

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 ☐ Subsequent ☐ Final Report

Name of Company: BP	Contact: Steve Moskal	
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9497	
Facility Name: Florance Gas Com J 016	Facility Type: Natural gas well	
Surface Owner: Federal	Mineral Owner: Federal	API No. 3004509800

LOCATION OF RELEASE

Unit Letter A	Section 6	Township 30N	Range 9W	Feet from the 1,010	North/South Line North	Feet from the 990	East/West Line East	County: San Juan
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Latitude 36.844942°

Longitude -107.815430°

NATURE OF RELEASE

Type of Release: Produced Water/Condensate	Volume of Release: unknown	Volume Recovered: none
Source of Release: Below Grade Tank - 21 bbl; Tank B	Date and Hour of Occurrence: August 6, 2016 @ 8:00AM	Date and Hour of Discovery: August 8, 2016 @ 6:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom? Steve Moskal	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

OIL CONS. DIV DIST. 3

AUG 30 2016

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Sampling of the soil beneath the BGT was done during removal to ensure no soil impacts from the BGT. Soil analysis resulted in BTEX and chlorides below standards. TPH was 3,000 ppm by Method 418.1 and 5,300 ppm by Method 8015D, indicating a release occurred. Delineation through soil borings indicated that the vertical extent of contamination is not removable through excavation. Soil vapor extraction points were installed.

Describe Area Affected and Cleanup Action Taken.* The BGT was removed. The site was fully delineated. A soil vapor extraction unit was installed in February 2016 after receiving an electrical connection that delayed the project. The soil vapor extraction unit will continue to operate and be monitored until remediation appears to be complete. Confirmation soil samples will be collected at a later date.

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.

OIL CONSERVATION DIVISION

Signature: <i>Steve Moskal</i>	Approved by Environmental Specialist: <i>[Signature]</i>	
Printed Name: Steve Moskal	Approval Date: 9/21/16	Expiration Date:
Title: Field Environmental Coordinator	Conditions of Approval:	
E-mail Address: steven.moskal@bp.com	Attached ☒	
Date: August 23, 2016	Phone: 505-326-9497	

Submit Bi-Annual Reports

OR progress of SVE.

* Attach Additional Sheets If Necessary

#NCS1410755727

108

Smith, Cory, EMNRD

From: Smith, Cory, EMNRD
Sent: Wednesday, September 21, 2016 2:27 PM
To: Moskal, Steven
Cc: Fields, Vanessa, EMNRD
Subject: Florance Gas Com J 16 API# 30-045-09800

Steve,

OCD has received your subsequent C-141 report for the Florante Gas Com J 16. Upon review the C-141 has been approved with the following conditions of approval:

- BP will submit to the OCD District III Office a subsequent C-141 remediation progress report Bi-annually.

If you have any questions please give me a call.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

BP America
Florance GC J 16
(A) Sec 6 – T30N – R9W
San Juan County, New Mexico
API: 30-045-09800

Summary Record of Impact Remediation

March 10, 2014 Soils impacted with hydrocarbons encountered during closure sampling of 21 barrel below grade tank (BGT). The BGT appeared to have good integrity and impacts were suspected to be from historical discharges of fluids into an unlined pit at the same location as the BGT.

Site Closure Standard Determined at 1,000 ppm TPH based on:

Horizontal distance to a blue line on a USGS Topo > 200 feet (10 points)
Nearest water well > 1,000 feet (0 points)
Depth to groundwater based on BGT permit records search >100 feet (0 points)

March 20, 2014 Receive lab report on 21 barrel BGT closure sampling documenting TPH and BTEX in excess of site closure standard:

TPH by US EPA Method 418.1 = 3,000 mg/Kg
TPH by US EPA Method 8015: GRO = 3,100 mg/Kg, DRO = 2,200 mg/Kg, MRO not reported
BTEX by US EPA Method 8021: Benzene = ND, Toluene = ND, Ethylbenzene = ND, Xylenes = 150 mg/Kg
Chloride = ND

October 9, 2014 Begin site delineation using Geoprobe. Encounter equipment limitations at 48 feet below surface grade (bsg).

November 21, 2014 – December 17, 2014 Complete site delineation using Hollow Stem Auger drill rig. A total of 5 borings advanced within and surrounding the original impact discovery. Impacts found to extend to a depth of 78 feet bsg at source, where a dense sandstone surface was encountered and auger refusal was determined. In the surrounding 4 additional borings the sandstone surface was found at depths ranging between 75.5' – 91' bsg. No groundwater was observed in any boring. Each boring was completed with 2-inch slotted pvc across the impact intervals to assist future SVE remediation.

February 17, 2016 Initial start-up of SVE system. Initial field OVM on exhaust = 4,088 ppm

February 18, 2016 – Present (August 22, 2016) SVE system in continuous operation. Most recent field OVM measured August 19, 2016 @ 804 ppm.

BP America - Florance GC J 16

Summary SVE System Monitoring Data

Date	Exhaust OVM (ppm)	Exhaust Vacuum (in)	SVE Point	Comments
02/17/2016	4,088	33	BH-1	Initial start up at SVE BH-1
02/18/2016	1,844	34	BH-1	Operational @ TOA; H ₂ O in drum below drain port
02/19/2016	1,280	31	BH-1	Operational @ TOA; drained ~ 1.5 gal. H ₂ O in drum, restarted
02/20/2016	1,273	31	BH-1	Operational @ TOA; drained ~ 2.5 gal. H ₂ O in drum, restarted
02/22/2016	1,193	31	BH-1	Operational @ TOA; drained ~ 9 gal. H ₂ O in drum, restarted
02/26/2016	1,344	34	BH-1	Operational @ TOA; drained ~ 23 gal. H ₂ O in drum, restarted
03/03/2016	1,259	34	BH-1	Operational @ TOA; drained ~ 15.5 gal. H ₂ O in drum, restarted
03/08/2016	1,219	32	BH-1	Operational @ TOA; drained ~ 11.5 gal. H ₂ O in drum, restarted
03/10/2016	1,135	34	BH-1	Operational @ TOA; drained ~ 5 gal. H ₂ O in drum, restarted
03/14/2016	1,184	34	BH-1	Operational @ TOA; drained ~ 10.5 gal. H ₂ O in drum, restarted
03/17/2016	1,022	37	BH-1	Operational @ TOA; drained ~ 7.5 gal. H ₂ O in drum, restarted
03/22/2016	2,427	36	BH-1	Operational @ TOA; drained ~ 9 gal. H ₂ O in drum, restarted
03/24/2016	1,504	34	BH-1	Operational @ TOA; drained ~ 5.5 gal. H ₂ O in drum, restarted
03/28/2016	1,448	34	BH-1	Operational @ TOA; drained ~ 17 gal. H ₂ O in drum, restarted
03/31/2016	1,462	34	BH-1	Operational @ TOA; drained ~ 9 gal. H ₂ O in drum, restarted
04/05/2016	1,480	34	BH-1	Operational @ TOA; drained ~ 12 gal. H ₂ O in drum, restarted
04/08/2016	1,499	34	BH-1	Operational @ TOA; drained ~ 5 gal. H ₂ O in drum, restarted
04/11/2016	1,425	34	BH-1	Operational @ TOA; drained ~ 7.5 gal. H ₂ O in drum, restarted
04/15/2016	1,567	34	BH-1	Operational @ TOA; drained ~ 10.5 gal. H ₂ O in drum, restarted
04/19/2016	1,596	34	BH-1	Operational @ TOA; drained ~ 11.5 gal. H ₂ O in drum, restarted
04/22/2016	1,480	34	BH-1	Operational @ TOA; drained ~ 3 gal. H ₂ O in drum, restarted
04/25/2016	1,471	34	BH-1	Operational @ TOA; meas. ~ 4 gal. of H ₂ O in drum, did not drain (D.N.D.)
04/29/2016	1,434	34	BH-1	Operational @ TOA; drained ~ 11.5 gal. H ₂ O in drum, restarted
05/05/2016	1,753	33	BH-1	Operational @ TOA; drained ~ 11.5 gal. H ₂ O in drum, restarted
05/14/2016	1,407	34	BH-1	Operational @ TOA; drained ~ 10.5 gal. H ₂ O in drum, restarted
05/20/2016	1,190	33	BH-1	Operational @ TOA; drained ~ 5.5 gal. H ₂ O in drum, restarted
05/26/2016	1,303	34	BH-1	Operational @ TOA; meas. ~ 2.5 gal. of H ₂ O in drum, D.N.D., restarted
06/02/2016	1,167	33	BH-1	Operational @ TOA; meas. ~ 5.5 gal. of H ₂ O in drum, D.N.D., restarted
06/17/2016	1,122	33	BH-1	Operational @ TOA; meas. ~ 1.5 gal. of H ₂ O in drum, D.N.D., restarted
06/30/2016	926	33	BH-1	Operational @ TOA; dry drum, restarted
07/15/2016	938	33	BH-1	Operational @ TOA; dry drum, restarted
08/19/2016	804	34	BH-1	Operational @ TOA; water in drum below drain port, restarted

TOA = Time of Arrival

D.N.D. = Did Not Drain

Note: Necessary to turn off SVE blower to inspect water accumulation from condensation in drum, then restart.



Florance J 16

BH-3

BH-5

Prior 21 BGT Location

BH-1
& 1A

20'

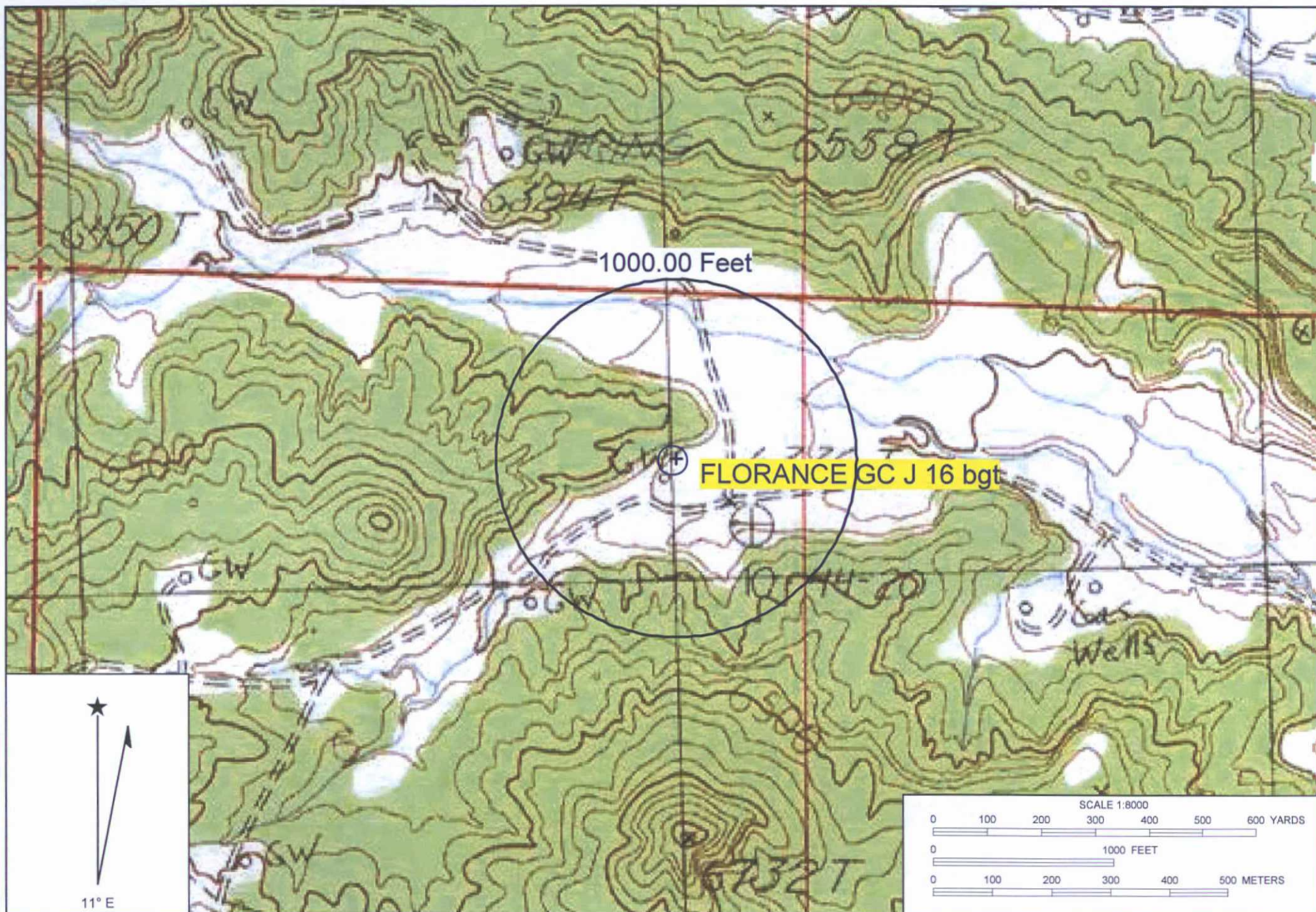
BH-2

BH-4

Google earth

50 ft

N



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Page 1 of 2
@ BGT (21) CENTER

OVM CALIB
53.1/100 @ 0640 AM

FIELD BORING LOG

BORING ID: BH-1

PROJECT: BP1 - FLORANCE GC J 16
CLIENT: BP America Production Co.
DRILLING CONTRACTOR: Kyvek
EQUIPMENT USED: GEOPRESS
DATE START: 10/9/2014 DATE FINISH: DRILLER: KP LOGGED BY: JCB
TOTAL DEPTH: CASING TYPE & SIZE: SLOT SIZE:
COMMENTS:

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	BLOW COUNTS	FIELD OVM	SAMPLE DESCRIPTION
		PLASTIC SLEEVE			
4'	1:23			4.4	MEDIUM Grained Sand, MINOR HC ODOR LITE YELLOW TAN
8'	1:26			60	LITE Gray Medium Sand, HC ODOR.
10'					
12'	1:29			408	DARK Gray Medium Sand, strong HC ODOR
16'	1:32		DRO=130 GRO=220	381	SAA
20'	1:37		DRO=1100 GRO=1700	347	DARK Gray Silt/SANDY Silt, HC ODOR
24'	1:41		DRO=2000 GRO=3600	285	SAA
28'	1:47		DRO= 870 GRO=2400	298	LITE Gray Medium/coarse Sand, HC ODOR
30'					

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FIELD BORING LOG

BORING ID: BH-1

PROJECT: BP: FLORANCE GC J 16
CLIENT: BP America Production Co.
DRILLING CONTRACTOR: Kyvek
EQUIPMENT USED: Geoprobe
DATE START: 10/9/2014 DATE FINISH: 10/9/2014 DRILLER: KP LOGGED BY: JCB
TOTAL DEPTH: 40' CASING TYPE & SIZE: SLOT SIZE:
COMMENTS:

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	BLOW COUNTS	FIELD DVM	SAMPLE DESCRIPTION
28		PLASTIC SLEEVE			
32'	1:51		DRO=2200 GRO=2000	308	SILTY/SANDY SILT, Lite Grey, HC odor
36'	1:57		DRO=1400 GRO=3800	275	SAA
40'	2:03		DRO=4700 GRO=2300	280	SAA
44'	2:10		DRO=2300 GRO=4100	315	Mottled Brown/Grey Silty Sand, HC odor
48'	2:19		DRO=1900 GRO=3800	240	SAA, V. Lite HC odor
		TD 40' EQUIPMENT LIMITATION			

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OVM CALIB 0710 AM
51.8/100

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EXACT SAME LOCATION AS BH-1
ADVANCED 10/9/2014 WITH GEOPROBE
USE CME-95 TO DRILL DEEPER TODAY

FIELD BORING LOG

BORING ID: BH-1A

PROJECT: BP: FLORANCE GC J 76

CLIENT: BP America Production Co.

