPA METHOD 300.0: ANIONS							Analyst: JRR
Fluoride	ND	0.50		mg/L	5	4/17/2014 1:46:03 PM	R18079
Chloride	12	2.5		mg/L	5	4/17/2014 1:46:03 PM	R18079
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	4/17/2014 1:46:03 PM	R18079
Sulfate	1800	25	*	mg/L	50	4/18/2014 5:36:55 PM	R18097
EPA METHOD 200.7: METALS							Analyst: JLF
Iron	0.22	0.020		mg/L	1	4/22/2014 12:17:22 PM	12794
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	3100	40.0	*	mg/L	1	4/18/2014 6:30:00 PM	12772

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		

Analytical Report

Lab Order 1404805

Date Reported: 4/24/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: MW #2

Project: Florance #100

Collection Date: 4/16/2014 10:25:00 AM

Lab ID: 1404805-002

Matrix: AQUEOUS

Received Date: 4/17/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	4/18/2014 12:19:01 AM	R18059
Toluene	ND	1.0		µg/L	1	4/18/2014 12:19:01 AM	R18059
Ethylbenzene	ND	1.0		µg/L	1	4/18/2014 12:19:01 AM	R18059
Xylenes, Total	ND	2.0		µg/L	1	4/18/2014 12:19:01 AM	R18059
Surr: 4-Bromofluorobenzene	90.3	82.9-139		%REC	1	4/18/2014 12:19:01 AM	R18059
EPA METHOD 300.0: ANIONS							Analyst: JRR
Fluoride	0.87	0.50		mg/L	5	4/17/2014 2:10:52 PM	R18079
Chloride	6.3	2.5		mg/L	5	4/17/2014 2:10:52 PM	R18079
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	4/17/2014 2:10:52 PM	R18079
Sulfate	2500	50	*	mg/L	100	4/18/2014 5:49:20 PM	R18097
EPA METHOD 200.7: METALS							Analyst: JLF
Iron	1.1	0.10	*	mg/L	5	4/22/2014 12:23:09 PM	12794
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	4000	40.0	*	mg/L	1	4/18/2014 6:30:00 PM	12772

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering **Client Sample ID:** MW #3
Project: Florance #100 **Collection Date:** 4/16/2014 11:30:00 AM
Lab ID: 1404805-003 **Matrix:** AQUEOUS **Received Date:** 4/17/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	4/18/2014 12:49:11 AM	R18059
Toluene	ND	1.0		µg/L	1	4/18/2014 12:49:11 AM	R18059
Ethylbenzene	ND	1.0		µg/L	1	4/18/2014 12:49:11 AM	R18059
Xylenes, Total	ND	2.0		µg/L	1	4/18/2014 12:49:11 AM	R18059
Surr: 4-Bromofluorobenzene	90.5	82.9-139		%REC	1	4/18/2014 12:49:11 AM	R18059
EPA METHOD 300.0: ANIONS							Analyst: JRR
Fluoride	0.60	0.50		mg/L	5	4/17/2014 2:35:42 PM	R18079
Chloride	24	2.5		mg/L	5	4/17/2014 2:35:42 PM	R18079
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	4/17/2014 2:35:42 PM	R18079
Sulfate	1700	25	*	mg/L	50	4/18/2014 6:01:44 PM	R18097
EPA METHOD 200.7: METALS							Analyst: JLF
Iron	0.30	0.020	*	mg/L	1	4/22/2014 12:26:42 PM	12794
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	2960	40.0	*	mg/L	1	4/18/2014 6:30:00 PM	12772

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#: 1404805

24-Apr-14

Client: Blagg Engineering

Project: Florance #100

Sample ID	MB-12794	SampType:	MBLK	TestCode:	EPA Method 200.7: Metals					
Client ID:	PBW	Batch ID:	12794	RunNo:	18147					
Prep Date:	4/21/2014	Analysis Date:	4/22/2014	SeqNo:	523601	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID	LCS-12794	SampType:	LCS	TestCode:	EPA Method 200.7: Metals					
Client ID:	LCSW	Batch ID:	12794	RunNo:	18147					
Prep Date:	4/21/2014	Analysis Date:	4/22/2014	SeqNo:	523602	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.53	0.020	0.5000	0	106	85	115			

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#: 1404805

24-Apr-14

Client: Blagg Engineering

Project: Florance #100

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R18079	RunNo:	18079					
Prep Date:		Analysis Date:	4/17/2014	SeqNo:	521839	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R18079	RunNo:	18079					
Prep Date:		Analysis Date:	4/17/2014	SeqNo:	521840	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	97.7	90	110			
Chloride	4.6	0.50	5.000	0	92.6	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	97.2	90	110			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R18097	RunNo:	18097					
Prep Date:		Analysis Date:	4/18/2014	SeqNo:	522465	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R18097	RunNo:	18097					
Prep Date:		Analysis Date:	4/18/2014	SeqNo:	522466	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	10	0.50	10.00	0	101	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#: 1404805

24-Apr-14

Client: Blagg Engineering

Project: Florance #100

Sample ID	5ML-RB2	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBW	Batch ID: R18059			RunNo: 18059					
Prep Date:		Analysis Date: 4/17/2014			SeqNo: 521759		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	18		20.00		91.1	82.9	139			

Sample ID	100NG BTEX LCS	SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSW	Batch ID: R18059			RunNo: 18059					
Prep Date:		Analysis Date: 4/17/2014			SeqNo: 521760		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	20	1.0	20.00	0	102	80	120			
Xylenes, Total	63	2.0	60.00	0	104	80	120			
Surr: 4-Bromofluorobenzene	18		20.00		91.0	82.9	139			

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
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG

Work Order Number: 1404805

RcptNo: 1

Received by/date:

AG

04/17/14

Logged By: Michelle Garcia

4/17/2014 10:10:00 AM

Michelle Garcia

Completed By: Michelle Garcia

4/17/2014 10:54:43 AM

Michelle Garcia

Reviewed By:

[Signature]

04/17/14

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 $>0^{\circ}\text{C}$ to 6.0°C

Yes ☒

No ☐

NA ☐

6. Sample(s) in proper container(s)?

Yes ☒

No ☐

7. Sufficient sample volume for indicated test(s)?

Yes ☒

No ☐

8. Are samples (except VOA and ONG) properly preserved?

Yes ☒

No ☐

9. Was preservative added to bottles?

Yes ☐

No ☒

NA ☐

10. VOA vials have zero headspace?

Yes ☒

No ☐

No VOA Vials ☐

11. Were any sample containers received broken?

Yes ☐

No ☒

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

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?

Yes ☒

No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

6

<2 or >12 unless noted

Adjusted? *No*

Checked by: *CS*

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

Turn-Around Time:

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

☒ Standard ☐ Rush

Mailing Address: **P.O. BOX 87**

Project Name:

FLORANCE # 100

BLOOMFIELD, NM 87413

Project #:

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

email or Fax#:

Project Manager:

QA/QC Package:

NELSON VELEZ

☒ Standard ☐ Level 4 (Full Validation)

Accreditation:

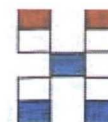
Sampler: **NELSON VELEZ**

☐ NELAP ☐ Other

On Ice: ☒ Yes ☐ No

☐ EDD (Type)

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.	BTEX + MTBE	BTEX + MTBB	TPH 8015B (C)	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)	Total Dissolved Solids	Iron, Ferrous (filtered)	Nitrate N / Nitrite N			Grab sample	5 pt. composite
4/16/14	0920	WATER	MW # 1	40 ml VOA - 2	HCl & Cool	1404805 -001	✓													✓	
4/16/14	0920	WATER	MW # 1	500 ml - 1	Cool	-001								✓	✓					✓	
4/16/14	0920	WATER	MW # 1	125 ml - 1	HNO ₃ & Cool	-001										✓				✓	
4/16/14	0920	WATER	MW # 1	125 ml - 1	H ₂ SO ₄ & Cool	-001											✓			✓	
4/16/14	1025	WATER	MW # 2	40 ml VOA - 2	HCl & Cool	-002	✓													✓	
4/16/14	1025	WATER	MW # 2	500 ml - 1	Cool	-002								✓	✓					✓	
4/16/14	1025	WATER	MW # 2	125 ml - 1	HNO ₃ & Cool	-002										✓				✓	
4/16/14	1025	WATER	MW # 2	125 ml - 1	H ₂ SO ₄ & Cool	-002											✓			✓	
4/16/14	1130	WATER	MW # 3	40 ml VOA - 2	HCl & Cool	-003	✓													✓	
4/16/14	1130	WATER	MW # 3	500 ml - 1	Cool	-003								✓	✓					✓	
4/16/14	1130	WATER	MW # 3	125 ml - 1	HNO ₃ & Cool	-003										✓				✓	
4/16/14	1130	WATER	MW # 3	125 ml - 1	H ₂ SO ₄ & Cool	-003											✓			✓	

Date: 4/16/14	Time: 1505	Relinquished by: [Signature]	Received by: [Signature]	Date: 4/16/14	Time: 1505
Date: 4/16/14	Time: 1710	Relinquished by: [Signature]	Received by: [Signature]	Date: 04/17/14	Time: 10:10

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.

Soil INFO

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 100	Facility Type: Natural gas well	
Surface Owner: Federal	Mineral Owner: Federal	API No. 3004520064

LOCATION OF RELEASE

Unit Letter P	Section 30	Township 30N	Range 8W	Feet from the 1,170	North/South Line South	Feet from the 945	East/West Line East	County: San Juan
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Latitude 36.77837 Longitude 107.71039

NATURE OF RELEASE

Type of Release: condensate/oil – historic release	Volume of Release: unknown	Volume Recovered: NA
Source of Release: unknown – likely earthen pit	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: 9/26/2013; 1:00 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

RCVD FEB 19 '14
OIL CONS. DIV.
DIST. 3

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Soil impacts were discovered during contouring for final P&A reclamation. Initial investigation determine impacts were widespread. Exploratory drilling was done to determine the depth and lateral extent of the impacts. Once impacted area was defined the contaminated soil was removed and hauled to the IEI landfarm for treatment. Clean soil was used to backfill the excavation. 3,608 cubic yards of soil was taken to the landfarm.

Describe Area Affected and Cleanup Action Taken.* Impacted soil was excavated and removed. Approximately 3,608 cubic yards of impacted soil was taken to IEI landfarm for treatment. Excavated area was backfilled with clean soil. Since excavation depth reached groundwater, groundwater monitor wells will be installed to check water quality.

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: <u>Jeff Peace</u>		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Jeff Peace		Approved by Environmental Specialist: <u>XXX</u>	
Title: Field Environmental Advisor		Approval Date:	Expiration Date:
E-mail Address: peace.jeffrey@bp.com		Conditions of Approval:	Attached <input type="checkbox"/>
Date: February 12, 2014 Phone: 505-326-9479		Investigation Incomplete Additional Info Requested. CS.	

* Attach Additional Sheets If Necessary

BP AMERICA PRODUCTION COMPANY

FLORANCE 100 – HISTORICAL (LEGACY) RELEASE CLEANUP

API #: 30-045-20064

Legal Description: (Unit Letter P, Sec. 30 - T30N - R8W, NMPM)

CHRONOLOGICAL EVENT SUMMATION

1. September 26, 2013: Soil impacts discovered (74' South 68° East of PxA Marker) with dozer while re-contouring site for final PxA operations. Original source event not evident and local pipeline operators (Enterprise and Williams) contacted to determine if they might be owners. Pipeline operators indicated they had no record of waste discharges in the impact area. BP initiates plan for cleanup effort.
2. September 27, 2013: BP begins remediation by excavation with trackhoe.
3. October 17, 2013: Conduct GeoProbe investigation to determine extent of impacts in areas of live pipelines.
4. November 15-19, 2013: Additional GeoProbe investigation to further delineate extent of impacts. Second potential impact area discovered with GeoProbe at 47' North 16.5° East of PxA marker. Original source event could not be determined.
5. December 13, 2013: Complete excavation of impacts. Total of 3,608 cubic yards of soil removed and transported to BP Crouch Mesa Landfarm in San Juan County, NM for final remediation.

FLORANCE 100

NE Wall
Sampled 12/5/13

Williams Pipeline

Enterprise Pipeline

West Wall
Sampled 12/12/13

NE Wall
Sampled 11/15/15

Excavation
(Average Depth
30 feet below grade)

East Wall
Sampled 11/12/13

Wall North of
Wellhead
Sampled 12/13/13

Wellhead

West Wall
Sampled 10/18/13

Points A to P are GeoProbe Points



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

October 25, 2013

Jeff Blagg

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-1183

FAX (505) 632-3903

RE: FLORANCE 100

OrderNo.: 1310948

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 7 sample(s) on 10/19/2013 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 qualifiers 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 1310948

Date Reported: 10/25/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 42' S42E @ -26'

Project: FLORANCE 100

Collection Date: 10/16/2013 3:20:00 PM

Lab ID: 1310948-001

Matrix: SOIL

Received Date: 10/19/2013 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/22/2013 1:38:42 PM	9920
Surr: DNOP	97.2	66-131		%REC	1	10/22/2013 1:38:42 PM	9920
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	10/21/2013 1:29:46 PM	9931
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: RAA
Benzene	ND	0.048		mg/Kg	1	10/22/2013 8:06:18 PM	9929
Toluene	ND	0.048		mg/Kg	1	10/22/2013 8:06:18 PM	9929
Ethylbenzene	ND	0.048		mg/Kg	1	10/22/2013 8:06:18 PM	9929
Xylenes, Total	ND	0.096		mg/Kg	1	10/22/2013 8:06:18 PM	9929
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%REC	1	10/22/2013 8:06:18 PM	9929
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	1	10/22/2013 8:06:18 PM	9929
Surr: Dibromofluoromethane	107	70-130		%REC	1	10/22/2013 8:06:18 PM	9929
Surr: Toluene-d8	88.9	70-130		%REC	1	10/22/2013 8:06:18 PM	9929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/22/2013 8:06:18 PM	9929
Surr: BFB	96.1	70-130		%REC	1	10/22/2013 8:06:18 PM	9929

Sample Collected at base of excavation SW of wellhead

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1310948

Date Reported: 10/25/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: W SIDEWALL 5-pt @ 10'-20'

Project: FLORANCE 100

Collection Date: 10/18/2013 9:32:00 AM

Lab ID: 1310948-002

Matrix: SOIL

Received Date: 10/19/2013 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	32	9.9		mg/Kg	1	10/22/2013 2:00:37 PM	9920
Surr: DNOP	96.2	66-131		%REC	1	10/22/2013 2:00:37 PM	9920
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	110	30		mg/Kg	20	10/21/2013 1:42:11 PM	9931
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: RAA
Benzene	ND	0.048		mg/Kg	1	10/22/2013 9:32:14 PM	9929
Toluene	ND	0.048		mg/Kg	1	10/22/2013 9:32:14 PM	9929
Ethylbenzene	ND	0.048		mg/Kg	1	10/22/2013 9:32:14 PM	9929
Xylenes, Total	ND	0.097		mg/Kg	1	10/22/2013 9:32:14 PM	9929
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%REC	1	10/22/2013 9:32:14 PM	9929
Surr: 4-Bromofluorobenzene	94.7	70-130		%REC	1	10/22/2013 9:32:14 PM	9929
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/22/2013 9:32:14 PM	9929
Surr: Toluene-d8	85.2	70-130		%REC	1	10/22/2013 9:32:14 PM	9929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/22/2013 9:32:14 PM	9929
Surr: BFB	94.7	70-130		%REC	1	10/22/2013 9:32:14 PM	9929

Sample collected along SW sidewall, south of wellhead.