DRILLING CONTRACTOR: Kyvek

EQUIPMENT USED: CME-95

DATE START: 11/21/2014 DATE FINISH: 11/21/2014 DRILLER: KP LOGGED BY: JCB

TOTAL DEPTH: 79 feet CASING TYPE & SIZE: 2" PVC SLOT SIZE: 0.010

COMMENTS: DRILL TO 50', THEN BEGIN SPLIT SPOON SAMPLING

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	BLOW COUNTS	FIELD OVM	SAMPLE DESCRIPTION
50'	1014	SS	18 DRO=590 GRO=1100	408	LITE BROWN SILTY SAND, HC ODOR MINOR GRAY STREAKING
55'	1031	SS	14 DRO=320 GRO=640	445	SAA
60'	1054	SS	16 DRO=220 GRO=350	417	SAA
65'	1120	SS	21 DRO=68 GRO=2200	409	MEDIUM SAND, MINOR ROUNDED PEBBLES, HC ODOR
70'	1155	SS	17 DRO=59 GRO=150	439	MEDIUM SAND, GRAY, HC ODOR
75'	1225	SS	17 DRO=68 GRO=87	402	SAA
80'	1255	SS	45 DRO=120 GRO=170	409	SANDSTONE @ 77' (Bit Bouncing) SPLIT SPOON 78'-79' CRUSHED SANDSTONE IN SPOON - MIX OF TAN/GRAY COLOR

TD Drilled 78', TD Split Spoon 79'

RUN 65' slotted 2" screen, 15' Riser

10/20 sand to 12', Bentonite 12'-9'

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Boring Dist/Bearing:

FIELD BORING LOG

BORING ID: BH-2

PROJECT: BP: Florance GC J 16

CLIENT: BP America Production Co.

DRILLING CONTRACTOR: Kyvek

EQUIPMENT USED: CME-95

DATE START: 12/9/14 DATE FINISH: 12/9/14 DRILLER: KP LOGGED BY: NJV

TOTAL DEPTH: CASING TYPE & SIZE: 2" PVC SLOT SIZE: 0.010

COMMENTS: 0.0m CALIB. - 52.5 ppm TIME: 1000 RF - 0.52 CALIB. GAS - 100ppm

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	BLOW COUNTS	FIELD OVM	SAMPLE DESCRIPTION
		SPLIT SPOON	PER 18"		
5'	0940		7	0.0 (1002)	COARSE GRAIN SAND, DYO, SM, FIRM
10	0955		7	0.6 (1003)	FINE GRAIN SILTY SAND, DYB, SM, FIRM
15'	1000		5	0.6 (1008)	SAA EXCEPT MB
20	1005		7	0.7 (1009)	SAA
25	1010		19	2.1 (1022)	MED GRAINED SAND TO SILTY SAND, PYB, SM, LOOSE TO FIRM
30	1020		13	1.1 (1033)	SA - BHZ ES!
35	1028		14	0.7 (1100)	SAA
40	1043		14	1.4 (1101)	SAA
45	1053		20	0.6 (1115)	FINE GRAINED SILTY SAND, DYB, SM, FIRM TO SLIGHTLY DENSE
50	1111		20	1.8 (1113)	MED TO COARSE GRAINED SAND, DYO, SM, FIRM
55	1128		40	0.6 (1201)	TOP INTERVAL SILTY SAND, DYB, SM, DENSE BOTTOM " SAND, DYO, SM, FIRM
60	1149		24	1.6 (1203)	MED TO FINE GRAINED SILTY SAND, MB
65	1216		24	7.6 (1228)	FINE GRAINED SILTY SAND, OLIVE TO MED. GRAY, DRY TO SM, FIRM TO DENSE
70	1247		22	29.8 (1300)	SAA EXCEPT MED. GRAY, DRY
75	1313		23	31.4 (1327)	SAA
80	1400		27	45.0 (1443)	SAA

SM -
SLIGHTLY
MOIST

DYO DARK
YELLOW
ORANGE
DYB " "
BROWN
MB MOD
BROWN
PYB PALE
YELLOW
BROWN
SA - SAME
AS
SAA - SAME
AS ABOVE

2" PVC SCREEN INTERVAL
65' - 85' B.G., CASING
TO SURFACE

85' 1453

75 41.9
(1503)

SAA SANDSTONE @ 86' (INDICATED BY
SPLIT SPOON BLOW COUNT & PHYSICAL
APPEARANCE, SIMILAR TO BH-1A.

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ENVIRONMENTAL COR 17916

Boring Dist/Bearing:

FIELD BORING LOG

BORING ID: BH-3

PROJECT: BP: Florance GC J 16

CLIENT: BP America Production Co.

DRILLING CONTRACTOR: Kyvek

EQUIPMENT USED: CME-45

DATE START: 12/10/14 DATE FINISH: 12/10/14 DRILLER: KP LOGGED BY: NJV

TOTAL DEPTH: 75 CASING TYPE & SIZE: 2" PVC SLOT SIZE: 0.010

COMMENTS: oym carb. - 53.1 ppm TIME - 0854 RF - 0.52 CALIB. GAS - 168 ppm

RECORDED:
oym
- 52.2 ppm
TIME - 1017

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	BLOW COUNTS	FIELD OVM	SAMPLE DESCRIPTION
5	0845	SPLIT SPOON	8	10.9 (0900)	COURSE GRAINED SAND, DYO, MOIST, FIRM
10	0850		9	0.0 (0924)	SAA
15	0855		22	1.5 (0925)	SAA
20	0902		7	0.9 (0926)	FINE GRAINED SILTY SAND, DYO, M, FIRM
25	0910		8	531 (0928)	MED. TO COURSE GRAINED SAND TO SILTY SAND, JM, FIRM, DISCOLORED (MED. GRAY) LAST 6" OF SPOON
30	0919		10	900 (0940)	SAA EXCEPT MED. GRAY CONTINUOUS TURN OUT SPOON
35	0935		13	879 (0945)	SAA
40	NA		40	NA	NO RECOVERY - 0944
45	0950		23	782 (1009)	SAA
50	1007		17	839 (1019)	SAA
55	1021		23	679 (1030)	SAA
60	1048		23	515 (1100)	SAA EXCEPT OLIVE GRAY
65	1107		20	526 (1129)	SAA EXCEPT LT. OLIVE GRAY
70	1131		19	618 (1218)	SAA EXCEPT MED. GRAY
75	1215		64	511 (1241)	SAA, SANDSTONE @ 75.5', SIMILAR APPEARANCE & CONDITIONS AS BH-1A & BH-2.
80					

36'-
ENCOUNTERED
HAND CONTACT
1' THICK
36'-57'

PVC
SLOTTED
SCREEN
25'-75'
B.G.
CASING
TO SURF

BLAGG ENGINEERING, INC.

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ENVIRTECH COCR 17917
" " 17918

Boring Dist/Bearing:

FIELD BORING LOG

BORING ID: BH-4

PROJECT: BP: Florance GC J 16

CLIENT: BP America Production Co.

DRILLING CONTRACTOR: Kyvek

EQUIPMENT USED: CME-95

DATE START: 12/10/14 DATE FINISH: 12/15/14 DRILLER: KP LOGGED BY: NTV

TOTAL DEPTH: 90 CASING TYPE & SIZE: 2" PVC SLOT SIZE: 0.010

COMMENTS: 0um calib. - SEE BH-3.

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	BLOW COUNTS	FIELD DVM	SAMPLE DESCRIPTION
		SPLIT SPOON			
5	1432		8	0.0 (1508)	COARSE GRAINED SAND, D40, SM, FIRM
10	1435		7	0.0 (1508)	MED. GRAINED SILTY SAND, D40, SM, FIRM
15	1442		4	0.0 (1508)	FINE GRAINED SILTY SAND, M.B. SM, LOOSE TO FIRM
20	1448		5	18.2 (1509)	SAA EXCEPT MED. GRAY W/ SPOON (1' THICK)
25	1455		8	22.3 (1510)	SAA, LAST 6" LT. GRAY SAND, SM, LOOSE
30	1502		13	65.3 (1511)	SAA (20') FINISHED @ 3 PM - TBC 12/11/14
35	0844		17	28.2 (0859)	SAA EXCEPT OLIVE GRAY, COHESIVE
40	0852		17	39.4 (0913)	SAA EXCEPT FIRM
45	0909		22	273 (0926)	SAA LAST 6", SILTY GRAY, COHESIVE, STIFF
50	0920		26	54.1 (0933)	SAA (40')
55	0938		20	68.0 (0947)	SAA
60	1002		16	112.5 (1016)	SAA EXCEPT SHADE DARKER IN COLOR
65	1027		26	39.1 (1057)	SAA EXCEPT RECOVERED ONLY 6" IN SPOON
70	0905		16	188.2 (0919)	SAA
75	0922		23	134.6 (0940)	SAA
80	0944		26	170.8 (1007)	SAA EXCEPT MED. GRAY W/ COLOR

85 1019 28 132.4
(1032) SAA

90 1106 60 537
(1133) SANDSTONE @ 41' B.G.
OK. MED. GRAY SILTY SAND, ORY TO S.M.

SETTLED
PIPE
BET.

45'-90'
B.G.

12/11/14
0um CALIB.
52.9 ppm

Time - 0850

12/11/14
10:35 AM
DRILLING
SHUT DOWN
DUE TO
MECHANICAL
REPAIRS
REQUIRED.

12/15/14
0um CALIB.
53.1 ppm
Time - 0838

BLAGG ENGINEERING, INC..

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P.O. BOX 87, BLOOMFIELD, NM 87413
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ENVIRTECH CORP 17919

Boring Dist/Bearing:

FIELD BORING LOG

BORING ID: BH-5

PROJECT: BP: Florence GC J 16

CLIENT: BP America Production Co.

DRILLING CONTRACTOR: Kyvek

EQUIPMENT USED: CME-95

DATE START: 12/15/14 DATE FINISH: 12/17/14 DRILLER: KP LOGGED BY: NJV

TOTAL DEPTH: 75 CASING TYPE & SIZE: 2" PVC SLOT SIZE:

COMMENTS: 0.0m CALIB. 53.1ppm TIME - 0838 RF - 0.52 CALIB. GAS - 100 ppm

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	BLOW COUNTS	FIELD DVM	SAMPLE DESCRIPTION
		<u>SPUT SPOON</u>			
5	1354		6	0.0 (1430)	MED. TO COARSE GRAINED SAND, DYO, SM, FIRM
10	1400		10	0.0 (1430)	SAA EXCEPT SUTY SAND, DYO, DRY TO SAA
15	1407		16	0.0 (1430)	SAA
20	1411		22	0.0 (1430)	SAA
25	1420		25	0.0 (1433)	SAA
30	1426		10	0.0 (1433)	SAA, DYO
35	1436		10	0.0 (1453)	SAA, COHESIVE
40	1444		15	0.0 (1453)	SAA
45	1500		20	0.0 (1507)	SAA, NON COHESIVE
50	0942		21	9.9 (0955)	SAA, COHESIVE, LT. OLIVE GRAY
55	0957		22	24.2 (1009)	SAA, OLIVE GRAY
60	1017		29	141.2 (1050)	SAA, NON COHESIVE
65	1043		39	29.5 (1102)	SAA EXCEPT MED. GRAY
70	1106		27	41.4 (1106)	SAA
75	1130		107	21.1 (1143)	OVERALL APPEARANCE & CHARACTERIZATION SIMILAR TO BH2 TOT. DEPTH
80					

ALL NON COHESIVE
(5' - 35')

CONTINUED
BORING ON 12/17/14

TERMINATED
ADVANCEMENT
C 45'
TIME - 1500

12/17/14
0.0m CALIB.
- 53.0 ppm
TIME - 0830

RECALIB.
52.1 ppm
TIME - 1012

SLOTTED
SCREEN
55' - 75'

SANDSTONE C 76'



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

October 16, 2014

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

RE: Florance GC J 16

OrderNo.: 1410571

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 9 sample(s) on 10/10/2014 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1410571

Date Reported: 10/16/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** BH-1 @ 16'**Project:** Florance GC J 16**Collection Date:** 10/9/2014 1:32:00 PM**Lab ID:** 1410571-001**Matrix:** SOIL**Received Date:** 10/10/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	130	10		mg/Kg	1	10/14/2014 4:18:42 PM	15857
Surr: DNOP	102	57.9-140		%REC	1	10/14/2014 4:18:42 PM	15857
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	220	23		mg/Kg	5	10/14/2014 11:22:45 AM	15866
Surr: BFB	314	80-120	S	%REC	5	10/14/2014 11:22:45 AM	15866
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	10/14/2014 11:22:45 AM	15866
Toluene	ND	0.23		mg/Kg	5	10/14/2014 11:22:45 AM	15866
Ethylbenzene	0.81	0.23		mg/Kg	5	10/14/2014 11:22:45 AM	15866
Xylenes, Total	9.9	0.47		mg/Kg	5	10/14/2014 11:22:45 AM	15866
Surr: 4-Bromofluorobenzene	111	80-120		%REC	5	10/14/2014 11:22:45 AM	15866
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	ND	30		mg/Kg	20	10/14/2014 4:22:14 PM	15890

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	Page 1 of 13
	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 1410571

Date Reported: 10/16/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: BH-1 @ 20'

Project: Florance GC J 16

Collection Date: 10/9/2014 1:37:00 PM

Lab ID: 1410571-002

Matrix: SOIL

Received Date: 10/10/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	1100	100		mg/Kg	10	10/15/2014 10:43:26 AM	15877
Surr: DNOP	0	57.9-140	S	%REC	10	10/15/2014 10:43:26 AM	15877
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	1700	250		mg/Kg	50	10/14/2014 7:28:44 PM	15866
Surr: BFB	191	80-120	S	%REC	50	10/14/2014 7:28:44 PM	15866

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	Page 2 of 13
	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 1410571

Date Reported: 10/16/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: BH-1 @ 24'

Project: Florance GC J 16

Collection Date: 10/9/2014 1:41:00 PM

Lab ID: 1410571-003

Matrix: SOIL

Received Date: 10/10/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	2000	98		mg/Kg	10	10/15/2014 12:31:21 PM	15877
Surr: DNOP	0	57.9-140	S	%REC	10	10/15/2014 12:31:21 PM	15877
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	3600	240		mg/Kg	50	10/14/2014 10:48:47 PM	15866
Surr: BFB	291	80-120	S	%REC	50	10/14/2014 10:48:47 PM	15866

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	Page 3 of 13
	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.