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1310948

Date Reported: 10/25/2013

CLIENT: Blagg Engineering

Client Sample ID: GP-A @ 20'

Project: FLORANCE 100

Collection Date: 10/17/2013 10:26:00 AM

Lab ID: 1310948-003

Matrix: SOIL

Received Date: 10/19/2013 11:00:00 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	10/22/2013 2:44:40 PM	9920
Surr: DNOP	93.8	66-131		%REC	1	10/22/2013 2:44:40 PM	9920
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	10/21/2013 1:54:36 PM	9931
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: RAA
Benzene	ND	0.046		mg/Kg	1	10/23/2013 1:21:26 AM	9929
Toluene	ND	0.046		mg/Kg	1	10/23/2013 1:21:26 AM	9929
Ethylbenzene	ND	0.046		mg/Kg	1	10/23/2013 1:21:26 AM	9929
Xylenes, Total	ND	0.092		mg/Kg	1	10/23/2013 1:21:26 AM	9929
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	10/23/2013 1:21:26 AM	9929
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	1	10/23/2013 1:21:26 AM	9929
Surr: Dibromofluoromethane	111	70-130		%REC	1	10/23/2013 1:21:26 AM	9929
Surr: Toluene-d8	94.5	70-130		%REC	1	10/23/2013 1:21:26 AM	9929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/23/2013 1:21:26 AM	9929
Surr: BFB	96.5	70-130		%REC	1	10/23/2013 1:21:26 AM	9929

GeoProbe Point A
at 20' depth

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1310948

Date Reported: 10/25/2013

CLIENT: Blagg Engineering

Client Sample ID: GP-B @ 18'

Project: FLORANCE 100

Collection Date: 10/17/2013 12:42:00 PM

Lab ID: 1310948-004

Matrix: SOIL

Received Date: 10/19/2013 11:00:00 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	10/22/2013 3:06:41 PM	9920
Surr: DNOP	93.8	66-131		%REC	1	10/22/2013 3:06:41 PM	9920
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	10/21/2013 2:07:00 PM	9931
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: RAA
Benzene	ND	0.049		mg/Kg	1	10/23/2013 1:50:02 AM	9929
Toluene	ND	0.049		mg/Kg	1	10/23/2013 1:50:02 AM	9929
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2013 1:50:02 AM	9929
Xylenes, Total	ND	0.098		mg/Kg	1	10/23/2013 1:50:02 AM	9929
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	10/23/2013 1:50:02 AM	9929
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	1	10/23/2013 1:50:02 AM	9929
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/23/2013 1:50:02 AM	9929
Surr: Toluene-d8	86.8	70-130		%REC	1	10/23/2013 1:50:02 AM	9929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2013 1:50:02 AM	9929
Surr: BFB	93.9	70-130		%REC	1	10/23/2013 1:50:02 AM	9929

GeoProbe Point B
at 18' depth

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1310948

Date Reported: 10/25/2013

CLIENT: Blagg Engineering**Client Sample ID:** GP-D @ 23'**Project:** FLORANCE 100**Collection Date:** 10/18/2013 10:02:00 AM**Lab ID:** 1310948-005**Matrix:** SOIL**Received Date:** 10/19/2013 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	710	10		mg/Kg	1	10/22/2013 3:28:42 PM	9920
Surr: DNOP	115	66-131		%REC	1	10/22/2013 3:28:42 PM	9920
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	10/21/2013 2:19:25 PM	9931
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: cadg
Benzene	ND	0.047		mg/Kg	1	10/23/2013 6:35:52 PM	9929
Toluene	ND	0.047		mg/Kg	1	10/23/2013 6:35:52 PM	9929
Ethylbenzene	ND	0.047		mg/Kg	1	10/23/2013 6:35:52 PM	9929
Xylenes, Total	ND	0.095		mg/Kg	1	10/23/2013 6:35:52 PM	9929
Surr: 1,2-Dichloroethane-d4	114	70-130		%REC	1	10/23/2013 6:35:52 PM	9929
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	10/23/2013 6:35:52 PM	9929
Surr: Dibromofluoromethane	113	70-130		%REC	1	10/23/2013 6:35:52 PM	9929
Surr: Toluene-d8	95.6	70-130		%REC	1	10/23/2013 6:35:52 PM	9929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: cadg
Gasoline Range Organics (GRO)	77	4.7		mg/Kg	1	10/23/2013 6:35:52 PM	9929
Surr: BFB	106	70-130		%REC	1	10/23/2013 6:35:52 PM	9929

GeoProbe Point D
at 23 foot depth.
Subsequently
excavated.

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 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1310948

Date Reported: 10/25/2013

CLIENT: Blagg Engineering**Client Sample ID:** GP-E @ 24'**Project:** FLORANCE 100**Collection Date:** 10/18/2013 11:14:00 AM**Lab ID:** 1310948-006**Matrix:** SOIL**Received Date:** 10/19/2013 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	310	10		mg/Kg	1	10/22/2013 3:50:45 PM	9920
Surr: DNOP	101	66-131		%REC	1	10/22/2013 3:50:45 PM	9920
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	10/21/2013 2:31:50 PM	9931
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: RAA
Benzene	ND	0.047		mg/Kg	1	10/23/2013 2:47:12 AM	9929
Toluene	ND	0.047		mg/Kg	1	10/23/2013 2:47:12 AM	9929
Ethylbenzene	ND	0.047		mg/Kg	1	10/23/2013 2:47:12 AM	9929
Xylenes, Total	ND	0.094		mg/Kg	1	10/23/2013 2:47:12 AM	9929
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	10/23/2013 2:47:12 AM	9929
Surr: 4-Bromofluorobenzene	89.0	70-130		%REC	1	10/23/2013 2:47:12 AM	9929
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/23/2013 2:47:12 AM	9929
Surr: Toluene-d8	94.5	70-130		%REC	1	10/23/2013 2:47:12 AM	9929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/23/2013 2:47:12 AM	9929
Surr: BFB	89.0	70-130		%REC	1	10/23/2013 2:47:12 AM	9929

GeoProbe Point E
at 24 foot depth.
Subsequently
Excavated.

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1310948

Date Reported: 10/25/2013

CLIENT: Blagg Engineering

Client Sample ID: GP-F @ 20'

Project: FLORANCE 100

Collection Date: 10/18/2013 12:17:00 PM

Lab ID: 1310948-007

Matrix: SOIL

Received Date: 10/19/2013 11:00:00 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	10/22/2013 4:12:45 PM	9920
Surr: DNOP	97.4	66-131		%REC	1	10/22/2013 4:12:45 PM	9920
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	10/21/2013 2:44:15 PM	9931
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: RAA
Benzene	ND	0.047		mg/Kg	1	10/23/2013 3:15:46 AM	9929
Toluene	ND	0.047		mg/Kg	1	10/23/2013 3:15:46 AM	9929
Ethylbenzene	ND	0.047		mg/Kg	1	10/23/2013 3:15:46 AM	9929
Xylenes, Total	ND	0.095		mg/Kg	1	10/23/2013 3:15:46 AM	9929
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	10/23/2013 3:15:46 AM	9929
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	1	10/23/2013 3:15:46 AM	9929
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/23/2013 3:15:46 AM	9929
Surr: Toluene-d8	88.9	70-130		%REC	1	10/23/2013 3:15:46 AM	9929
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/23/2013 3:15:46 AM	9929
Surr: BFB	98.0	70-130		%REC	1	10/23/2013 3:15:46 AM	9929

GeoProbe Point F
at 20 foot Depth.
Located between
south edge of
location and
Enterprise pipeline.
Hit Sandstone at
20' depth

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 for VOA and TOC only.
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#: 1310948

25-Oct-13

Client: Blagg Engineering

Project: FLORANCE 100

Sample ID	MB-9931	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	9931	RunNo:	14237					
Prep Date:	10/21/2013	Analysis Date:	10/21/2013	SeqNo:	407870	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-9931	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	9931	RunNo:	14237					
Prep Date:	10/21/2013	Analysis Date:	10/21/2013	SeqNo:	407871	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.9	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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1310948

25-Oct-13

Client: Blagg Engineering

Project: FLORANCE 100

Sample ID	MB-9920	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	9920	RunNo:	14215					
Prep Date:	10/21/2013	Analysis Date:	10/21/2013	SeqNo:	407543	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	10		10.00		103	66	131			

Sample ID	LCS-9920	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	9920	RunNo:	14215					
Prep Date:	10/21/2013	Analysis Date:	10/21/2013	SeqNo:	407544	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.2	77.1	128			
Surr: DNOP	4.8		5.000		96.0	66	131			

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 for VOA and TOC only. |
| 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#: 1310948

25-Oct-13

Client: Blagg Engineering

Project: FLORANCE 100

Sample ID	mb-9929		SampType: MBLK		TestCode: EPA Method 8260B: Volatiles Short List					
Client ID:	PBS		Batch ID: 9929		RunNo: 14255					
Prep Date:	10/21/2013		Analysis Date: 10/22/2013		SeqNo: 409097		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: 1,2-Dichloroethane-d4	0.52		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		111	70	130			
Surr: Toluene-d8	0.47		0.5000		94.7	70	130			

Sample ID	mb-9929		SampType: MBLK		TestCode: EPA Method 8260B: Volatiles Short List					
Client ID:	PBS		Batch ID: 9929		RunNo: 14255					
Prep Date:	10/21/2013		Analysis Date: 10/22/2013		SeqNo: 409512		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: 1,2-Dichloroethane-d4	0.52		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		111	70	130			
Surr: Toluene-d8	0.47		0.5000		94.7	70	130			

Sample ID	LCS-9929		SampType: LCS		TestCode: EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS		Batch ID: 9929		RunNo: 14255					
Prep Date:	10/21/2013		Analysis Date: 10/22/2013		SeqNo: 409534		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	109	70	130			
Toluene	1.0	0.050	1.000	0	99.8	69.9	139			
Ethylbenzene	1.0	0.050	1.000	0	104	70	130			
Xylenes, Total	3.2	0.10	3.000	0	108	70	130			
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		105	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.4	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.48		0.5000		95.2	70	130			

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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1310948

25-Oct-13

Client: Blagg Engineering

Project: FLORANCE 100

Sample ID	mb-9907	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	R14280	RunNo:	14280					
Prep Date:		Analysis Date:	10/23/2013	SeqNo:	410558	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		97.2	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.1	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		107	70	130			
Surr: Toluene-d8	0.44		0.5000		88.1	70	130			

Sample ID	LCS-9907	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	R14280	RunNo:	14280					
Prep Date:		Analysis Date:	10/23/2013	SeqNo:	410563	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		106	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.6	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.45		0.5000		89.7	70	130			

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 for VOA and TOC only. |
| 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#: 1310948

25-Oct-13

Client: Blagg Engineering

Project: FLORANCE 100

Sample ID	mb-9929		SampType: MBLK		TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS		Batch ID: 9929		RunNo: 14255					
Prep Date:	10/21/2013		Analysis Date: 10/22/2013		SeqNo: 409104		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	510		500.0		102	70	130			

Sample ID	mb-9929		SampType: MBLK		TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS		Batch ID: 9929		RunNo: 14255					
Prep Date:	10/21/2013		Analysis Date: 10/22/2013		SeqNo: 409535		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	510		500.0		102	70	130			

Sample ID	LCS-9929		SampType: LCS		TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS		Batch ID: 9929		RunNo: 14255					
Prep Date:	10/21/2013		Analysis Date: 10/22/2013		SeqNo: 409536		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.1	80	120			
Surr: BFB	450		500.0		90.2	70	130			

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 for VOA and TOC only.
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: BLAGG

Work Order Number: 1310948

RcptNo: 1

Received by/date: AF 10/19/13

Logged By: Andy Freeman 10/19/2013 11:00:00 AM

Completed By: Anne Thorne 10/21/2013

Reviewed By: [Signature] 10/21/13

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

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

Special Handling (if applicable)

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

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.0	Good	Yes			

Chain-of-Custody Record		Turn-Around Time:
Client: <u>BLAGG ENGINEERING INC.</u>	<input type="checkbox"/> Standard	<u>WED. 10/23/13</u> <input checked="" type="checkbox"/> Rush
<u>BP AMERICA</u>	Project Name:	
Mailing Address: <u>P.O. Box 87</u>	<u>FLORANCE 100</u>	
<u>BLOOMFIELD NM 87413</u>	Project #:	
Phone #: <u>505-632-1199</u>	Project Manager:	
email or Fax#:	<u>J. BLAGG</u>	
QA/QC Package:		
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Level 4 (Full Validation)	
Accreditation	Sampler: <u>J. BLAGG</u>	
<input type="checkbox"/> NELAP	<input checked="" type="checkbox"/> Yes	
<input type="checkbox"/> Other _____	<input type="checkbox"/> No	
<input type="checkbox"/> EDD (Type) _____	Sample Temperature: <u>4.0</u>	

Sample Temperature: 4.0

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

[illegible]

Date: 01/18/2013	Time: 1421	Relinquished by: Jeff Bogg	Received by: Christine Woelen	Date 10/18/2013	Time 1421
Date: 01/18/13	Time: 1700	Relinquished by: Christine Woelen	Received by: Angel	Date 10/19/13	Time 10:

Remarks: BILL BP
PAYEE: 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.



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

November 19, 2013

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

RE: Florance 100

OrderNo.: 1311585

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/14/2013 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 qualifiers 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1311585

Date Reported: 11/19/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: Florance 100

Lab ID: 1311585-001

Matrix: SOIL

Client Sample ID: East Wall 9-point comp. 8' -24'

Collection Date: 11/12/2013 2:50:00 PM

Received Date: 11/14/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/15/2013 12:20:44 PM	10337
Surr: DNOP	90.3	66-131		%REC	1	11/15/2013 12:20:44 PM	10337
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/16/2013 4:07:47 AM	10349
Surr: BFB	94.4	74.5-129		%REC	1	11/16/2013 4:07:47 AM	10349
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	11/16/2013 4:07:47 AM	10349
Toluene	ND	0.049		mg/Kg	1	11/16/2013 4:07:47 AM	10349
Ethylbenzene	ND	0.049		mg/Kg	1	11/16/2013 4:07:47 AM	10349
Xylenes, Total	ND	0.099		mg/Kg	1	11/16/2013 4:07:47 AM	10349
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	11/16/2013 4:07:47 AM	10349
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	11/15/2013 1:58:02 PM	10359

East Wall, along
south end of
excavation,
sampled to confirm
excavation closure.

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 for VOA and TOC only.
	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#: 1311585

19-Nov-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10359	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	10359	RunNo:	14851					
Prep Date:	11/15/2013	Analysis Date:	11/15/2013	SeqNo:	428021	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-10359	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	10359	RunNo:	14851					
Prep Date:	11/15/2013	Analysis Date:	11/15/2013	SeqNo:	428022	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1311585

19-Nov-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	LCS-10337		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 10337		RunNo: 14826					
Prep Date:	11/14/2013		Analysis Date: 11/15/2013		SeqNo: 427453		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.4	62.1	127			
Surr: DNOP	4.4		5.000		87.3	66	131			

Sample ID	MB-10337	SampType: MBLK			TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 10337			RunNo: 14826					
Prep Date:	11/14/2013	Analysis Date: 11/15/2013			SeqNo: 427454		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		81.6	66	131			

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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1311585

19-Nov-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10349	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	10349		RunNo:	14837				
Prep Date:	11/14/2013	Analysis Date:	11/15/2013		SeqNo:	427700		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		89.8	74.5	129			

Sample ID	LCS-10349		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 10349		RunNo: 14837					
Prep Date:	11/14/2013		Analysis Date: 11/15/2013		SeqNo: 427707		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	99.2	74.5	126			
Surr: BFB	980		1000		98.0	74.5	129			

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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1311585

19-Nov-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10349	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	10349	RunNo:	14837					
Prep Date:	11/14/2013	Analysis Date:	11/15/2013	SeqNo:	427782	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			

Sample ID	LCS-10349	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	10349	RunNo:	14837					
Prep Date:	11/14/2013	Analysis Date:	11/15/2013	SeqNo:	427783	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.1	0.050	1.000	0	105	80	120			
Xylenes, Total	3.2	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	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 for VOA and TOC only.
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: BLAGG

Work Order Number: 1311585

RcptNo: 1

Received by/date: AG 11/14/13
Logged By: Michelle Garcia 11/14/2013 10:00:00 AM Michelle Garcia
Completed By: Michelle Garcia 11/14/2013 10:15:11 AM Michelle Garcia
Reviewed By: [Signature] 11/14/13

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

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

Special Handling (if applicable)

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

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record		Turn-Around Time: <u>By Monday 11/18/2013</u>
Client: <u>BLAGG ENGINEERING INC.</u>		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush
<u>BP AMERICA</u>		Project Name: <u>FLORANCE 100</u>
Mailing Address: <u>P.O. Box 87</u>		Project #: _____
<u>BLOOMFIELD, NM 87413</u>		Project Manager: <u>J. Blagg</u>
Phone #: <u>505-632-1199</u>		
email or Fax#: _____		
QA/QC Package:		
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		
Accreditation		Sampler: <u>J. Blagg</u>
<input type="checkbox"/> NELAP <input type="checkbox"/> Other _____		On Ice <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> EDD (Type) _____		Sample Temperature: <u>1.0</u>

☐ Standard ☒ Rush _____

Project Name: _____

FLORANCE 100

Project #:

Project Manager: _____

J. BLAGG

Sampler: J. Blagg

On Ice	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Sample Temperature	1.0	

--	--	--

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

		1311585
--	--	---------

403 x 1	COOL	-601
---------	------	------

[illegible]

[illegible]