Analytical Report

Lab Order 1410571

Date Reported: 10/16/2014

CLIENT: Blagg Engineering

Client Sample ID: BH-1 @ 28'

Project: Florance GC J 16

Collection Date: 10/9/2014 1:47:00 PM

Lab ID: 1410571-004

Matrix: SOIL

Received Date: 10/10/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	870	10		mg/Kg	1	10/15/2014 11:26:31 AM	15877
Surr: DNOP	113	57.9-140		%REC	1	10/15/2014 11:26:31 AM	15877
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	2400	47		mg/Kg	10	10/14/2014 12:48:32 PM	15866
Surr: BFB	857	80-120	S	%REC	10	10/14/2014 12:48:32 PM	15866

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	Page 4 of 13
	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 ReportLab Order **1410571**Date Reported: **10/16/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Blagg Engineering**Client Sample ID:** BH-1 @ 32'**Project:** Florance GC J 16**Collection Date:** 10/9/2014 1:51:00 PM**Lab ID:** 1410571-005**Matrix:** SOIL**Received Date:** 10/10/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	2200	98		mg/Kg	10	10/15/2014 12:53:07 PM	15877
Surr: DNOP	0	57.9-140	S	%REC	10	10/15/2014 12:53:07 PM	15877
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	2000	240		mg/Kg	50	10/14/2014 11:17:18 PM	15866
Surr: BFB	186	80-120	S	%REC	50	10/14/2014 11:17:18 PM	15866

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

Qualifiers:

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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Analytical Report

Lab Order 1410571

Date Reported: 10/16/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** BH-1 @ 36'**Project:** Florance GC J 16**Collection Date:** 10/9/2014 1:57:00 PM**Lab ID:** 1410571-006**Matrix:** SOIL**Received Date:** 10/10/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	1400	100		mg/Kg	10	10/15/2014 1:36:48 PM	15877
Surr: DNOP	0	57.9-140	S	%REC	10	10/15/2014 1:36:48 PM	15877
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	3800	240		mg/Kg	50	10/14/2014 11:45:51 PM	15866
Surr: BFB	313	80-120	S	%REC	50	10/14/2014 11:45:51 PM	15866

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	Page 6 of 13
	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 1410571

Date Reported: 10/16/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: BH-1 @ 40'

Project: Florance GC J 16

Collection Date: 10/9/2014 2:03:00 PM

Lab ID: 1410571-007

Matrix: SOIL

Received Date: 10/10/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	4700	100		mg/Kg	10	10/15/2014 1:58:45 PM	15877
Surr: DNOP	0	57.9-140	S	%REC	10	10/15/2014 1:58:45 PM	15877
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	2300	460		mg/Kg	100	10/15/2014 12:14:28 AM	15866
Surr: BFB	141	80-120	S	%REC	100	10/15/2014 12:14:28 AM	15866

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	Page 7 of 13
	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 1410571

Date Reported: 10/16/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: BH-1 @ 44'

Project: Florance GC J 16

Collection Date: 10/9/2014 2:10:00 PM

Lab ID: 1410571-008

Matrix: SOIL

Received Date: 10/10/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	2300	100		mg/Kg	10	10/15/2014 2:20:28 PM	15877
Surr: DNOP	0	57.9-140	S	%REC	10	10/15/2014 2:20:28 PM	15877
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	4100	460		mg/Kg	100	10/15/2014 12:43:05 AM	15866
Surr: BFB	205	80-120	S	%REC	100	10/15/2014 12:43:05 AM	15866

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	Page 8 of 13
	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 1410571

Date Reported: 10/16/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: BH-1 @ 48'

Project: Florance GC J 16

Collection Date: 10/9/2014 2:19:00 PM

Lab ID: 1410571-009

Matrix: SOIL

Received Date: 10/10/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	1900	99		mg/Kg	10	10/15/2014 9:17:16 AM	15857
Surr: DNOP	0	57.9-140	S	%REC	10	10/15/2014 9:17:16 AM	15857
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	3800	470		mg/Kg	100	10/15/2014 1:11:39 AM	15866
Surr: BFB	204	80-120	S	%REC	100	10/15/2014 1:11:39 AM	15866
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.47		mg/Kg	10	10/14/2014 3:11:34 PM	15866
Toluene	11	0.47		mg/Kg	10	10/14/2014 3:11:34 PM	15866
Ethylbenzene	20	0.47		mg/Kg	10	10/14/2014 3:11:34 PM	15866
Xylenes, Total	280	9.3		mg/Kg	100	10/15/2014 1:11:39 AM	15866
Surr: 4-Bromofluorobenzene	212	80-120	S	%REC	10	10/14/2014 3:11:34 PM	15866
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	ND	30		mg/Kg	20	10/14/2014 4:34:39 PM	15890

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#: 1410571

16-Oct-14

Client: Blagg Engineering

Project: Florance GC J 16

Sample ID	MB-15890	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	15890	RunNo:	21901					
Prep Date:	10/14/2014	Analysis Date:	10/14/2014	SeqNo:	643793	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-15890	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	15890	RunNo:	21901					
Prep Date:	10/14/2014	Analysis Date:	10/14/2014	SeqNo:	643794	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.7	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#: 1410571

16-Oct-14

Client: Blagg Engineering

Project: Florance GC J 16

Sample ID	MB-15857		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	15857		RunNo:	21866				
Prep Date:	10/13/2014		Analysis Date:	10/14/2014		SeqNo:	643034		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	8.7		10.00		87.5	57.9	140				

Sample ID	LCS-15857		SampType:	LCS		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	15857		RunNo:	21866				
Prep Date:	10/13/2014		Analysis Date:	10/14/2014		SeqNo:	643037		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	68.6	130				
Surr: DNOP	4.4		5.000		87.5	57.9	140				

Sample ID	MB-15880		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	15880		RunNo:	21866				
Prep Date:	10/14/2014		Analysis Date:	10/14/2014		SeqNo:	643143		Units: %REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	9.6		10.00		96.2	57.9	140				

Sample ID	LCS-15880		SampType:	LCS		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	15880		RunNo:	21866				
Prep Date:	10/14/2014		Analysis Date:	10/14/2014		SeqNo:	643147		Units: %REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	4.8		5.000		95.3	57.9	140				

Sample ID	MB-15877		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	15877		RunNo:	21898				
Prep Date:	10/14/2014		Analysis Date:	10/15/2014		SeqNo:	644205		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	13		10.00		129	57.9	140				

Sample ID	LCS-15877		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 15877		RunNo: 21898					
Prep Date:	10/14/2014		Analysis Date: 10/15/2014		SeqNo: 644206		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.7	68.6	130			
Surr: DNOP	4.7		5.000		93.7	57.9	140			

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#: 1410571

16-Oct-14

Client: Blagg Engineering

Project: Florance GC J 16

Sample ID	MB-15866		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 15866		RunNo: 21893					
Prep Date:	10/13/2014		Analysis Date: 10/14/2014		SeqNo: 643484		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	80	120			

Sample ID	LCS-15866		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 15866		RunNo: 21893					
Prep Date:	10/13/2014		Analysis Date: 10/14/2014		SeqNo: 643485		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	98.4	65.8	139			
Surr: BFB	950		1000		95.0	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. |
| 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#: 1410571

16-Oct-14

Client: Blagg Engineering

Project: Florance GC J 16

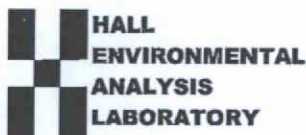
Sample ID	MB-15866		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	15866		RunNo:	21893			
Prep Date:	10/13/2014		Analysis Date:	10/14/2014		SeqNo:	643515		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		92.6	80	120			

Sample ID	LCS-15866		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	15866		RunNo:	21893			
Prep Date:	10/13/2014		Analysis Date:	10/14/2014		SeqNo:	643516		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	95.0	80	120			
Toluene	0.95	0.050	1.000	0	95.0	80	120			
Ethylbenzene	0.98	0.050	1.000	0	97.9	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.0	80	120			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.5	80	120			

Qualifiers:

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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit



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: 1410571

RcptNo: 1

Received by/date:

CS 10/10/14

Logged By: Lindsay Mangin

10/10/2014 4:15:00 PM

Lindsay Mangin

Completed By: Lindsay Mangin

10/13/2014 9:04:13 AM

Lindsay Mangin

Reviewed By:

CS 10/13/14

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?
(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			

Client: Blagg Engineering, Inc.
 BP America Production Co.
 Mailing Address: P.O. Box 87
 Bloomfield, NM 87413
 Phone #: (505)320-1183
 email or Fax#:
 QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
☐ Other _____
☐ EDD (Type) _____

☒ Standard ☐ Rush
 Project Name: Florance GC J 16
 Project #:
 Project Manager: Jeff Blagg
 Sampler: Jeff Blagg
 On Ice: ☒ Yes ☐ No
 Sample Temperature: 1.0°C



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 (8021)	TPH 8015B (GRO / DRO)	Chloride	Air Bubbles (Y or N)
10/09/2014	13:32	Soil	BH-1 @ 16'	4oz x 1	cool	-001	x	x		
10/09/2014	13:37	Soil	BH-1 @ 20'	4oz x 1	cool	-002		x		
10/09/2014	13:41	Soil	BH-1 @ 24'	4oz x 1	cool	-003		x		
10/09/2014	13:47	Soil	BH-1 @ 28'	4oz x 1	cool	-004		x		
10/09/2014	13:51	Soil	BH-1 @ 32'	4oz x 1	cool	-005		x		
10/09/2014	13:57	Soil	BH-1 @ 36'	4oz x 1	cool	-006		x		
10/09/2014	14:03	Soil	BH-1 @ 40'	4oz x 1	cool	-007		x		
10/09/2014	14:10	Soil	BH-1 @ 44'	4oz x 1	cool	-008		x		
10/09/2014	14:19	Soil	BH-1 @ 48'	4oz x 1	cool	-009	x	x		

Date: 10/10/2014 Time: 903 Relinquished by: J-H Blagg Received by: Christine Waelles Date: 10/10/14 Time: 903
 Date: 10/10/14 Time: 1115 Relinquished by: Christine Waelles Received by: Calvin Sims Date: 10/10/14 Time: 1615

Remarks: Bill Blagg
 BP 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 noted 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 01, 2014

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

RE: Florance GC J 16

OrderNo.: 1411974

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/22/2014 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 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 1411974

Date Reported: 12/1/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: BH-1A @ 50'-51'

Project: Florance GC J 16

Collection Date: 11/21/2014 10:14:00 AM

Lab ID: 1411974-001

Matrix: SOIL

Received Date: 11/22/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	590	9.8		mg/Kg	1	11/25/2014 10:29:31 PM	16540
Surr: DNOP	100	63.5-128		%REC	1	11/25/2014 10:29:31 PM	16540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	1100	240		mg/Kg	50	11/26/2014 6:41:55 PM	16538
Surr: BFB	179	80-120	S	%REC	50	11/26/2014 6:41:55 PM	16538

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	Page 1 of 11
	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 1411974

Date Reported: 12/1/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** BH-1A @ 55'-56'**Project:** Florance GC J 16**Collection Date:** 11/21/2014 10:31:00 AM**Lab ID:** 1411974-002**Matrix:** SOIL**Received Date:** 11/22/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	320	10		mg/Kg	1	11/25/2014 10:59:35 PM	16540
Surr: DNOP	85.8	63.5-128		%REC	1	11/25/2014 10:59:35 PM	16540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	640	240		mg/Kg	50	11/25/2014 9:49:38 PM	16538
Surr: BFB	138	80-120	S	%REC	50	11/25/2014 9:49:38 PM	16538

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 1411974

Date Reported: 12/1/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** BH-1A @ 60'-61'**Project:** Florance GC J 16**Collection Date:** 11/21/2014 10:54:00 AM**Lab ID:** 1411974-003**Matrix:** SOIL**Received Date:** 11/22/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	220	10		mg/Kg	1	11/25/2014 11:29:18 PM	16540
Surr: DNOP	91.4	63.5-128		%REC	1	11/25/2014 11:29:18 PM	16540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	350	93		mg/Kg	20	11/26/2014 7:10:33 PM	16538
Surr: BFB	167	80-120	S	%REC	20	11/26/2014 7:10:33 PM	16538

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 1411974

Date Reported: 12/1/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** BH-1A @ 65'-66'**Project:** Florance GC J 16**Collection Date:** 11/21/2014 11:20:00 AM**Lab ID:** 1411974-004**Matrix:** SOIL**Received Date:** 11/22/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	68	9.8		mg/Kg	1	11/25/2014 11:58:49 PM	16540
Surr: DNOP	93.8	63.5-128		%REC	1	11/25/2014 11:58:49 PM	16540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	2200	240		mg/Kg	50	11/25/2014 10:46:51 PM	16538
Surr: BFB	201	80-120	S	%REC	50	11/25/2014 10:46:51 PM	16538

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	Page 4 of 11
	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 1411974