Received by:		Date	Time
--------------	--	------	------

Monty Wall 11/13/2012 1153

Received by:	Date	Time
--------------	------	------

11/14/13 1000

Contracted to other accredited laboratories. This serves as notice of this

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BBTEX + MTBE + MBEs (8021)
BBBTEX + MTBE + TPH (Gas only)
TPH 8015B (GRO / DRO / MBE)
TPH (Method 418.1)
EEDB (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)
<i>CHLORIDE</i>
Air Bubbles (Y or N)

[illegible]

Date: 1/13/2013	Time: 1153	Relinquished by: Jeff Begg	Received by: Christen Wallen	Date 1/13/2013	Time 1153	Remarks: BILL BP PAYEE: ZFEIRKOSJS CONTACT: JEFF PEACE
Date: 1/13/13	Time: 1754	Relinquished by: Christen Wallen	Received by: Brianna Galleaga	Date 1/14/13	Time 1000	

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

November 26, 2013

Jeff Blagg

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-1183

FAX

RE: Florance 100

OrderNo.: 1311953

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 12 sample(s) on 11/21/2013 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 qualifiers 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1311953

Date Reported: 11/26/2013

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** NE Wall 9-pt comp. @ 8'-24'**Project:** Florance 100**Collection Date:** 11/15/2013 9:15:00 AM**Lab ID:** 1311953-001**Matrix:** SOIL**Received Date:** 11/21/2013 9:50:00 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	11/25/2013 10:32:13 AM	10474
Surr: DNOP	98.5	66-131		%REC	1	11/25/2013 10:32:13 AM	10474
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/22/2013 3:17:09 PM	10465
Surr: BFB	92.6	74.5-129		%REC	1	11/22/2013 3:17:09 PM	10465
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.048		mg/Kg	1	11/22/2013 3:17:09 PM	10465
Toluene	ND	0.048		mg/Kg	1	11/22/2013 3:17:09 PM	10465
Ethylbenzene	ND	0.048		mg/Kg	1	11/22/2013 3:17:09 PM	10465
Xylenes, Total	ND	0.096		mg/Kg	1	11/22/2013 3:17:09 PM	10465
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	11/22/2013 3:17:09 PM	10465
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	35	30		mg/Kg	20	11/22/2013 3:49:34 PM	10486

Northeast sidewall,
along East side, to
confirm excavation
closure.

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1311953

Date Reported: 11/26/2013

CLIENT: Blagg Engineering

Client Sample ID: GP-I @ 30'

Project: Florance 100

Collection Date: 11/15/2013 2:35:00 PM

Lab ID: 1311953-002

Matrix: SOIL

Received Date: 11/21/2013 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/25/2013 11:37:31 AM	10474
Surr: DNOP	99.6	66-131		%REC	1	11/25/2013 11:37:31 AM	10474
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/22/2013 3:45:40 PM	10465
Surr: BFB	91.4	74.5-129		%REC	1	11/22/2013 3:45:40 PM	10465
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	11/22/2013 3:45:40 PM	10465
Toluene	ND	0.050		mg/Kg	1	11/22/2013 3:45:40 PM	10465
Ethylbenzene	ND	0.050		mg/Kg	1	11/22/2013 3:45:40 PM	10465
Xylenes, Total	ND	0.10		mg/Kg	1	11/22/2013 3:45:40 PM	10465
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	11/22/2013 3:45:40 PM	10465
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	11/22/2013 4:26:49 PM	10486

GeoProbe Point I
at 30 foot depth.

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1311953

Date Reported: 11/26/2013

CLIENT: Blagg Engineering

Client Sample ID: GP-I @ 4-pt comp 12'-24'

Project: Florance 100

Collection Date: 11/15/2013 1:50:00 PM

Lab ID: 1311953-003

Matrix: SOIL

Received Date: 11/21/2013 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/25/2013 11:59:26 AM	10474
Surr: DNOP	95.6	66-131		%REC	1	11/25/2013 11:59:26 AM	10474
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/22/2013 4:14:15 PM	10465
Surr: BFB	91.6	74.5-129		%REC	1	11/22/2013 4:14:15 PM	10465
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.047		mg/Kg	1	11/22/2013 4:14:15 PM	10465
Toluene	ND	0.047		mg/Kg	1	11/22/2013 4:14:15 PM	10465
Ethylbenzene	ND	0.047		mg/Kg	1	11/22/2013 4:14:15 PM	10465
Xylenes, Total	ND	0.095		mg/Kg	1	11/22/2013 4:14:15 PM	10465
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	11/22/2013 4:14:15 PM	10465
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	110	30		mg/Kg	20	11/22/2013 4:39:14 PM	10486

GeoProbe Point I
4-point composite
from 12' - 24'
depth.

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1311953

Date Reported: 11/26/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-J @ 27'-28'

Project: Florance 100

Collection Date: 11/18/2013 10:04:00 AM

Lab ID: 1311953-004

Matrix: SOIL

Received Date: 11/21/2013 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	1300	100		mg/Kg	10	11/25/2013 2:33:00 PM	10474
Surr: DNOP	0	66-131	S	%REC	10	11/25/2013 2:33:00 PM	10474
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	420	25		mg/Kg	5	11/25/2013 1:48:13 PM	10465
Surr: BFB	752	74.5-129	S	%REC	5	11/25/2013 1:48:13 PM	10465
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.25		mg/Kg	5	11/25/2013 1:48:13 PM	10465
Toluene	ND	0.25		mg/Kg	5	11/25/2013 1:48:13 PM	10465
Ethylbenzene	1.7	0.25		mg/Kg	5	11/25/2013 1:48:13 PM	10465
Xylenes, Total	4.1	0.50		mg/Kg	5	11/25/2013 1:48:13 PM	10465
Surr: 4-Bromofluorobenzene	149	80-120	S	%REC	5	11/25/2013 1:48:13 PM	10465
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	11/22/2013 4:51:38 PM	10486

GeoProbe Point J
at 27'-28' depth.
Subsequently
excavated.

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1311953

Date Reported: 11/26/2013

CLIENT: Blagg Engineering

Client Sample ID: GP-K @ 30'-30.5'

Project: Florance 100

Collection Date: 11/18/2013 11:50:00 AM

Lab ID: 1311953-005

Matrix: SOIL

Received Date: 11/21/2013 9:50:00 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	11/25/2013 12:43:15 PM	10474
Surr: DNOP	97.4	66-131		%REC	1	11/25/2013 12:43:15 PM	10474
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/22/2013 9:56:50 PM	10465
Surr: BFB	90.2	74.5-129		%REC	1	11/22/2013 9:56:50 PM	10465
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.047		mg/Kg	1	11/22/2013 9:56:50 PM	10465
Toluene	ND	0.047		mg/Kg	1	11/22/2013 9:56:50 PM	10465
Ethylbenzene	ND	0.047		mg/Kg	1	11/22/2013 9:56:50 PM	10465
Xylenes, Total	ND	0.093		mg/Kg	1	11/22/2013 9:56:50 PM	10465
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	11/22/2013 9:56:50 PM	10465
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	11/22/2013 5:28:52 PM	10486

GeoProbe Point K
at 30'-30.5' depth
(located north of
northern extent of
remediated area to
confirm no impacts
past pipeline)

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1311953

Date Reported: 11/26/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-L @ 25'-26'

Project: Florance 100

Collection Date: 11/18/2013 1:02:00 PM

Lab ID: 1311953-006

Matrix: SOIL

Received Date: 11/21/2013 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/25/2013 1:05:04 PM	10474
Surr: DNOP	95.2	66-131		%REC	1	11/25/2013 1:05:04 PM	10474
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/22/2013 10:25:24 PM	10465
Surr: BFB	88.8	74.5-129		%REC	1	11/22/2013 10:25:24 PM	10465
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.047		mg/Kg	1	11/22/2013 10:25:24 PM	10465
Toluene	ND	0.047		mg/Kg	1	11/22/2013 10:25:24 PM	10465
Ethylbenzene	ND	0.047		mg/Kg	1	11/22/2013 10:25:24 PM	10465
Xylenes, Total	ND	0.095		mg/Kg	1	11/22/2013 10:25:24 PM	10465
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	11/22/2013 10:25:24 PM	10465
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	11/22/2013 5:41:16 PM	10486

GeoProbe Point L
at 25'-26' depth.

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1311953

Date Reported: 11/26/2013

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** GP-M @ 31'**Project:** Florance 100**Collection Date:** 11/18/2013 2:32:00 PM**Lab ID:** 1311953-007**Matrix:** SOIL**Received Date:** 11/21/2013 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/25/2013 1:27:02 PM	10474
Surr: DNOP	94.7	66-131		%REC	1	11/25/2013 1:27:02 PM	10474
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/22/2013 11:22:30 PM	10465
Surr: BFB	89.8	74.5-129		%REC	1	11/22/2013 11:22:30 PM	10465
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.048		mg/Kg	1	11/22/2013 11:22:30 PM	10465
Toluene	ND	0.048		mg/Kg	1	11/22/2013 11:22:30 PM	10465
Ethylbenzene	ND	0.048		mg/Kg	1	11/22/2013 11:22:30 PM	10465
Xylenes, Total	ND	0.096		mg/Kg	1	11/22/2013 11:22:30 PM	10465
Surr: 4-Bromofluorobenzene	106	80-120		%REC	1	11/22/2013 11:22:30 PM	10465
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	11/22/2013 5:53:41 PM	10486

GeoProbe Point M
at 31' depth.

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1311953

Date Reported: 11/26/2013

CLIENT: Blagg Engineering

Client Sample ID: GP-N 4 pt comp 12'-24'

Project: Florance 100

Collection Date: 11/18/2013 3:05:00 PM

Lab ID: 1311953-008

Matrix: SOIL

Received Date: 11/21/2013 9:50:00 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	11/25/2013 1:48:59 PM	10474
Surr: DNOP	87.7	66-131		%REC	1	11/25/2013 1:48:59 PM	10474
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/22/2013 11:51:02 PM	10465
Surr: BFB	90.0	74.5-129		%REC	1	11/22/2013 11:51:02 PM	10465
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.048		mg/Kg	1	11/22/2013 11:51:02 PM	10465
Toluene	ND	0.048		mg/Kg	1	11/22/2013 11:51:02 PM	10465
Ethylbenzene	ND	0.048		mg/Kg	1	11/22/2013 11:51:02 PM	10465
Xylenes, Total	ND	0.096		mg/Kg	1	11/22/2013 11:51:02 PM	10465
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	11/22/2013 11:51:02 PM	10465
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	130	30		mg/Kg	20	11/22/2013 6:06:05 PM	10486

GeoProbe Point N
4-point composite
from 12'-24' depth.

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1311953

Date Reported: 11/26/2013

CLIENT: Blagg Engineering

Client Sample ID: GP-N @ 28'

Project: Florance 100

Collection Date: 11/18/2013 4:15:00 PM

Lab ID: 1311953-009

Matrix: SOIL

Received Date: 11/21/2013 9:50:00 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	11/25/2013 11:42:08 AM	10474
Surr: DNOP	83.1	66-131		%REC	1	11/25/2013 11:42:08 AM	10474
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/23/2013 12:19:32 AM	10465
Surr: BFB	90.6	74.5-129		%REC	1	11/23/2013 12:19:32 AM	10465
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	11/23/2013 12:19:32 AM	10465
Toluene	ND	0.050		mg/Kg	1	11/23/2013 12:19:32 AM	10465
Ethylbenzene	ND	0.050		mg/Kg	1	11/23/2013 12:19:32 AM	10465
Xylenes, Total	ND	0.10		mg/Kg	1	11/23/2013 12:19:32 AM	10465
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	11/23/2013 12:19:32 AM	10465
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	11/22/2013 6:18:30 PM	10486

GeoProbe Point N
at 28' depth.

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1311953

Date Reported: 11/26/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: GP-O @ 27'

Project: Florance 100

Collection Date: 11/19/2013 9:02:00 AM

Lab ID: 1311953-010

Matrix: SOIL

Received Date: 11/21/2013 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	330	10		mg/Kg	1	11/26/2013 9:53:46 AM	10474
Surr: DNOP	97.0	66-131		%REC	1	11/26/2013 9:53:46 AM	10474
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	8.5	4.8		mg/Kg	1	11/25/2013 2:45:22 PM	10465
Surr: BFB	110	74.5-129		%REC	1	11/25/2013 2:45:22 PM	10465
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.048		mg/Kg	1	11/25/2013 2:45:22 PM	10465
Toluene	ND	0.048		mg/Kg	1	11/25/2013 2:45:22 PM	10465
Ethylbenzene	ND	0.048		mg/Kg	1	11/25/2013 2:45:22 PM	10465
Xylenes, Total	ND	0.097		mg/Kg	1	11/25/2013 2:45:22 PM	10465
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	11/25/2013 2:45:22 PM	10465
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	11/22/2013 6:30:55 PM	10486

GeoProbe Point)
at 27' depth.
Subsequently
Excavated.

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1311953

Date Reported: 11/26/2013

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** GP-O @ 29'**Project:** Florance 100**Collection Date:** 11/19/2013 9:12:00 AM**Lab ID:** 1311953-011**Matrix:** SOIL**Received Date:** 11/21/2013 9:50:00 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	11/25/2013 12:42:35 PM	10474
Surr: DNOP	76.2	66-131		%REC	1	11/25/2013 12:42:35 PM	10474
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/23/2013 1:16:26 AM	10465
Surr: BFB	88.5	74.5-129		%REC	1	11/23/2013 1:16:26 AM	10465
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.048		mg/Kg	1	11/23/2013 1:16:26 AM	10465
Toluene	ND	0.048		mg/Kg	1	11/23/2013 1:16:26 AM	10465
Ethylbenzene	ND	0.048		mg/Kg	1	11/23/2013 1:16:26 AM	10465
Xylenes, Total	ND	0.096		mg/Kg	1	11/23/2013 1:16:26 AM	10465
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	11/23/2013 1:16:26 AM	10465
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	11/22/2013 6:43:20 PM	10486

GeoProbe Point O
at 29 foot depth.
Subsequently
excavated.

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1311953

Date Reported: 11/26/2013

CLIENT: Blagg Engineering

Client Sample ID: GP-O @ 30'

Project: Florance 100

Collection Date: 11/19/2013 11:05:00 AM

Lab ID: 1311953-012

Matrix: SOIL

Received Date: 11/21/2013 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	3100	100		mg/Kg	10	11/26/2013 10:15:30 AM	10474
Surr: DNOP	0	66-131	S	%REC	10	11/26/2013 10:15:30 AM	10474
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	700	24		mg/Kg	5	11/25/2013 3:13:59 PM	10465
Surr: BFB	1100	74.5-129	S	%REC	5	11/25/2013 3:13:59 PM	10465
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.24		mg/Kg	5	11/25/2013 3:13:59 PM	10465
Toluene	ND	0.24		mg/Kg	5	11/25/2013 3:13:59 PM	10465
Ethylbenzene	1.7	0.24		mg/Kg	5	11/25/2013 3:13:59 PM	10465
Xylenes, Total	4.9	0.47		mg/Kg	5	11/25/2013 3:13:59 PM	10465
Surr: 4-Bromofluorobenzene	183	80-120	S	%REC	5	11/25/2013 3:13:59 PM	10465
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	11/22/2013 6:55:45 PM	10486

GeoProbe Point O
at 30' depth.
Subsequently
excavated.

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 for VOA and TOC only.
	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#: 1311953

26-Nov-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10486	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	10486	RunNo:	15033					
Prep Date:	11/22/2013	Analysis Date:	11/22/2013	SeqNo:	434229	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-10486		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 10486		RunNo: 15033					
Prep Date:	11/22/2013		Analysis Date: 11/22/2013		SeqNo: 434230		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1311953

26-Nov-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10474		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 10474		RunNo: 14985					
Prep Date:	11/21/2013		Analysis Date: 11/22/2013		SeqNo: 432946		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		94.4	66	131			

Sample ID	LCS-10474		SampType:	LCS		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	10474		RunNo:	14985				
Prep Date:	11/21/2013		Analysis Date:	11/22/2013		SeqNo:	432958		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	57	10	50.00	0	114	62.1	127				
Surr: DNOP	5.2		5.000		104	66	131				

Sample ID	1311953-001AMS		SampType: MS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	NE Wall 9-pt comp.		Batch ID: 10474		RunNo: 15015					
Prep Date:	11/21/2013		Analysis Date: 11/25/2013		SeqNo: 434386		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	49.85	0	100	47.4	148			
Surr: DNOP	4.8		4.985		96.0	66	131			

Sample ID	1311953-001AMSD		SampType: MSD		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	NE Wall 9-pt comp.		Batch ID: 10474		RunNo: 15015					
Prep Date:	11/21/2013		Analysis Date: 11/25/2013		SeqNo: 434387		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.9	49.60	0	99.0	47.4	148	1.59	22.7	
Surr: DNOP	4.6		4.960		92.2	66	131	0	0	