Date Reported: 12/1/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** BH-1A @ 70'-71'**Project:** Florance GC J 16**Collection Date:** 11/21/2014 11:55:00 AM**Lab ID:** 1411974-005**Matrix:** SOIL**Received Date:** 11/22/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	59	9.9		mg/Kg	1	11/26/2014 12:28:43 AM	16540
Surr: DNOP	88.1	63.5-128		%REC	1	11/26/2014 12:28:43 AM	16540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	150	24		mg/Kg	5	11/26/2014 7:39:08 PM	16538
Surr: BFB	253	80-120	S	%REC	5	11/26/2014 7:39:08 PM	16538

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	Page 5 of 11
	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:** BH-1A @ 75'-76'
Project: Florance GC J 16 **Collection Date:** 11/21/2014 12:25:00 PM
Lab ID: 1411974-006 **Matrix:** SOIL **Received Date:** 11/22/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	68	10		mg/Kg	1	11/26/2014 12:58:59 AM	16540
Surr: DNOP	83.0	63.5-128		%REC	1	11/26/2014 12:58:59 AM	16540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	87	9.2		mg/Kg	2	11/26/2014 10:02:19 PM	16538
Surr: BFB	358	80-120	S	%REC	2	11/26/2014 10:02:19 PM	16538

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	Page 6 of 11
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 1411974

Date Reported: 12/1/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: BH-1A @ 78'-79'

Project: Florance GC J 16

Collection Date: 11/21/2014 12:55:00 PM

Lab ID: 1411974-007

Matrix: SOIL

Received Date: 11/22/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	120	10		mg/Kg	1	11/26/2014 1:29:01 AM	16540
Surr: DNOP	90.2	63.5-128		%REC	1	11/26/2014 1:29:01 AM	16540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	170	24		mg/Kg	5	11/26/2014 6:13:19 PM	16538
Surr: BFB	273	80-120	S	%REC	5	11/26/2014 6:13:19 PM	16538
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	11/26/2014 6:13:19 PM	16538
Toluene	ND	0.24		mg/Kg	5	11/26/2014 6:13:19 PM	16538
Ethylbenzene	0.57	0.24		mg/Kg	5	11/26/2014 6:13:19 PM	16538
Xylenes, Total	7.2	0.47		mg/Kg	5	11/26/2014 6:13:19 PM	16538
Surr: 4-Bromofluorobenzene	117	80-120		%REC	5	11/26/2014 6:13:19 PM	16538
EPA METHOD 300.0: ANIONS							Analyst: LGP
Chloride	ND	30		mg/Kg	20	11/25/2014 1:35:43 PM	16568

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

Qualifiers:

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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1411974

01-Dec-14

Client: Blagg Engineering

Project: Florance GC J 16

Sample ID	MB-16568		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 16568		RunNo: 22809					
Prep Date:	11/25/2014		Analysis Date: 11/25/2014		SeqNo: 673166		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-16568		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 16568		RunNo: 22809					
Prep Date:	11/25/2014		Analysis Date: 11/25/2014		SeqNo: 673167		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	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#: 1411974

01-Dec-14

Client: Blagg Engineering

Project: Florance GC J 16

Sample ID	MB-16562		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics			
Client ID:	PBS		Batch ID:	16562		RunNo:	22764			
Prep Date:	11/25/2014		Analysis Date:	11/25/2014		SeqNo:	671990		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.9		10.00		78.8	63.5	128			

Sample ID	LCS-16562		SampType:	LCS		TestCode:	EPA Method 8015D: Diesel Range Organics			
Client ID:	LCSS		Batch ID:	16562		RunNo:	22764			
Prep Date:	11/25/2014		Analysis Date:	11/25/2014		SeqNo:	671994		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		81.6	63.5	128			

Sample ID	MB-16540		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics			
Client ID:	PBS		Batch ID:	16540		RunNo:	22764			
Prep Date:	11/24/2014		Analysis Date:	11/25/2014		SeqNo:	672069		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		82.2	63.5	128			

Sample ID	LCS-16540		SampType:	LCS		TestCode:	EPA Method 8015D: Diesel Range Organics			
Client ID:	LCSS		Batch ID:	16540		RunNo:	22764			
Prep Date:	11/24/2014		Analysis Date:	11/25/2014		SeqNo:	672266		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	108	68.6	130			
Surr: DNOP	4.0		5.000		80.1	63.5	128			

Sample ID	MB-16541		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics			
Client ID:	PBS		Batch ID:	16541		RunNo:	22764			
Prep Date:	11/24/2014		Analysis Date:	11/25/2014		SeqNo:	672638		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.5		10.00		74.9	63.5	128			

Sample ID	LCS-16541		SampType:	LCS		TestCode:	EPA Method 8015D: Diesel Range Organics			
Client ID:	LCSS		Batch ID:	16541		RunNo:	22764			
Prep Date:	11/24/2014		Analysis Date:	11/25/2014		SeqNo:	672743		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.5		5.000		69.6	63.5	128			

Qualifiers:

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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1411974

01-Dec-14

Client: Blagg Engineering

Project: Florance GC J 16

Sample ID	MB-16538		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	16538		RunNo:	22780				
Prep Date:	11/24/2014		Analysis Date:	11/25/2014		SeqNo:	672974		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	910		1000		91.3	80	120				

Sample ID	LCS-16538		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 16538		RunNo: 22780					
Prep Date:	11/24/2014		Analysis Date: 11/25/2014		SeqNo: 672975		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.4	65.8	139			
Surr: BFB	1000		1000		102	80	120			

Qualifiers:

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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1411974

01-Dec-14

Client: Blagg Engineering

Project: Florance GC J 16

Sample ID	MB-16538		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	16538		RunNo:	22780			
Prep Date:	11/24/2014		Analysis Date:	11/25/2014		SeqNo:	673034		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		99.9	80	120			

Sample ID	LCS-16538		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	16538		RunNo:	22780			
Prep Date:	11/24/2014		Analysis Date:	11/25/2014		SeqNo:	673035		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.050	1.000	0	96.8	80	120			
Toluene	0.94	0.050	1.000	0	94.0	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.2	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Qualifiers:

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

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit



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: **1411974**

RcptNo: **1**

Received by/date:

Logged By: **Lindsay Mangin**

11/22/14
11/22/2014 7:30:00 AM

Completed By: **Lindsay Mangin**

11/22/2014 8:03:50 AM

Reviewed By:

11/24/14

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? Client

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	2.7	Good	Yes			

Client: BLAGG ENGINEERING INC.
BP AMERICA
 Mailing Address: P.O. Box 87
BLOOMFIELD, NM 87413
 Phone #: 505-320-1183
 email or Fax#:
 QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
 Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type)

☒ Standard ☐ Rush

FLORANCE GC J 16

Project #:

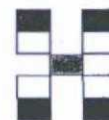
Project Manager:

J. BLA66

Sampler: J. Blagg

On Ice: ☒ Yes, ☐ No

Sample Temperature: 2.7



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.



Analytical Report

Report Summary

Client: BP America Production Co.

Chain Of Custody Number: 17915

Samples Received: 12/10/2014 8:49:00AM

Job Number: 03143-0424

Work Order: P412024

Project Name/Location: Florance GC J #16

Entire Report Reviewed By:

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

Tim Cain, Laboratory Manager

Date: 12/15/14

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.



BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
15-Dec-14 09:55

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH 2 @ 25'-26.5'	P412024-01A	Soil	12/09/14	12/10/14	Glass Jar, 4 oz.
BH 2 @ 65'-66.5'	P412024-02A	Soil	12/09/14	12/10/14	Glass Jar, 4 oz.
BH 2 @ 70'-71.5'	P412024-03A	Soil	12/09/14	12/10/14	Glass Jar, 4 oz.
BH 2 @ 75'-76.5'	P412024-04A	Soil	12/09/14	12/10/14	Glass Jar, 4 oz.
BH 2 @ 80'-81.5'	P412024-05A	Soil	12/09/14	12/10/14	Glass Jar, 4 oz.
BH 2 @ 85'-86.5'	P412024-06A	Soil	12/09/14	12/10/14	Glass Jar, 4 oz.

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Ph (970) 259-0615 Fr (800) 362-1879

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laboratory@envirotech-inc.com



BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
15-Dec-14 09:55

BH 2 @ 25'-26.5'

P412024-01 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	16.5	9.99	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8015D		
Diesel Range Organics (C10-C28)	ND	39.9	mg/kg	2	1450011	12/10/14	12/11/14	EPA 8015D		
Surrogate: o-Terphenyl		109 %		50-200	1450011	12/10/14	12/11/14	EPA 8015D		
Surrogate: 4-Bromochlorobenzene-FID		89.9 %		50-150	1450010	12/10/14	12/12/14	EPA 8015D		

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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
15-Dec-14 09:55

BH 2 @ 65'-66.5'

P412024-02 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg	1		1450010	12/10/14	12/12/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1		1450011	12/10/14	12/11/14	EPA 8015D	
Surrogate: o-Terphenyl		95.4 %		50-200		1450011	12/10/14	12/11/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		94.0 %		50-150		1450010	12/10/14	12/12/14	EPA 8015D	

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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
15-Dec-14 09:55

BH 2 @ 70'-71.5'

P412024-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatiles Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Ethylbenzene	0.38	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
p,m-Xylene	1.43	0.20	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
o-Xylene	0.33	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Total Xylenes	1.76	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Total BTEX	2.14	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		101 %		50-150	1450010	12/10/14	12/12/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	15.0	9.99	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	35.0	mg/kg	1	1450011	12/10/14	12/11/14	EPA 8015D	
Surrogate: o-Terphenyl		109 %		50-200	1450011	12/10/14	12/11/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		91.7 %		50-150	1450010	12/10/14	12/12/14	EPA 8015D	

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PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
15-Dec-14 09:55

BH 2 @ 75'-76.5'

P412024-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		107 %		50-150	1450010	12/10/14	12/12/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	9.98	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1	1450011	12/10/14	12/11/14	EPA 8015D	
Surrogate: o-Terphenyl		111 %		50-200	1450011	12/10/14	12/11/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		96.5 %		50-150	1450010	12/10/14	12/12/14	EPA 8015D	

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Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
15-Dec-14 09:55

BH 2 @ 80'-81.5'
P412024-05 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		104 %		50-150	1450010	12/10/14	12/12/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	30.0	mg/kg	1	1450011	12/10/14	12/11/14	EPA 8015D	
Surrogate: o-Terphenyl		94.0 %		50-200	1450011	12/10/14	12/11/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		93.7 %		50-150	1450010	12/10/14	12/12/14	EPA 8015D	

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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
15-Dec-14 09:55

BH 2 @ 85'-86.5'
P412024-06 (Solid)

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		106 %	50-150		1450010	12/10/14	12/12/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg	1	1450010	12/10/14	12/12/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	35.0	mg/kg	1	1450011	12/10/14	12/11/14	EPA 8015D	
Surrogate: o-Terphenyl		106 %	50-200		1450011	12/10/14	12/11/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		95.4 %	50-150		1450010	12/10/14	12/12/14	EPA 8015D	

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PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
15-Dec-14 09:55

Volatile Organics by EPA 8021 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1450010 - Purge and Trap EPA 5030A

Blank (1450010-BLK1)

Prepared: 09-Dec-14 Analyzed: 10-Dec-14

Benzene	ND	0.10	mg/kg							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
p,m-Xylene	ND	0.20	"							
o-Xylene	ND	0.10	"							
Total Xylenes	ND	0.10	"							
Total BTEX	ND	0.10	"							
Surrogate: 4-Bromochlorobenzene-PID	0.415		"	0.400		104	50-150			

LCS (1450010-BS1)

Prepared: 09-Dec-14 Analyzed: 10-Dec-14

Benzene	20.3	0.10	mg/kg	20.0		101	75-125			
Toluene	20.7	0.10	"	20.0		103	70-125			
Ethylbenzene	20.8	0.10	"	20.0		104	75-125			
p,m-Xylene	42.2	0.20	"	40.0		106	80-125			
o-Xylene	20.9	0.10	"	20.0		104	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.420		"	0.400		105	50-150			

Matrix Spike (1450010-MS1)

Source: P412021-01

Prepared: 09-Dec-14 Analyzed: 10-Dec-14

Benzene	18.3	0.10	mg/kg	20.0	ND	91.4	75-125			
Toluene	18.4	0.10	"	20.0	ND	92.3	70-125			
Ethylbenzene	18.8	0.10	"	20.0	ND	94.3	75-125			
p,m-Xylene	38.3	0.20	"	39.9	ND	96.0	80-125			
o-Xylene	19.0	0.10	"	20.0	ND	95.1	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.426		"	0.399		107	50-150			

Matrix Spike Dup (1450010-MSD1)

Source: P412021-01

Prepared: 09-Dec-14 Analyzed: 10-Dec-14

Benzene	19.8	0.10	mg/kg	20.0	ND	99.0	75-125	8.12	15	
Toluene	20.0	0.10	"	20.0	ND	99.9	70-125	8.02	15	
Ethylbenzene	20.3	0.10	"	20.0	ND	101	75-125	7.39	15	
p,m-Xylene	41.3	0.20	"	40.0	ND	103	80-125	7.38	15	
o-Xylene	20.6	0.10	"	20.0	ND	103	75-125	8.02	15	
Surrogate: 4-Bromochlorobenzene-PID	0.435		"	0.400		109	50-150			

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
15-Dec-14 09:55

Nonhalogenated Organics by 8015 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1450010 - Purge and Trap EPA 5030A										
Blank (1450010-BLK1)				Prepared: 09-Dec-14 Analyzed: 10-Dec-14						
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg							
Surrogate: 4-Bromochlorobenzene-FID	0.373		"	0.400		93.3	50-150			
LCS (1450010-BS1)				Prepared: 09-Dec-14 Analyzed: 10-Dec-14						
Gasoline Range Organics (C6-C10)	292	10.0	mg/kg	292		100	80-120			
Surrogate: 4-Bromochlorobenzene-FID	0.378		"	0.400		94.5	50-150			
Matrix Spike (1450010-MS1)				Source: P412021-01 Prepared: 09-Dec-14 Analyzed: 10-Dec-14						
Gasoline Range Organics (C6-C10)	267	9.98	mg/kg	292	ND	91.6	75-125			
Surrogate: 4-Bromochlorobenzene-FID	0.382		"	0.399		95.6	50-150			
Matrix Spike Dup (1450010-MSD1)				Source: P412021-01 Prepared: 09-Dec-14 Analyzed: 10-Dec-14						
Gasoline Range Organics (C6-C10)	289	9.99	mg/kg	292	ND	99.1	75-125	7.96	15	
Surrogate: 4-Bromochlorobenzene-FID	0.390		"	0.400		97.5	50-150			