Sample ID	MB-10502		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 10502		RunNo: 15051					
Prep Date:	11/25/2013		Analysis Date: 11/26/2013		SeqNo: 434751		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		106	66	131			

Sample ID	LCS-10502		SampType:	LCS		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	10502		RunNo:	15051				
Prep Date:	11/25/2013		Analysis Date:	11/26/2013		SeqNo:	434752		Units: %REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	5.2		5.000		105	66	131				

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 for VOA and TOC only. |
| 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#: 1311953

26-Nov-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10465	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	10465	RunNo:	14998					
Prep Date:	11/21/2013	Analysis Date:	11/22/2013	SeqNo:	434062	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		92.3	74.5	129			

Sample ID	LCS-10465	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	10465	RunNo:	14998					
Prep Date:	11/21/2013	Analysis Date:	11/22/2013	SeqNo:	434063	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.3	74.5	126			
Surr: BFB	1000		1000		100	74.5	129			

Sample ID	MB-10482	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	10482	RunNo:	15061					
Prep Date:	11/22/2013	Analysis Date:	11/25/2013	SeqNo:	434684	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		92.6	74.5	129			

Sample ID	LCS-10482	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	10482	RunNo:	15061					
Prep Date:	11/22/2013	Analysis Date:	11/25/2013	SeqNo:	434685	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		99.6	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 for VOA and TOC only. |
| 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#: 1311953

26-Nov-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10465	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID: 10465			RunNo: 14998					
Prep Date:	11/21/2013	Analysis Date: 11/22/2013			SeqNo: 434092		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		111	80	120			

Sample ID	LCS-10465	SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID: 10465			RunNo: 14998					
Prep Date:	11/21/2013	Analysis Date: 11/22/2013			SeqNo: 434093		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	99.0	80	120			
Toluene	0.97	0.050	1.000	0	96.9	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		117	80	120			

Sample ID	MB-10482		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 10482		RunNo: 15061					
Prep Date:	11/22/2013		Analysis Date: 11/25/2013		SeqNo: 434726		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID	LCS-10482	SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID: 10482			RunNo: 15061					
Prep Date:	11/22/2013	Analysis Date: 11/25/2013			SeqNo: 434727		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		113	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 for VOA and TOC only.
- RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **BLAGG**

Work Order Number: 1311953

RcptNo: 1

Received by/date:	<i>mg</i>	<i>11/21/13</i>
Logged By:	Michelle Garcia	11/21/2013 9:50:00 AM <i>Michelle Garcia</i>
Completed By:	Michelle Garcia	11/21/2013 11:12:27 AM <i>Michelle Garcia</i>
Reviewed By:	<i>IO</i>	<i>11/21/2013</i>

Chain of Custody

- Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
- Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
- How was the sample delivered? Courier

Log In

- Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
- Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
- Sample(s) in proper container(s)? Yes ☒ No ☐
- Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
- Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
- Was preservative added to bottles? Yes ☐ No ☒ NA ☐
- VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
- Were any sample containers received broken? Yes ☐ No ☒
- Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
- Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
- Is it clear what analyses were requested? Yes ☒ No ☐
- 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)

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

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

- Additional remarks:

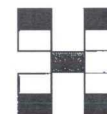
18. Cooler Information

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: By TUESDAY 11-26-2013
☐ Standard ☒ Rush
Project Name: FLORANCE 100
Project #:
Project Manager: J. BLAGG
Sampler: J. 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	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)
11/15/13	0915	SOIL	NE WALL 9-pt comp 8'-24'	402 x 1	COOL	-001	X		X									X	
"	1435	"	GP-I @ 30'	"	"	-002	X		X									X	
"	1350	"	GP-I @ 4-pt comp 12'-24'	"	"	-003	X		X									X	
11/18/13	1004	"	GP-J @ 27'-28'	"	"	-004	X		X									X	
"	1150	"	GP-K @ 30'-30.5'	"	"	-005	X		X									X	
"	1302	"	GP-L @ 25'-26'	"	"	-006	X		X									X	
"	1432	"	GP-M @ 31'	"	"	-007	X		X									X	
"	1505	"	GP-N 4pt comp 12'-24'	"	"	-008	X		X									X	
"	1615	"	GP-N @ 28'	"	"	-009	X		X									X	
11/19/13	0902	"	GP-O @ 27'	"	"	-010	X		X									X	
"	0912	"	GP-O @ 29'	"	"	-011	X		X									X	
"	1105	"	GP-P @ 30'	"	"	-012	X		X									X	

Date: 11/20/13 Time: 1104 Relinquished by: J. Blagg Received by: Christina Wheeler Date: 11/20/13 Time: 1104
Date: 11/21/13 Time: 0950 Relinquished by: Christina Wheeler Received by: Maurice Green Date: 11/21/13 Time: 0950

Remarks: Bill BP
PAYMENT: ZFEIRKOSTS
CONTACT: J. 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.



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

December 19, 2013

Jeff Blagg

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-1183

FAX (505) 632-3903

RE: Florance 100

OrderNo.: 1312465

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/11/2013 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1312465

Date Reported: 12/19/2013

CLIENT: Blagg Engineering

Client Sample ID: NE Sidewall 3-pt Comp 8'-24'

Project: Florance 100

Collection Date: 12/5/2013 9:05:00 AM

Lab ID: 1312465-001

Matrix: SOIL

Received Date: 12/11/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	230	10		mg/Kg	1	12/13/2013 2:00:27 PM	10750
Surr: DNOP	89.2	66-131		%REC	1	12/13/2013 2:00:27 PM	10750
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/12/2013 4:53:53 PM	10755
Surr: BFB	98.7	74.5-129		%REC	1	12/12/2013 4:53:53 PM	10755
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	12/12/2013 4:53:53 PM	10755
Toluene	ND	0.048		mg/Kg	1	12/12/2013 4:53:53 PM	10755
Ethylbenzene	ND	0.048		mg/Kg	1	12/12/2013 4:53:53 PM	10755
Xylenes, Total	ND	0.096		mg/Kg	1	12/12/2013 4:53:53 PM	10755
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	12/12/2013 4:53:53 PM	10755
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	44	30		mg/Kg	20	12/16/2013 1:28:26 PM	10813

Northeast sidewall
Near Williams
pipeline. Residual
impacts not
recoverable due to
proximity to
pipeline.
GeoProbe Points
M and K indicated
no residual impacts
at groundwater in
this vicinity.

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 for VOA and TOC only.
	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#: 1312465

19-Dec-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10813	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	10813	RunNo:	15549					
Prep Date:	12/16/2013	Analysis Date:	12/16/2013	SeqNo:	447221	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-10813	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	10813	RunNo:	15549					
Prep Date:	12/16/2013	Analysis Date:	12/16/2013	SeqNo:	447222	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.6	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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1312465

19-Dec-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10750	SampType	MBLK	TestCode	EPA Method 8015D: Diesel Range Organics					
Client ID	PBS	Batch ID	10750	RunNo	15473					
Prep Date	12/11/2013	Analysis Date	12/13/2013	SeqNo	445458	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	8.8		10.00		87.8	66	131			

Sample ID	LCS-10750	SampType	LCS	TestCode	EPA Method 8015D: Diesel Range Organics					
Client ID	LCSS	Batch ID	10750	RunNo	15473					
Prep Date	12/11/2013	Analysis Date	12/13/2013	SeqNo	445579	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	10	50.00	0	115	62.1	127			
Surr: DNOP	5.5		5.000		109	66	131			

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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1312465

19-Dec-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10755	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	10755	RunNo:	15471					
Prep Date:	12/11/2013	Analysis Date:	12/12/2013	SeqNo:	445353	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	880		1000		88.5	74.5	129			

Sample ID	LCS-10755	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	10755	RunNo:	15471					
Prep Date:	12/11/2013	Analysis Date:	12/12/2013	SeqNo:	445354	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	120	74.5	126			
Surr: BFB	960		1000		95.8	74.5	129			

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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1312465

19-Dec-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10755	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID: 10755			RunNo: 15471					
Prep Date:	12/11/2013	Analysis Date: 12/12/2013			SeqNo: 445368		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		102	80	120			

Sample ID	LCS-10755		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 10755		RunNo: 15471					
Prep Date:	12/11/2013		Analysis Date: 12/12/2013		SeqNo: 445369		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	110	80	120			
Toluene	1.1	0.050	1.000	0	107	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.2	0.10	3.000	0	108	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	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 greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |