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PO Box 22024
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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
15-Dec-14 09:55

Nonhalogenated Organics by 8015 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1450011 - DRO Extraction EPA 3550M										
Blank (1450011-BLK1)				Prepared: 09-Dec-14 Analyzed: 10-Dec-14						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Surrogate: o-Terphenyl	42.5		"	40.0		106	50-200			
LCS (1450011-BS1)				Prepared: 09-Dec-14 Analyzed: 10-Dec-14						
Diesel Range Organics (C10-C28)	462	25.0	mg/kg	499		92.7	38-132			
Surrogate: o-Terphenyl	42.6		"	39.9		107	50-200			
Matrix Spike (1450011-MS1)				Source: P412021-01 Prepared: 09-Dec-14 Analyzed: 10-Dec-14						
Diesel Range Organics (C10-C28)	509	30.0	mg/kg	500	ND	102	38-132			
Surrogate: o-Terphenyl	49.9		"	40.0		125	50-200			
Matrix Spike Dup (1450011-MSD1)				Source: P412021-01 Prepared: 09-Dec-14 Analyzed: 10-Dec-14						
Diesel Range Organics (C10-C28)	455	30.0	mg/kg	500	ND	91.1	38-132	11.3	20	
Surrogate: o-Terphenyl	43.0		"	40.0		108	50-200			

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
15-Dec-14 09:55

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

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CHAIN OF CUSTODY RECORD

17915

Client: BP AMERICA			Project Name / Location: FLORANCE GC J #16			ANALYSIS / PARAMETERS																																													
Email results to: JEFF PEACE / JEFF BLASS / NELSON VELEZ			Sampler Name: NELSON VELEZ			<table border="1"> <tr> <th>TPH (Method 8015)</th> <th>BTEX (Method 8021)</th> <th>VOC (Method 8260)</th> <th>RCRA 8 Metals</th> <th>Cation / Anion</th> <th>RCI</th> <th>TCLP with H/P</th> <th>CO Table 910-1</th> <th>TPH (418.1)</th> <th>CHLORIDE</th> <th></th> <th></th> <th></th> <th></th> <th>Sample Cool</th> <th>Sample Intact</th> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>														TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE					Sample Cool	Sample Intact																
TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI															TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE					Sample Cool	Sample Intact																						
Client Phone No.: 505.320.3489			Client No.: 03143-0424																																																
Sample No. / Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE					Sample Cool	Sample Intact																												
					HNO ₃	HCl																																													
BH 2 @ 25'-26.5'	12/9/14	1010	P412024-01	1 - 4oz.				✓														✓	✓																												
BH 2 @ 65'-66.5'	12/9/14	1216	P412024-02	1 - 4oz				✓														✓	✓																												
BH 2 @ 70'-71.5'	12/9/14	1247	P412024-03	1 - 4oz				✓	✓													✓	✓																												
BH 2 @ 75'-76.5'	12/9/14	1313	P412024-04	1 - 4oz				✓	✓													✓	✓																												
BH 2 @ 80'-81.5'	12/9/14	1400	P412024-05	1 - 4oz				✓	✓													✓	✓																												
BH 2 @ 85'-86.5'	12/9/14	1453	P412024-06	1 - 4oz				✓	✓													✓	✓																												
Relinquished by: (Signature) <i>[Signature]</i>					Date	Time	Received by: (Signature) <i>[Signature]</i>					Date	Time																																						
Relinquished by: (Signature) <i>[Signature]</i>					12/10/14	0730	Received by: (Signature) <i>[Signature]</i>					12/10/14	0730																																						
Sample Matrix																																																			
Soil ☒ Solid ☐ Sludge ☐ Aqueous ☐ Other ☐																																																			
☐ Sample(s) dropped off after hours to secure drop off area.																																																			
5.4 5.4 5.8 (5.6)  Bill BP A PO Has Been Issued To Envirotech																																																			
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Analytical Report

Report Summary

Client: BP America Production Co.
Chain Of Custody Number: 17916
Samples Received: 12/10/2014 2:01:00PM
Job Number: 03143-0424
Work Order: P412028
Project Name/Location: Florance GC J #16

Entire Report Reviewed By:

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

Tim Cain, Laboratory Manager

Date: 12/18/14

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.



BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
18-Dec-14 10:14

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH3 @ 25'-26.5'	P412028-01A	Soil	12/10/14	12/10/14	Glass Jar, 4 oz.
BH3 @ 30'-31.5'	P412028-02A	Soil	12/10/14	12/10/14	Glass Jar, 4 oz.
BH3 @ 50'-51.5'	P412028-03A	Soil	12/10/14	12/10/14	Glass Jar, 4 oz.
BH3 @ 70'-71.5'	P412028-04A	Soil	12/10/14	12/10/14	Glass Jar, 4 oz.

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BP America Production Co.
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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
18-Dec-14 10:14

BH3 @ 25'-26.5'
P412028-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1450019	12/11/14	12/11/14	EPA 8021B	
Toluene	1.28	0.10	mg/kg	1	1450019	12/11/14	12/11/14	EPA 8021B	
Ethylbenzene	6.99	0.10	mg/kg	1	1450019	12/11/14	12/11/14	EPA 8021B	
p,m-Xylene	73.1	0.20	mg/kg	1	1450019	12/11/14	12/11/14	EPA 8021B	
o-Xylene	13.3	0.10	mg/kg	1	1450019	12/11/14	12/11/14	EPA 8021B	
Total Xylenes	86.4	0.10	mg/kg	1	1450019	12/11/14	12/11/14	EPA 8021B	
Total BTEX	94.7	0.10	mg/kg	1	1450019	12/11/14	12/11/14	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		104 %	50-150		1450019	12/11/14	12/11/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	795	10.0	mg/kg	1	1450019	12/11/14	12/11/14	EPA 8015D	
Diesel Range Organics (C10-C28)	577	35.0	mg/kg	1	1450022	12/11/14	12/11/14	EPA 8015D	
<i>Surrogate: o-Terphenyl</i>		120 %	50-200		1450022	12/11/14	12/11/14	EPA 8015D	
<i>Surrogate: 4-Bromochlorobenzene-FID</i>		89.7 %	50-150		1450019	12/11/14	12/11/14	EPA 8015D	

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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
18-Dec-14 10:14

BH3 @ 30'-31.5'

P412028-02 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	0.15	0.10	mg/kg	1		1450019	12/11/14	12/16/14	EPA 8021B	
Toluene	4.24	0.10	mg/kg	1		1450019	12/11/14	12/16/14	EPA 8021B	
Ethylbenzene	12.3	0.10	mg/kg	1		1450019	12/11/14	12/16/14	EPA 8021B	
p,m-Xylene	120	0.20	mg/kg	1		1450019	12/11/14	12/16/14	EPA 8021B	
o-Xylene	23.5	0.10	mg/kg	1		1450019	12/11/14	12/16/14	EPA 8021B	
Total Xylenes	144	0.10	mg/kg	1		1450019	12/11/14	12/16/14	EPA 8021B	
Total BTEX	160	0.10	mg/kg	1		1450019	12/11/14	12/16/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		113 %		50-150		1450019	12/11/14	12/16/14	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	1500	9.98	mg/kg	1		1450019	12/11/14	12/16/14	EPA 8015D	
Diesel Range Organics (C10-C28)	630	34.9	mg/kg	1		1450022	12/11/14	12/12/14	EPA 8015D	
Surrogate: o-Terphenyl		159 %		50-200		1450022	12/11/14	12/12/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		102 %		50-150		1450019	12/11/14	12/16/14	EPA 8015D	

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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
18-Dec-14 10:14

BH3 @ 50'-51.5'

P412028-03 (Solid)

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Volatile Organics by EPA 8021									
Benzene	3.76	0.10	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
Toluene	116	0.10	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
Ethylbenzene	33.7	0.10	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
p,m-Xylene	268	0.20	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
o-Xylene	58.5	0.10	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
Total Xylenes	327	0.10	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
Total BTEX	480	0.10	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		102 %		50-150	1450019	12/11/14	12/16/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	6490	9.99	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8015D	
Diesel Range Organics (C10-C28)	1400	35.0	mg/kg	1	1450022	12/11/14	12/12/14	EPA 8015D	
Surrogate: o-Terphenyl		144 %		50-200	1450022	12/11/14	12/12/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		125 %		50-150	1450019	12/11/14	12/16/14	EPA 8015D	

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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
18-Dec-14 10:14

BH3 @ 70-71.5'
P412028-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	2.77	0.10	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
Toluene	56.7	0.10	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
Ethylbenzene	15.5	0.10	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
p,m-Xylene	132	0.20	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
o-Xylene	29.2	0.10	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
Total Xylenes	161	0.10	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
Total BTEX	236	0.10	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		106 %		50-150	1450019	12/11/14	12/16/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	2600	9.98	mg/kg	1	1450019	12/11/14	12/16/14	EPA 8015D	E
Diesel Range Organics (C10-C28)	879	29.9	mg/kg	1	1450022	12/11/14	12/12/14	EPA 8015D	
Surrogate: o-Terphenyl		118 %		50-200	1450022	12/11/14	12/12/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		93.7 %		50-150	1450019	12/11/14	12/16/14	EPA 8015D	

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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
18-Dec-14 10:14

Volatile Organics by EPA 8021 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1450019 - Purge and Trap EPA 5030A

Blank (1450019-BLK1)

Prepared & Analyzed: 11-Dec-14

Benzene	ND	0.10	mg/kg							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
p,m-Xylene	ND	0.20	"							
o-Xylene	ND	0.10	"							
Total Xylenes	ND	0.10	"							
Total BTEX	ND	0.10	"							
Surrogate: 4-Bromochlorobenzene-PID	0.392		"	0.400		98.0	50-150			

LCS (1450019-BS1)

Prepared & Analyzed: 11-Dec-14

Benzene	21.7	0.10	mg/kg	20.0		109	75-125			
Toluene	20.4	0.10	"	20.0		102	70-125			
Ethylbenzene	21.0	0.10	"	20.0		105	75-125			
p,m-Xylene	42.8	0.20	"	39.9		107	80-125			
o-Xylene	21.6	0.10	"	20.0		108	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.546		"	0.399		137	50-150			

Matrix Spike (1450019-MS1)

Source: P412028-01

Prepared & Analyzed: 11-Dec-14

Benzene	18.6	0.10	mg/kg	19.9	ND	93.4	75-125			
Toluene	25.9	0.10	"	19.9	1.28	123	70-125			
Ethylbenzene	28.2	0.10	"	19.9	6.99	106	75-125			
p,m-Xylene	119	0.20	"	39.9	73.1	115	80-125			
o-Xylene	31.5	0.10	"	19.9	13.3	91.2	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.418		"	0.399		105	50-150			

Matrix Spike Dup (1450019-MSD1)

Source: P412028-01

Prepared & Analyzed: 11-Dec-14

Benzene	20.1	0.10	mg/kg	20.0	ND	101	75-125	7.58	15	
Toluene	28.2	0.10	"	20.0	1.28	135	70-125	8.61	15	SPK1
Ethylbenzene	32.0	0.10	"	20.0	6.99	125	75-125	12.6	15	
p,m-Xylene	145	0.20	"	40.0	73.1	180	80-125	19.8	15	SPK1
o-Xylene	43.8	0.10	"	20.0	13.3	153	75-125	32.8	15	SPK1
Surrogate: 4-Bromochlorobenzene-PID	0.426		"	0.400		107	50-150			

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PO Box 22024
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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
18-Dec-14 10:14

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1450019 - Purge and Trap EPA 5030A										
Blank (1450019-BLK1)				Prepared & Analyzed: 11-Dec-14						
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg							
Surrogate: 4-Bromochlorobenzene-FID	0.355		"	0.400		88.9	50-150			
LCS (1450019-BS1)				Prepared & Analyzed: 11-Dec-14						
Gasoline Range Organics (C6-C10)	315	9.98	mg/kg	292		108	80-120			
Surrogate: 4-Bromochlorobenzene-FID	0.508		"	0.399		127	50-150			
Matrix Spike (1450019-MS1)				Source: P412028-01		Prepared & Analyzed: 11-Dec-14				
Gasoline Range Organics (C6-C10)	1160	9.96	mg/kg	291	795	124	75-125			
Surrogate: 4-Bromochlorobenzene-FID	0.387		"	0.399		97.1	50-150			
Matrix Spike Dup (1450019-MSD1)				Source: P412028-01		Prepared & Analyzed: 11-Dec-14				
Gasoline Range Organics (C6-C10)	1220	9.99	mg/kg	292	795	145	75-125	5.18	15	SPK1
Surrogate: 4-Bromochlorobenzene-FID	0.373		"	0.400		93.4	50-150			

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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
18-Dec-14 10:14

Nonhalogenated Organics by 8015 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1450022 - DRO Extraction EPA 3550M										
Blank (1450022-BLK1)				Prepared & Analyzed: 11-Dec-14						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Surrogate: o-Terphenyl	41.1		"	40.0		103	50-200			
LCS (1450022-BS1)				Prepared & Analyzed: 11-Dec-14						
Diesel Range Organics (C10-C28)	627	25.0	mg/kg	499		126	38-132			
Surrogate: o-Terphenyl	50.2		"	39.9		126	50-200			
Matrix Spike (1450022-MS1)				Source: P412028-01		Prepared & Analyzed: 11-Dec-14				
Diesel Range Organics (C10-C28)	937	35.0	mg/kg	499	577	72.0	38-132			
Surrogate: o-Terphenyl	28.9		"	40.0		72.4	50-200			
Matrix Spike Dup (1450022-MSD1)				Source: P412028-01		Prepared & Analyzed: 11-Dec-14				
Diesel Range Organics (C10-C28)	1200	35.0	mg/kg	500	577	124	38-132	24.4	20	D1
Surrogate: o-Terphenyl	71.5		"	40.0		179	50-200			

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
18-Dec-14 10:14

Notes and Definitions

SPK1 The spike recovery for this QC sample is outside of control limits.

E Analyte was present at a concentration greater than the calibration curve upper limit.

D1 Duplicates or Matrix Spike Duplicates Relative Percent Difference exceeds control limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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CHAIN OF CUSTODY RECORD

17916

Client: BP AMERICA			Project Name / Location: FLORANCE GC J #16			ANALYSIS / PARAMETERS													
Email results to: JEFF PEACE / JEFF BLAGG / NELSON VELEZ			Sampler Name: NELSON VELEZ			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Client Phone No.:			Client No.: 03143-0424																
Sample No. / Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative														
					HNO ₃	HCl													
BH3 C 25'-26.5'	12/10/14	0910	P412028-01	1 - 4oz.				✓	✓									X	X
BH3 C 30'-31.5'	12/10/14	0919	P412028-02	1 - 4oz.				✓	✓									X	X
BH3 C 50'-51.5'	12/10/14	1007	P412028-13	1 - 4oz.				✓	✓									X	X
BH3 C 70'-71.5'	12/10/14	1131	P412028-04	1 - 4oz.				✓	✓									X	X
Relinquished by: (Signature) <i>[Signature]</i>					Date	Time	Received by: (Signature) <i>[Signature]</i>					Date	Time						
Relinquished by: (Signature) <i>[Signature]</i>					12/10/14	1315	Received by: (Signature) <i>[Signature]</i>					12/10/14	1315						
Sample Matrix																			
Soil ☒ Solid ☐ Sludge ☐ Aqueous ☐ Other ☐																			
☐ Sample(s) dropped off after hours to secure drop off area.					3.4 3.8 4.1 3.8 envirotech Analytical Laboratory Bill BP PO HAS been sent to Envirotech														



Analytical Report

Report Summary

Client: BP America Production Co.
Chain Of Custody Number: 17917
Samples Received: 12/11/2014 12:18:00PM
Job Number: 03143-0424
Work Order: P412039
Project Name/Location: Florance GC J #16

Entire Report Reviewed By:

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

Tim Cain, Laboratory Manager

Date: 12/19/14

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.

BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
19-Dec-14 13:04

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH4 @ 30'-31.5'	P412039-01A	Soil	12/10/14	12/11/14	Glass Jar, 4 oz.
BH4 @ 45'-46.5'	P412039-02A	Soil	12/10/14	12/11/14	Glass Jar, 4 oz.
BH4 @ 60'-61.5'	P412039-03A	Soil	12/10/14	12/11/14	Glass Jar, 4 oz.

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
19-Dec-14 13:04

BH4 @ 30'-31.5'

P412039-01 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.10	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		108 %		50-150		1450026	12/15/14	12/18/14	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1		1451001	12/15/14	12/17/14	EPA 8015D	
Surrogate: o-Terphenyl		104 %		50-200		1451001	12/15/14	12/17/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		96.7 %		50-150		1450026	12/15/14	12/18/14	EPA 8015D	

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BP America Production Co.
 PO Box 22024
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 Project Name: Florance GC J #16
 Project Number: 03143-0424
 Project Manager: Nelson Velez

 Reported:
 19-Dec-14 13:04

BH4 @ 45'-46.5'
P412039-02 (Solid)

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1450026	12/15/14	12/18/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1450026	12/15/14	12/18/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1450026	12/15/14	12/18/14	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1450026	12/15/14	12/18/14	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1	1450026	12/15/14	12/18/14	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1	1450026	12/15/14	12/18/14	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1	1450026	12/15/14	12/18/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		110 %		50-150	1450026	12/15/14	12/18/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	11.2	9.98	mg/kg	1	1450026	12/15/14	12/18/14	EPA 8015D	
Diesel Range Organics (C10-C28)	31.3	29.9	mg/kg	1	1451001	12/15/14	12/17/14	EPA 8015D	
Surrogate: o-Terphenyl		105 %		50-200	1451001	12/15/14	12/17/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		99.1 %		50-150	1450026	12/15/14	12/18/14	EPA 8015D	

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PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
19-Dec-14 13:04

BH4 @ 60'-61.5'
P412039-03 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.10	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		108 %		50-150		1450026	12/15/14	12/18/14	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg	1		1450026	12/15/14	12/18/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	30.0	mg/kg	1		1451001	12/15/14	12/17/14	EPA 8015D	
Surrogate: o-Terphenyl		105 %		50-200		1451001	12/15/14	12/17/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		97.3 %		50-150		1450026	12/15/14	12/18/14	EPA 8015D	

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
19-Dec-14 13:04

Volatile Organics by EPA 8021 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1450026 - Purge and Trap EPA 5030A

Blank (1450026-BLK1)

Prepared: 15-Dec-14 Analyzed: 17-Dec-14

Benzene	ND	0.10	mg/kg							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
p,m-Xylene	ND	0.20	"							
o-Xylene	ND	0.10	"							
Total Xylenes	ND	0.10	"							
Total BTEX	ND	0.10	"							
Surrogate: 4-Bromochlorobenzene-PID	0.420		"	0.399		105	50-150			

LCS (1450026-BS1)

Prepared: 15-Dec-14 Analyzed: 17-Dec-14

Benzene	21.8	0.10	mg/kg	20.0		109	75-125			
Toluene	22.0	0.10	"	20.0		110	70-125			
Ethylbenzene	22.5	0.10	"	20.0		113	75-125			
p,m-Xylene	45.5	0.20	"	39.9		114	80-125			
o-Xylene	22.8	0.10	"	20.0		114	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.427		"	0.399		107	50-150			

Matrix Spike (1450026-MS1)

Source: P412029-01

Prepared: 15-Dec-14 Analyzed: 17-Dec-14

Benzene	21.7	0.10	mg/kg	20.0	ND	109	75-125			
Toluene	22.0	0.10	"	20.0	ND	110	70-125			
Ethylbenzene	22.4	0.10	"	20.0	ND	112	75-125			
p,m-Xylene	45.3	0.20	"	40.0	ND	113	80-125			
o-Xylene	22.4	0.10	"	20.0	ND	112	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.421		"	0.400		105	50-150			

Matrix Spike Dup (1450026-MSD1)

Source: P412029-01

Prepared: 15-Dec-14 Analyzed: 17-Dec-14

Benzene	20.4	0.10	mg/kg	20.0	ND	102	75-125	6.25	15	
Toluene	20.8	0.10	"	20.0	ND	104	70-125	5.41	15	
Ethylbenzene	21.0	0.10	"	20.0	ND	105	75-125	6.31	15	
p,m-Xylene	42.5	0.20	"	40.0	ND	106	80-125	6.39	15	
o-Xylene	21.3	0.10	"	20.0	ND	107	75-125	5.25	15	
Surrogate: 4-Bromochlorobenzene-PID	0.430		"	0.400		108	50-150			

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
19-Dec-14 13:04

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1450026 - Purge and Trap EPA 5030A

Blank (1450026-BLK1)

Prepared: 15-Dec-14 Analyzed: 17-Dec-14

Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg							
Surrogate: 4-Bromochlorobenzene-FID	0.387		"	0.399		96.9	50-150			

LCS (1450026-BS1)

Prepared: 15-Dec-14 Analyzed: 17-Dec-14

Gasoline Range Organics (C6-C10)	318	9.99	mg/kg	292		109	80-120			
Surrogate: 4-Bromochlorobenzene-FID	0.385		"	0.399		96.3	50-150			

Matrix Spike (1450026-MS1)

Source: P412029-01

Prepared: 15-Dec-14 Analyzed: 17-Dec-14

Gasoline Range Organics (C6-C10)	317	9.99	mg/kg	292	ND	109	75-125			
Surrogate: 4-Bromochlorobenzene-FID	0.380		"	0.400		95.0	50-150			

Matrix Spike Dup (1450026-MSD1)

Source: P412029-01

Prepared: 15-Dec-14 Analyzed: 17-Dec-14

Gasoline Range Organics (C6-C10)	299	9.99	mg/kg	292	ND	102	75-125	6.03	15	
Surrogate: 4-Bromochlorobenzene-FID	0.386		"	0.400		96.6	50-150			

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
19-Dec-14 13:04

Nonhalogenated Organics by 8015 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1451001 - DRO Extraction EPA 3550M										
Blank (1451001-BLK1)				Prepared: 15-Dec-14 Analyzed: 17-Dec-14						
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg							
Surrogate: o-Terphenyl	43.9		"	39.9		110	50-200			
LCS (1451001-BS1)				Prepared: 15-Dec-14 Analyzed: 17-Dec-14						
Diesel Range Organics (C10-C28)	468	29.9	mg/kg	499		93.7	38-132			
Surrogate: o-Terphenyl	39.7		"	39.9		99.4	50-200			
Matrix Spike (1451001-MS1)				Source: P412029-01 Prepared: 15-Dec-14 Analyzed: 17-Dec-14						
Diesel Range Organics (C10-C28)	564	30.0	mg/kg	500	ND	113	38-132			
Surrogate: o-Terphenyl	51.4		"	40.0		129	50-200			
Matrix Spike Dup (1451001-MSD1)				Source: P412029-01 Prepared: 15-Dec-14 Analyzed: 17-Dec-14						
Diesel Range Organics (C10-C28)	524	29.9	mg/kg	499	ND	105	38-132	7.36	20	
Surrogate: o-Terphenyl	44.9		"	39.9		112	50-200			

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
19-Dec-14 13:04

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

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CHAIN OF CUSTODY RECORD

17917

Client: BP AMERICA			Project Name / Location: FLORANCE GC J. #16			ANALYSIS / PARAMETERS																																													
Email results to: JEFF RACE / JEFF BLASS / NELSON VELEZ			Sampler Name: NELSON VELEZ			<table border="1"> <tr> <th>TPH (Method 8015)</th> <th>BTEX (Method 8021)</th> <th>VOC (Method 8260)</th> <th>RCRA 8 Metals</th> <th>Cation / Anion</th> <th>RCI</th> <th>TCLP with H/P</th> <th>CO Table 910-1</th> <th>TPH (418.1)</th> <th>CHLORIDE</th> <th></th> <th></th> <th></th> <th></th> <th>Sample Cool</th> <th>Sample Intact</th> </tr> <tr> <td>✓</td> <td>✓</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>✓</td> <td>✓</td> </tr> </table>														TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE					Sample Cool	Sample Intact	✓	✓													✓	✓
TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI															TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE					Sample Cool	Sample Intact																						
✓	✓													✓	✓																																				
Client Phone No.: 505.320.3489			Client No.: 03143-0424																																																
Sample No. / Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact																														
					HNO ₃	HCl																																													
BH4 @ 30'-31.5'	12/10/14	1500	P412038-01	1-4oz.				✓	✓												✓	✓																													
BH4 @ 45'-46.5'	12/11/14	0909	P412038-02	1-4oz.				✓	✓												✓	✓																													
BH4 @ 60'-61.5'	12/11/14	1002	P412038-03	1-4oz.				✓	✓												✓	✓																													
Relinquished by: (Signature) <i>[Signature]</i>					Date	Time	Received by: (Signature) <i>[Signature]</i>					Date	Time																																						
Relinquished by: (Signature)							Received by: (Signature)																																												
Sample Matrix																																																			
Soil ☒ Solid ☐ Sludge ☐ Aqueous ☐ Other ☐																																																			
☐ Sample(s) dropped off after hours to secure drop off area.																																																			



8.2 10.6
8.9



Analytical Report

Report Summary

Client: BP America Production Co.
Chain Of Custody Number: 17918
Samples Received: 12/15/2014 3:57:00PM
Job Number: 03143-0424
Work Order: P412045
Project Name/Location: Florance GC J #16

Entire Report Reviewed By:

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

Date: 12/23/14

Tim Cain, Laboratory Manager

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.



BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
23-Dec-14 11:40

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH4 @ 70'-71.5'	P412045-01A	Solid	12/15/14	12/15/14	Glass Jar, 4 oz.
BH4 @ 80'-81.5'	P412045-02A	Solid	12/15/14	12/15/14	Glass Jar, 4 oz.
BH4 @ 90'-91'	P412045-03A	Solid	12/15/14	12/15/14	Glass Jar, 4 oz.

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
23-Dec-14 11:40

BH4 @ 70'-71.5'
P412045-01 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.10	mg/kg	1		1451009	12/16/14	12/17/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1		1451009	12/16/14	12/17/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1		1451009	12/16/14	12/17/14	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1		1451009	12/16/14	12/17/14	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1		1451009	12/16/14	12/17/14	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1		1451009	12/16/14	12/17/14	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1		1451009	12/16/14	12/17/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		107 %		50-150		1451009	12/16/14	12/17/14	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg	1		1451009	12/16/14	12/17/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1		1451008	12/16/14	12/17/14	EPA 8015D	
Surrogate: o-Terphenyl		108 %		50-200		1451008	12/16/14	12/17/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		96.3 %		50-150		1451009	12/16/14	12/17/14	EPA 8015D	

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
23-Dec-14 11:40

BH4 @ 80'-81.5'

P412045-02 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.10	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B		
Toluene	0.13	0.10	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B		
Ethylbenzene	ND	0.10	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B		
p,m-Xylene	0.41	0.20	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B		
o-Xylene	0.23	0.10	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B		
Total Xylenes	0.64	0.10	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B		
Total BTEX	0.78	0.10	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B		
Surrogate: 4-Bromochlorobenzene-PID		116 %		50-150	1451009	12/16/14	12/22/14	EPA 8021B		
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	31.7	9.99	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8015D		
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1	1451008	12/16/14	12/18/14	EPA 8015D		
Surrogate: o-Terphenyl		115 %		50-200	1451008	12/16/14	12/18/14	EPA 8015D		
Surrogate: 4-Bromochlorobenzene-FID		106 %		50-150	1451009	12/16/14	12/22/14	EPA 8015D		

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Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
23-Dec-14 11:40

BH4 @ 90'-91'

P412045-03 (Solid)

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B	
Toluene	0.13	0.10	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B	
p,m-Xylene	1.58	0.20	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B	
o-Xylene	0.37	0.10	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B	
Total Xylenes	1.95	0.10	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B	
Total BTEX	2.07	0.10	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		116 %	50-150		1451009	12/16/14	12/22/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	81.7	9.98	mg/kg	1	1451009	12/16/14	12/22/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1	1451008	12/16/14	12/18/14	EPA 8015D	
Surrogate: o-Terphenyl		110 %	50-200		1451008	12/16/14	12/18/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		106 %	50-150		1451009	12/16/14	12/22/14	EPA 8015D	

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Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
23-Dec-14 11:40

Volatile Organics by EPA 8021 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1451009 - Purge and Trap EPA 5030A

Blank (1451009-BLK1)