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: **1312465**

RcptNo: 1

Received by/date: LM 12/11/13

Logged By: **Ashley Gallegos** 12/11/2013 10:00:00 AM

Completed By: **Ashley Gallegos** 12/11/2013 11:48:07 AM

Reviewed By: [Signature] 12/11/13

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

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

Special Handling (if applicable)

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

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No.	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			

Chain-of-Custody Record		Turn-Around Time:	
Client: <u>BLAG ENGINEERING INC.</u>		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush _____	
<u>BP AMERICA</u>		Project Name:	
Mailing Address: <u>P.O. Box 87</u>		<u>FLORANGE 100</u>	
<u>Bloomfield NM 87413</u>		Project #:	
Phone #: <u>505-632-1199</u>		Project Manager:	
email or Fax#:		<u>J. Blagg</u>	
QA/QC Package:			
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)			
Accreditation		Sampler: <u>J. Blagg</u>	
<input type="checkbox"/> NELAP <input type="checkbox"/> Other _____		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> EDD (Type)		Sample Temperature: <u>10</u>	

☒ Standard ☐ Rush

FLORENCE 100

Project Manager:

J. Blagg

Sampler: J. Blase 6

On Ice: ☒ Yes ☐ No

Sample Temperature: / c/

[illegible]

Date: 2/10/2008	Time: 1200	Relinquished by: J. C. Bay
--------------------	---------------	-------------------------------

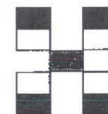
Received by:	Date	Time
Christine Vaele	12/10/13	1200

Date:	Time:	Relinquished by:
12/10/13	1750	Pat Watter

Received by: _____ Date: 2/1/83 Time: 1:00

Remarks: BILL BP
PAYEE: ZFEIRKOSJS

contact: Jeff Pease



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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

December 19, 2013

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 320-1183
FAX (505) 632-3903

RE: Florance 100

OrderNo.: 1312620

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 2 sample(s) on 12/14/2013 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 qualifiers 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1312620

Date Reported: 12/19/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: West Wall N of Well 5-pt 8'-28'

Project: Florance 100

Collection Date: 12/12/2013 2:25:00 PM

Lab ID: 1312620-001

Matrix: SOIL

Received Date: 12/14/2013 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/17/2013 1:17:32 PM	10798
Surr: DNOP	73.3	66-131		%REC	1	12/17/2013 1:17:32 PM	10798
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/17/2013 1:36:44 PM	10811
Surr: BFB	93.0	74.5-129		%REC	1	12/17/2013 1:36:44 PM	10811
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	12/17/2013 1:36:44 PM	10811
Toluene	ND	0.047		mg/Kg	1	12/17/2013 1:36:44 PM	10811
Ethylbenzene	ND	0.047		mg/Kg	1	12/17/2013 1:36:44 PM	10811
Xylenes, Total	ND	0.094		mg/Kg	1	12/17/2013 1:36:44 PM	10811
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	12/17/2013 1:36:44 PM	10811
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	43	30		mg/Kg	20	12/16/2013 2:30:30 PM	10813

West Wall North of PxA marker, 5 point composite from 8'-28 feet.
Sampled to confirm excavation closure

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 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1312620

Date Reported: 12/19/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: Wall N of Well 5-pt 8'-28'

Project: Florance 100

Collection Date: 12/13/2013 1:16:00 PM

Lab ID: 1312620-002

Matrix: SOIL

Received Date: 12/14/2013 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/17/2013 1:40:06 PM	10798
Surr: DNOP	84.4	66-131		%REC	1	12/17/2013 1:40:06 PM	10798
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/17/2013 2:05:27 PM	10811
Surr: BFB	93.4	74.5-129		%REC	1	12/17/2013 2:05:27 PM	10811
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	12/17/2013 2:05:27 PM	10811
Toluene	ND	0.049		mg/Kg	1	12/17/2013 2:05:27 PM	10811
Ethylbenzene	ND	0.049		mg/Kg	1	12/17/2013 2:05:27 PM	10811
Xylenes, Total	ND	0.099		mg/Kg	1	12/17/2013 2:05:27 PM	10811
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	12/17/2013 2:05:27 PM	10811
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	12/16/2013 2:42:55 PM	10813

Sidewall
immediately North
of PxA marker
sampled to confirm
excavation closure.

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 for VOA and TOC only.
	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#: 1312620

19-Dec-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10813	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	10813	RunNo:	15549					
Prep Date:	12/16/2013	Analysis Date:	12/16/2013	SeqNo:	447221	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-10813	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	10813	RunNo:	15549					
Prep Date:	12/16/2013	Analysis Date:	12/16/2013	SeqNo:	447222	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.6	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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1312620

19-Dec-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10798	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	10798	RunNo:	15536					
Prep Date:	12/16/2013	Analysis Date:	12/17/2013	SeqNo:	447068	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	8.4		10.00		84.0	66	131			

Sample ID	LCS-10798	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	10798	RunNo:	15536					
Prep Date:	12/16/2013	Analysis Date:	12/17/2013	SeqNo:	447085	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	10	50.00	0	123	62.1	127			
Surr: DNOP	5.3		5.000		106	66	131			

Sample ID	MB-10815	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	10815	RunNo:	15536					
Prep Date:	12/16/2013	Analysis Date:	12/17/2013	SeqNo:	448012	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.5		10.00		85.1	66	131			

Sample ID	LCS-10815	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	10815	RunNo:	15536					
Prep Date:	12/16/2013	Analysis Date:	12/17/2013	SeqNo:	448013	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.5	66	131			

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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1312620

19-Dec-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10811	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	10811	RunNo:	15571					
Prep Date:	12/16/2013	Analysis Date:	12/17/2013	SeqNo:	448155	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	930		1000		93.3	74.5	129			

Sample ID	LCS-10811	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	10811	RunNo:	15571					
Prep Date:	12/16/2013	Analysis Date:	12/17/2013	SeqNo:	448156	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	74.5	126			
Surr: BFB	1000		1000		101	74.5	129			

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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1312620

19-Dec-13

Client: Blagg Engineering

Project: Florance 100

Sample ID	MB-10811		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 10811		RunNo: 15571					
Prep Date:	12/16/2013		Analysis Date: 12/17/2013		SeqNo: 448181		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		108	80	120			

Sample ID	LCS-10811		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 10811		RunNo: 15571					
Prep Date:	12/16/2013		Analysis Date: 12/17/2013		SeqNo: 448182		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	98.5	80	120			
Toluene	0.95	0.050	1.000	0	94.8	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.1	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	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 for VOA and TOC only.
- RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **BLAGG**

Work Order Number: **1312620**

RcptNo: **1**

Received by/date:

AF 12/14/13

Logged By: **Anne Thorne**

12/14/2013 10:30:00 AM




Completed By: **Anne Thorne**

12/16/2013



Reviewed By:

 12/16/13

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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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			

Client: BLAKE ENGINEERING INC.
BP AMERICA
Mailing Address: P.O. Box 87
BLAINFIELD NM 87413
Phone #: 505-632-1199
email or Fax#: _____
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Project Name: FLORANCE 100

Project #:

Project Manager:
J. Blalock

Sampler: J- BLA66

On Ice: ☒ Yes ☐ No

Sample Temperature: 10 °C	
Container	Preservative

[illegible]

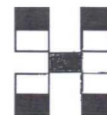
Date: 2/13/13	Time: 1430	Relinquished by: Jeff Blegg
Date:	Time:	Relinquished by:

Date:	Time:	Requisitioned by:
12/14/13	1830	Christine Waeber

If necessary, samples submitted to Hall Environmental may be sub

Received by:	Date	Time
Christa Walker	12/13/13	1430

Received by: Dan Date 12/14/13 Time 10:30



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

	X	X	BTEX + MTBE + TMP's (8021)
			BTEX + MTBE + TPH (Gas only)
	X	X	TPH 8015B (GRO / DRO / MTBE)
			TPH (Method 418.1)
			EDB (Method 504.1)
			PAH's (8310 or 8270 SIMS)
			RCRA 8 Metals
			Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)
			8081 Pesticides / 8082 PCB's
			8260B (VOA)
			8270 (Semi-VOA)
	X	X	<i>Chloride</i>
			Air Bubbles (Y or N)

Remarks: Bill BP
PAYER: ZFEIRKOSTJS
contact: JEFF PACE