Prepared: 16-Dec-14 Analyzed: 17-Dec-14

Benzene	ND	0.10	mg/kg							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
p,m-Xylene	ND	0.20	"							
o-Xylene	ND	0.10	"							
Total Xylenes	ND	0.10	"							
Total BTEX	ND	0.10	"							
Surrogate: 4-Bromochlorobenzene-PID	0.428		"	0.399		107	50-150			

LCS (1451009-BS1)

Prepared: 16-Dec-14 Analyzed: 17-Dec-14

Benzene	21.4	0.10	mg/kg	19.9		108	75-125			
Toluene	21.9	0.10	"	19.9		110	70-125			
Ethylbenzene	22.1	0.10	"	19.9		111	75-125			
p,m-Xylene	44.7	0.20	"	39.9		112	80-125			
o-Xylene	22.2	0.10	"	19.9		111	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.420		"	0.399		105	50-150			

Matrix Spike (1451009-MS1)

Source: P412045-01

Prepared: 16-Dec-14 Analyzed: 17-Dec-14

Benzene	21.7	0.10	mg/kg	20.0	ND	109	75-125			
Toluene	22.2	0.10	"	20.0	ND	111	70-125			
Ethylbenzene	22.4	0.10	"	20.0	ND	112	75-125			
p,m-Xylene	45.2	0.20	"	39.9	ND	113	80-125			
o-Xylene	22.4	0.10	"	20.0	ND	112	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.398		"	0.399		99.8	50-150			

Matrix Spike Dup (1451009-MSD1)

Source: P412045-01

Prepared: 16-Dec-14 Analyzed: 17-Dec-14

Benzene	22.0	0.10	mg/kg	20.0	ND	110	75-125	1.57	15	
Toluene	22.5	0.10	"	20.0	ND	113	70-125	1.49	15	
Ethylbenzene	22.7	0.10	"	20.0	ND	114	75-125	1.43	15	
p,m-Xylene	45.8	0.20	"	39.9	ND	115	80-125	1.47	15	
o-Xylene	22.8	0.10	"	20.0	ND	114	75-125	1.83	15	
Surrogate: 4-Bromochlorobenzene-PID	0.402		"	0.399		101	50-150			

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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
23-Dec-14 11:40

Nonhalogenated Organics by 8015 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1451008 - DRO Extraction EPA 3550M										
Blank (1451008-BLK1)				Prepared: 16-Dec-14 Analyzed: 17-Dec-14						
Diesel Range Organics (C10-C28)	ND	24.9	mg/kg							
Surrogate: o-Terphenyl	41.7		"	39.9		105	50-200			
LCS (1451008-BS1)				Prepared: 16-Dec-14 Analyzed: 17-Dec-14						
Diesel Range Organics (C10-C28)	487	25.0	mg/kg	500		97.5	38-132			
Surrogate: o-Terphenyl	40.9		"	40.0		102	50-200			
Matrix Spike (1451008-MS1)				Source: P412045-01		Prepared: 16-Dec-14 Analyzed: 17-Dec-14				
Diesel Range Organics (C10-C28)	711	29.9	mg/kg	498	ND	143	38-132			SPK1
Surrogate: o-Terphenyl	57.8		"	39.9		145	50-200			
Matrix Spike Dup (1451008-MSD1)				Source: P412045-01		Prepared: 16-Dec-14 Analyzed: 17-Dec-14				
Diesel Range Organics (C10-C28)	658	30.0	mg/kg	499	ND	132	38-132	7.76	20	
Surrogate: o-Terphenyl	53.1		"	39.9		133	50-200			

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
23-Dec-14 11:40

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1451009 - Purge and Trap EPA 5030A										
Blank (1451009-BLK1)				Prepared: 16-Dec-14 Analyzed: 17-Dec-14						
Gasoline Range Organics (C6-C10)	ND	9.98	mg/kg							
Surrogate: 4-Bromochlorobenzene-FID	0.383		"	0.399		95.9	50-150			
LCS (1451009-BS1)				Prepared: 16-Dec-14 Analyzed: 17-Dec-14						
Gasoline Range Organics (C6-C10)	312	9.97	mg/kg	291		107	80-120			
Surrogate: 4-Bromochlorobenzene-FID	0.379		"	0.399		94.9	50-150			
Matrix Spike (1451009-MS1)				Source: P412045-01		Prepared: 16-Dec-14 Analyzed: 17-Dec-14				
Gasoline Range Organics (C6-C10)	314	9.98	mg/kg	291	ND	108	75-125			
Surrogate: 4-Bromochlorobenzene-FID	0.358		"	0.399		89.6	50-150			
Matrix Spike Dup (1451009-MSD1)				Source: P412045-01		Prepared: 16-Dec-14 Analyzed: 17-Dec-14				
Gasoline Range Organics (C6-C10)	318	9.98	mg/kg	292	ND	109	75-125	1.15	15	
Surrogate: 4-Bromochlorobenzene-FID	0.362		"	0.399		90.7	50-150			

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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
23-Dec-14 11:40

Notes and Definitions

SPK1 The spike recovery for this QC sample is outside of control limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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CHAIN OF CUSTODY RECORD

17918

Client: BP AMERICA		Project Name / Location: FLORANCE GC J #16			ANALYSIS / PARAMETERS																																													
Email results to: JEFF PEARCE / JEFF BLAKE / NELSON VELEZ		Sampler Name: NELSON VELEZ			<table border="1"> <tr> <th>TPH (Method 8015)</th> <th>BTEX (Method 8021)</th> <th>VOC (Method 8260)</th> <th>RCRA 8 Metals</th> <th>Cation / Anion</th> <th>RCI</th> <th>TCLP with H/P</th> <th>CO Table 910-1</th> <th>TPH (418.1)</th> <th>CHLORIDE</th> <th></th> <th></th> <th></th> <th></th> <th>Sample Cool</th> <th>Sample Intact</th> </tr> <tr> <td>✓</td> <td>✓</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>✓</td> <td>✓</td> </tr> </table>														TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE					Sample Cool	Sample Intact	✓	✓													✓	✓
TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion															RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE					Sample Cool	Sample Intact																					
✓	✓													✓	✓																																			
Client Phone No.: 505.320.3489		Client No.: 03143-0424																																																
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact																													
					HNO ₃	HCl																																												
BH4 @ 70' - 71.5'	12/15/14	0905	P412045-01	1 - 4 oz.				✓	✓											✓	✓																													
BH4 @ 80' - 81.5'	12/15/14	0944	P412045-02	1 - 4 oz.				✓	✓											✓	✓																													
BH4 @ 90' - 91'	12/15/14	1106	P412045-03	1 - 4 oz.				✓	✓											✓	✓																													
Relinquished by: (Signature) <i>[Signature]</i>					Date	Time	Received by: (Signature) <i>[Signature]</i>					Date	Time																																					
Relinquished by: (Signature)							Received by: (Signature)																																											
Sample Matrix																																																		
Soil ☒ Solid ☐ Sludge ☐ Aqueous ☐ Other ☐																																																		
☐ Sample(s) dropped off after hours to secure drop off area.																																																		

Bill BP per Nelson

WO: N15562633 PO 4300384448

envirotech
Analytical Laboratory

14.4
17.2
16.1



Analytical Report

Report Summary

Client: BP America Production Co.

Chain Of Custody Number: 17919

Samples Received: 12/17/2014 1:51:00PM

Job Number: 03143-0424

Work Order: P412067

Project Name/Location: Florance GC J #16

Entire Report Reviewed By:

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

Tim Cain, Laboratory Manager

Date: 12/24/14

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.



BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
24-Dec-14 13:31

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH5 @ 55'-56.5'	P412067-01A	Soil	12/17/14	12/17/14	Glass Jar, 4 oz.
BH5 @ 60'-61.5'	P412067-02A	Soil	12/17/14	12/17/14	Glass Jar, 4 oz.
BH5 @ 65'-66.5'	P412067-03A	Soil	12/17/14	12/17/14	Glass Jar, 4 oz.
BH5 @ 75'-76'	P412067-04A	Soil	12/17/14	12/17/14	Glass Jar, 4 oz.

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PO Box 22024
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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
24-Dec-14 13:31

BH5 @ 55'-56.5'
P412067-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		102 %		50-150	1451042	12/19/14	12/23/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	10.0	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	30.0	mg/kg	1	1451041	12/19/14	12/22/14	EPA 8015D	
Surrogate: o-Terphenyl		116 %		50-200	1451041	12/19/14	12/22/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		91.7 %		50-150	1451042	12/19/14	12/23/14	EPA 8015D	

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 Project Name: Florance GC J #16
 Project Number: 03143-0424
 Project Manager: Nelson Velez

 Reported:
 24-Dec-14 13:31

BH5 @ 60'-61.5'
P412067-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
p,m-Xylene	0.22	0.20	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
o-Xylene	0.17	0.10	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	B
Total Xylenes	0.39	0.10	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
Total BTEX	0.39	0.10	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		98.8 %		50-150	1451042	12/19/14	12/23/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	11.5	9.98	mg/kg	1	1451042	12/19/14	12/23/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	30.0	mg/kg	1	1451041	12/19/14	12/22/14	EPA 8015D	
<i>Surrogate: o-Terphenyl</i>		109 %		50-200	1451041	12/19/14	12/22/14	EPA 8015D	
<i>Surrogate: 4-Bromochlorobenzene-FID</i>		90.6 %		50-150	1451042	12/19/14	12/23/14	EPA 8015D	

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
24-Dec-14 13:31

BH5 @ 65'-66.5'
P412067-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1451042	12/19/14	12/24/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1451042	12/19/14	12/24/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1451042	12/19/14	12/24/14	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1451042	12/19/14	12/24/14	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1	1451042	12/19/14	12/24/14	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1	1451042	12/19/14	12/24/14	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1	1451042	12/19/14	12/24/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		102 %		50-150	1451042	12/19/14	12/24/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg	1	1451042	12/19/14	12/24/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	30.0	mg/kg	1	1451041	12/19/14	12/22/14	EPA 8015D	
Surrogate: o-Terphenyl		112 %		50-200	1451041	12/19/14	12/22/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		91.1 %		50-150	1451042	12/19/14	12/24/14	EPA 8015D	

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
24-Dec-14 13:31

BH5 @ 75'-76'
P412067-04 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.10	mg/kg	1		1451042	12/19/14	12/24/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1		1451042	12/19/14	12/24/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1		1451042	12/19/14	12/24/14	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1		1451042	12/19/14	12/24/14	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1		1451042	12/19/14	12/24/14	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1		1451042	12/19/14	12/24/14	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1		1451042	12/19/14	12/24/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		101 %		50-150		1451042	12/19/14	12/24/14	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	ND	9.98	mg/kg	1		1451042	12/19/14	12/24/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1		1451041	12/19/14	12/22/14	EPA 8015D	
Surrogate: o-Terphenyl		113 %		50-200		1451041	12/19/14	12/22/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		90.7 %		50-150		1451042	12/19/14	12/24/14	EPA 8015D	

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
24-Dec-14 13:31

Volatile Organics by EPA 8021 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1451042 - Purge and Trap EPA 5030A

Blank (1451042-BLK1)

Prepared: 19-Dec-14 Analyzed: 23-Dec-14

Benzene	ND	0.10	mg/kg							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
p,m-Xylene	ND	0.20	"							
o-Xylene	0.15	0.10	"							
Total Xylenes	0.15	0.10	"							
Total BTEX	0.15	0.10	"							
Surrogate: 4-Bromochlorobenzene-PID	0.417		"	0.400		104	50-150			

LCS (1451042-BS1)

Prepared: 19-Dec-14 Analyzed: 23-Dec-14

Benzene	21.7	0.10	mg/kg	19.9		109	75-125			
Toluene	22.4	0.10	"	19.9		112	70-125			
Ethylbenzene	22.5	0.10	"	19.9		113	75-125			
p,m-Xylene	45.8	0.20	"	39.9		115	80-125			
o-Xylene	22.6	0.10	"	19.9		113	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.417		"	0.399		105	50-150			

Matrix Spike (1451042-MS1)

Source: P412067-01

Prepared: 19-Dec-14 Analyzed: 23-Dec-14

Benzene	22.3	0.10	mg/kg	20.0	ND	112	75-125			
Toluene	22.9	0.10	"	20.0	ND	115	70-125			
Ethylbenzene	23.0	0.10	"	20.0	ND	115	75-125			
p,m-Xylene	46.5	0.20	"	40.0	ND	116	80-125			
o-Xylene	23.1	0.10	"	20.0	ND	115	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.416		"	0.400		104	50-150			

Matrix Spike Dup (1451042-MSD1)

Source: P412067-01

Prepared: 19-Dec-14 Analyzed: 23-Dec-14

Benzene	22.4	0.10	mg/kg	20.0	ND	112	75-125	0.464	15	
Toluene	22.9	0.10	"	20.0	ND	114	70-125	0.121	15	
Ethylbenzene	23.2	0.10	"	20.0	ND	116	75-125	1.07	15	
p,m-Xylene	46.4	0.20	"	40.0	ND	116	80-125	0.221	15	
o-Xylene	23.2	0.10	"	20.0	ND	116	75-125	0.712	15	
Surrogate: 4-Bromochlorobenzene-PID	0.402		"	0.400		101	50-150			

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
24-Dec-14 13:31

Nonhalogenated Organics by 8015 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1451041 - DRO Extraction EPA 3550M										
Blank (1451041-BLK1)				Prepared: 19-Dec-14 Analyzed: 22-Dec-14						
Diesel Range Organics (C10-C28)	ND	30.0	mg/kg							
Surrogate: o-Terphenyl	42.7		"	40.0		107	50-200			
LCS (1451041-BS1)				Prepared: 19-Dec-14 Analyzed: 22-Dec-14						
Diesel Range Organics (C10-C28)	535	30.0	mg/kg	500		107	38-132			
Surrogate: o-Terphenyl	44.2		"	40.0		111	50-200			
Matrix Spike (1451041-MS1)				Source: P412067-01		Prepared: 19-Dec-14 Analyzed: 22-Dec-14				
Diesel Range Organics (C10-C28)	691	30.0	mg/kg	500	ND	138	38-132			SPK1
Surrogate: o-Terphenyl	53.0		"	40.0		133	50-200			
Matrix Spike Dup (1451041-MSD1)				Source: P412067-01		Prepared: 19-Dec-14 Analyzed: 22-Dec-14				
Diesel Range Organics (C10-C28)	579	29.9	mg/kg	499	ND	116	38-132	17.7	20	
Surrogate: o-Terphenyl	47.2		"	39.9		118	50-200			

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Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
24-Dec-14 13:31

Nonhalogenated Organics by 8015 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1451042 - Purge and Trap EPA 5030A										
Blank (1451042-BLK1)				Prepared: 19-Dec-14 Analyzed: 23-Dec-14						
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg							
Surrogate: 4-Bromochlorobenzene-FID	0.373		"	0.400		93.2	50-150			
LCS (1451042-BS1)				Prepared: 19-Dec-14 Analyzed: 23-Dec-14						
Gasoline Range Organics (C6-C10)	323	9.97	mg/kg	291		111	80-120			
Surrogate: 4-Bromochlorobenzene-FID	0.374		"	0.399		93.9	50-150			
Matrix Spike (1451042-MS1)				Source: P412067-01 Prepared: 19-Dec-14 Analyzed: 23-Dec-14						
Gasoline Range Organics (C6-C10)	325	9.99	mg/kg	292	ND	112	75-125			
Surrogate: 4-Bromochlorobenzene-FID	0.374		"	0.400		93.6	50-150			
Matrix Spike Dup (1451042-MSD1)				Source: P412067-01 Prepared: 19-Dec-14 Analyzed: 23-Dec-14						
Gasoline Range Organics (C6-C10)	330	9.99	mg/kg	292	ND	113	75-125	1.22	15	
Surrogate: 4-Bromochlorobenzene-FID	0.361		"	0.400		90.4	50-150			

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PO Box 22024
Tulsa OK, 74121-2024

Project Name: Florance GC J #16
Project Number: 03143-0424
Project Manager: Nelson Velez

Reported:
24-Dec-14 13:31

Notes and Definitions

SPK1 The spike recovery for this QC sample is outside of control limits.

B Analyte is found in the associated blank.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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CHAIN OF CUSTODY RECORD

17919

Client: BP AMERICA			Project Name / Location: FLORANCE GC J #16			ANALYSIS / PARAMETERS														
Email results to: JEFF PENCE / JEFF BLASS / NELSON VELEZ			Sampler Name: NELSON VELEZ			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact	
Client Phone No.: 505.320.3489			Client No.: 03143-0424																	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative															
					HNO ₃	HCl														
BH5 @ 55'-56.5'	12/17/14	0957	P412067-01	1 - 4oz.				✓	✓										✓	✓
BH5 @ 60'-61.5'	12/17/14	1017	P412067-02	1 - 4oz.				✓	✓										✓	✓
BH5 @ 65'-66.5'	12/17/14	1043	P412067-03	1 - 4oz.				✓	✓										✓	✓
BH5 @ 75'-76'	12/17/14	1130	P412067-04	1 - 4oz.				✓	✓										✓	✓
Relinquished by: (Signature) <i>[Signature]</i>					Date	Time	Received by: (Signature) <i>[Signature]</i>										Date	Time		
					12/17/14	1351											12/17/14	13:51		
Relinquished by: (Signature)							Received by: (Signature)													
Sample Matrix																				
Soil ☒ Solid ☐ Sludge ☐ Aqueous ☐ Other ☐																				
☐ Sample(s) dropped off after hours to secure drop off area. BILL BP DIRECTLY N15562633 4300384448					 16.6 17.3 15.8															

CLIENT: BP	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	API #: 3004509800 TANK ID (if applicable): A & B
-------------------	---	---

FIELD REPORT:

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

PAGE #: **1** of **1**

SITE INFORMATION:	SITE NAME: FLORANCE GC J # 16	DATE STARTED: 03/10/14
QUAD/UNIT: A SEC: 6 TWP: 30N RNG: 9W PM: NM CNTY: SJ ST: NM		DATE FINISHED:
1/4 - 1/4 FOOTAGE: 1,010'N / 990'E NE/NE LEASE TYPE: <u>FEDERAL</u> STATE / FEE / INDIAN		ENVIRONMENTAL SPECIALIST(S): JCB
LEASE #: SF078316 PROD. FORMATION: MV CONTRACTOR: ELKHORN MBF - B. SCHUMAN		

REFERENCE POINT:	WELL HEAD (W.H.) GPS COORD.: 36.84503 X 107.81571 GL ELEV.: 6,374'	
1) 95 BGT (SW/SB) - A	GPS COORD.: 36.845274 X 107.815455	DISTANCE/BEARING FROM W.H.: 102', N43E
2) 21 BGT (SW/SB) - B	GPS COORD.: 36.844942 X 107.815430	DISTANCE/BEARING FROM W.H.: 82', S59E
3)	GPS COORD.:	DISTANCE/BEARING FROM W.H.:
4)	GPS COORD.:	DISTANCE/BEARING FROM W.H.:

SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL	OVM READING (ppm)
1) SAMPLE ID: 95 BGT 5-pt. @ 3' SAMPLE DATE: 03/10/14 SAMPLE TIME: 1254 LAB ANALYSIS: 418.1/8015B/8021B/300.0(CI)		0.0
2) SAMPLE ID: 21 BGT 5-pt. @ 6' SAMPLE DATE: 03/10/14 SAMPLE TIME: 1304 LAB ANALYSIS: 418.1/8015B/8021B/300.0(CI)		1,780
3) SAMPLE ID: SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS:		
4) SAMPLE ID: SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS:		

SOIL DESCRIPTION:	SOIL TYPE: <u>SAND / SILTY SAND</u> SILT / SILTY CLAY / CLAY / GRAVEL / OTHER
SOIL COLOR: DARK YELLOWISH ORANGE	PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC
COHESION (ALL OTHERS): <u>NON COHESIVE</u> SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE	DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD
CONSISTENCY (NON COHESIVE SOILS): <u>LOOSE</u> FIRM / DENSE / VERY DENSE	HC ODOR DETECTED: <u>YES</u> NO EXPLANATION - AT 21 BGT
MOISTURE: DRY <u>SLIGHTLY MOIST</u> MOIST / WET / SATURATED / SUPER SATURATED	
SAMPLE TYPE: GRAB <u>COMPOSITE</u> # OF PTS. 5	ANY AREAS DISPLAYING WETNESS: YES <u>NO</u> EXPLANATION -
DISCOLORATION/STAINING OBSERVED: <u>YES</u> NO EXPLANATION - BLACK BENEATH 21 BGT	

SITE OBSERVATIONS:	LOST INTEGRITY OF EQUIPMENT: YES <u>NO</u> EXPLANATION -
APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: <u>YES</u> NO EXPLANATION: AT 21 BGT	
EQUIPMENT SET OVER RECLAIMED AREA: <u>YES</u> NO EXPLANATION - AT 95 BGT ONLY	
OTHER: 95 BGT - 15 FT. DIAMETER WITH I-BEAMS WELDED TO ITS BOTTOM	

SOIL IMPACT DIMENSION ESTIMATION: NA ft. X NA ft. X NA ft.	EXCAVATION ESTIMATION (Cubic Yards): NA
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1,000' NEAREST SURFACE WATER: <1,000'	NMOCD TPH CLOSURE STD: 1,000 ppm

SITE SKETCH

BGT Located : off on site
PLOT PLAN circle: attached

SEPARATOR → BERM → (95) PBGTL T.B. ~ 3' B.G. → COMPRESSOR → BERM → PROD. TANK → (21) PBGTL T.B. ~ 6' B.G.

X - S.P.D.

OVM CALIB. READ. = **100.1** ppm RF=1.00
 OVM CALIB. GAS = **100** ppm
 TIME: **11:05** am/pm DATE: **03/10/14**

MISCELL. NOTES

WO: **N15419185**

PO #:

PK: **ZEVH01BGT2**

PJ #: **Z2-006Q0**

Permit date(s): **06/02/10**

OCD Appr. date(s): **02/24/14**

Tank ID	OVM = Organic Vapor Meter ppm = parts per million
A	BGT Sidewalls Visible: Y / <u>N</u>
B	BGT Sidewalls Visible: Y / <u>N</u>
	BGT Sidewalls Visible: Y / <u>N</u>

Magnetic declination: **10° E**

NOTES:

ONSITE: **03/10/14**

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

Lab Order 1403483

Date Reported: 3/19/2014

CLIENT: Blagg Engineering**Client Sample ID:** 95 BGT 5-pt @ 3'**Project:** Florance J 16**Collection Date:** 3/10/2014 12:54:00 PM**Lab ID:** 1403483-001**Matrix:** SOIL**Received Date:** 3/12/2014 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	3/14/2014 7:16:27 PM	12165
Surr: DNOP	111	66-131		%REC	1	3/14/2014 7:16:27 PM	12165
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/17/2014 2:21:44 PM	12163
Surr: BFB	85.0	74.5-129		%REC	1	3/17/2014 2:21:44 PM	12163
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	3/17/2014 2:21:44 PM	12163
Toluene	ND	0.048		mg/Kg	1	3/17/2014 2:21:44 PM	12163
Ethylbenzene	ND	0.048		mg/Kg	1	3/17/2014 2:21:44 PM	12163
Xylenes, Total	ND	0.096		mg/Kg	1	3/17/2014 2:21:44 PM	12163
Surr: 4-Bromofluorobenzene	97.5	80-120		%REC	1	3/17/2014 2:21:44 PM	12163
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	3/17/2014 12:44:31 PM	12201
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	3/17/2014	12172

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.

Analytical Report

Lab Order 1403483

Date Reported: 3/19/2014

CLIENT: Blagg Engineering

Project: Florance J 16

Lab ID: 1403483-002

Matrix: SOIL

Client Sample ID: 21 BGT 5-pt @ 6'

Collection Date: 3/10/2014 1:04:00 PM

Received Date: 3/12/2014 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)	2200	100		mg/Kg	10	3/17/2014 6:48:12 PM	12165
Surr: DNOP	0	66-131	S	%REC	10	3/17/2014 6:48:12 PM	12165
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	3100	250		mg/Kg	50	3/17/2014 2:50:25 PM	12163
Surr: BFB	405	74.5-129	S	%REC	50	3/17/2014 2:50:25 PM	12163
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.2		mg/Kg	50	3/17/2014 2:50:25 PM	12163
Toluene	ND	2.5		mg/Kg	50	3/17/2014 2:50:25 PM	12163
Ethylbenzene	ND	2.5		mg/Kg	50	3/17/2014 2:50:25 PM	12163
Xylenes, Total	150	4.9		mg/Kg	50	3/17/2014 2:50:25 PM	12163
Surr: 4-Bromofluorobenzene	117	80-120		%REC	50	3/17/2014 2:50:25 PM	12163
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	3/17/2014 1:21:45 PM	12201
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	3000	200		mg/Kg	10	3/17/2014	12172

TPH (8015B) - 5,300 mg/Kg or ppm
TPH (418.1) - 3,000 mg/Kg or ppm

Benzene - ND
Total BTEX - 150 mg/Kg or ppm

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#: 1403483

19-Mar-14

Client: Blagg Engineering

Project: Florance J 16

Sample ID	MB-12201	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	12201	RunNo:	17390					
Prep Date:	3/17/2014	Analysis Date:	3/17/2014	SeqNo:	500913	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-12201	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	12201	RunNo:	17390					
Prep Date:	3/17/2014	Analysis Date:	3/17/2014	SeqNo:	500914	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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1403483

19-Mar-14

Client: Blagg Engineering

Project: Florance J 16

Sample ID	MB-12172	SampType:	MBLK	TestCode:	EPA Method 418.1: TPH					
Client ID:	PBS	Batch ID:	12172	RunNo:	17320					
Prep Date:	3/13/2014	Analysis Date:	3/17/2014	SeqNo:	498786	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	LCS-12172	SampType:	LCS	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS	Batch ID:	12172	RunNo:	17320					
Prep Date:	3/13/2014	Analysis Date:	3/17/2014	SeqNo:	498795	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	104	80	120			

Sample ID	LCSD-12172	SampType:	LCSD	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS02	Batch ID:	12172	RunNo:	17320					
Prep Date:	3/13/2014	Analysis Date:	3/17/2014	SeqNo:	498802	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	99.6	80	120	4.19	20	

Qualifiers:

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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1403483

19-Mar-14

Client: Blagg Engineering

Project: Florance J 16

Sample ID	MB-12179	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	12179	RunNo:	17323					
Prep Date:	3/14/2014	Analysis Date:	3/14/2014	SeqNo:	499010	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		101	66	131			

Sample ID	LCS-12179	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	12179	RunNo:	17323					
Prep Date:	3/14/2014	Analysis Date:	3/14/2014	SeqNo:	499012	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		98.5	66	131			

Sample ID	MB-12165	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	12165	RunNo:	17309					
Prep Date:	3/13/2014	Analysis Date:	3/14/2014	SeqNo:	499648	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		101	66	131			

Sample ID	LCS-12165	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	12165	RunNo:	17357					
Prep Date:	3/13/2014	Analysis Date:	3/17/2014	SeqNo:	499909	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	109	60.8	145			
Surr: DNOP	5.4		5.000		107	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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1403483

19-Mar-14

Client: Blagg Engineering

Project: Florance J 16

Sample ID	MB-12163	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	12163	RunNo:	17371					
Prep Date:	3/13/2014	Analysis Date:	3/17/2014	SeqNo:	500261	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	870		1000		87.2	74.5	129			

Sample ID	LCS-12163	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	12163	RunNo:	17371					
Prep Date:	3/13/2014	Analysis Date:	3/17/2014	SeqNo:	500262	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	108	71.7	134			
Surr: BFB	930		1000		92.7	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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1403483

19-Mar-14

Client: Blagg Engineering

Project: Florance J 16

Sample ID	MB-12163		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	12163		RunNo:	17371			
Prep Date:	3/13/2014		Analysis Date:	3/17/2014		SeqNo:	500288		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-12163		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	12163		RunNo:	17371			
Prep Date:	3/13/2014		Analysis Date:	3/17/2014		SeqNo:	500289		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.050	1.000	0	97.4	80	120			
Toluene	0.96	0.050	1.000	0	96.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.5	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.5	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Qualifiers:

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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Sample Log-In Check List

Client Name: BLAGG

Work Order Number: 1403483

RcptNo: 1

Received by/date: [Signature] 03/12/14

Logged By: Lindsay Mangin 3/12/2014 10:00:00 AM [Signature]

Completed By: Lindsay Mangin 3/12/2014 1:56:56 PM [Signature]

Reviewed By: A 03/13/14

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			