

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: BP	Contact: Steve Moskal
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9497
Facility Name: Florance 058	Facility Type: Natural gas well

Surface Owner: Federal	Mineral Owner: Federal	API No. 3004511652
------------------------	------------------------	--------------------

LOCATION OF RELEASE

Unit Letter M	Section 14	Township 30N	Range 09W	Feet from the 855	North/South Line South	Feet from the 1,060	East/West Line West	County: San Juan
------------------	---------------	-----------------	--------------	----------------------	---------------------------	------------------------	------------------------	------------------

Latitude 36.80618° Longitude -107.7551°

NATURE OF RELEASE

Type of Release: Unknown hydrocarbons	Volume of Release: unknown	Volume Recovered: none
Source of Release: Unknown; Suspected earthen pit	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: November 29, 2016; 12:30 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? Steve Moskal	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

OIL CONS. DIV DIST. 3



AUG 09 2017

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* During removal of a line drip for final reclamation, impacts were found. Initial investigation indicates the impacts to be related to a former earthen pit based on the appearance and contents of the pit including fencing wire. BP followed the spill and release guidelines for remediation via excavation.

Describe Area Affected and Cleanup Action Taken.* The extents of the contamination were fully delineated via excavation following the spill and release guidelines. The total excavation area measured 50'x46'x8' deep. Closure samples indicate no further action required.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Steve Moskal	Approved by Environmental Specialist: 	
Title: Field Environmental Coordinator	Approval Date: 9/13/17	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: August 8, 2017	Phone: 505-326-9497	

* Attach Additional Sheets If Necessary

#NCS1634251546

49

BP AMERICA PRODUCTION COMPANY

FLORANCE 058 - HISTORICAL RELEASE CLEANUP

API #: 30-045-20064

Legal Description: (Unit Letter M, Sec. 14 -T30N -R9W, NMPM)

CHRONOLOGICAL EVENT SUMMATION

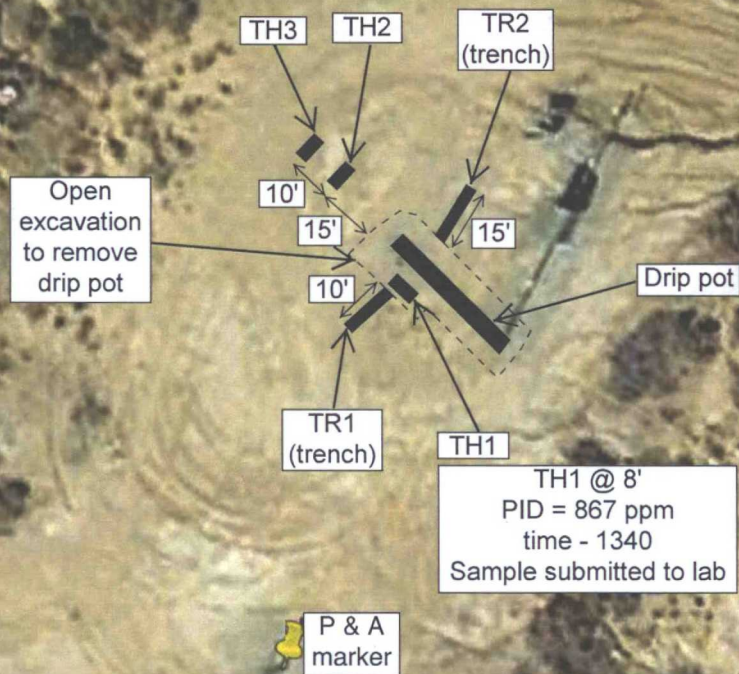
- November 30, 2016:** Soil and sandstone impacts discovered during removal of drip pot located at southern end of meter run (Figure 1 & 2). After a preliminary on-site assessment, excavation commenced using a trackhoe. Based on the site's below-grade tank permit and analyzing aerial & topographic maps, NMOCD's Spill & Release Guidelines would produce a ranking criteria of zero (0), or soil Total Petroleum Hydrocarbon closure standard of 5,000 mg/Kg. NMOCD's District III verbally concurred with this classification.
- December 2, 2013:** Subsequent sampling conducted along north sidewall and excavation bottom. After receiving preliminary lab results, crew advised to continue excavation toward north and west directions.
- December 6, 2013:** Conducted extensive sampling of excavation measured approximately 50 ft. x 46 ft. x 4-8 ft. depth (Figure 2). After receiving preliminary lab results, crew advised to excavate north sidewall at eastern most area. Approximately 24 ft. x 4 ft. x 5 ft. depth of mostly sandstone was removed.
- December 8, 2013:** Final sampling completed of the additional excavated area. Total of approximately 1,300 cubic yards of soil & bedrock were removed and transported to BP Crouch Mesa Landfarm in San Juan County, NM for final remediation.

BP - Florance 058

(M) Sec. 14, T30N, R9W
API #: 3004511652

Imagery date: 3/16/2016.

FIGURE 1



Notes:

1. TR1 - Impacts encountered ~4 ft. below grade (b.g.) throughout the full 10 ft. length.
2. TR2 - Impacts encountered between 2-3 ft. b.g. throughout 15 ft. length.
3. TH1 - Impacts into a dense and competent sandstone penetrated to 8 ft. b.g.
4. TH2 - Impacts discovered ~2 ft. b.g. Fence wiring also exposed.
5. TH3 - Dense and competent sandstone encountered at 1-1.5 ft. b.g.
6. Southeast end of drip pot did not encounter any discoloration to 8.5 ft. b.g.
7. Drip pot - SE end ~3 ft. b.g., NW end ~4 ft. b.g., 30 inch diameter, 21 ft. in length.
8. Impacted soil and/or sandstone - light gray to black, dry to moist, very apparent hydrocarbon odor, mostly in northern section.

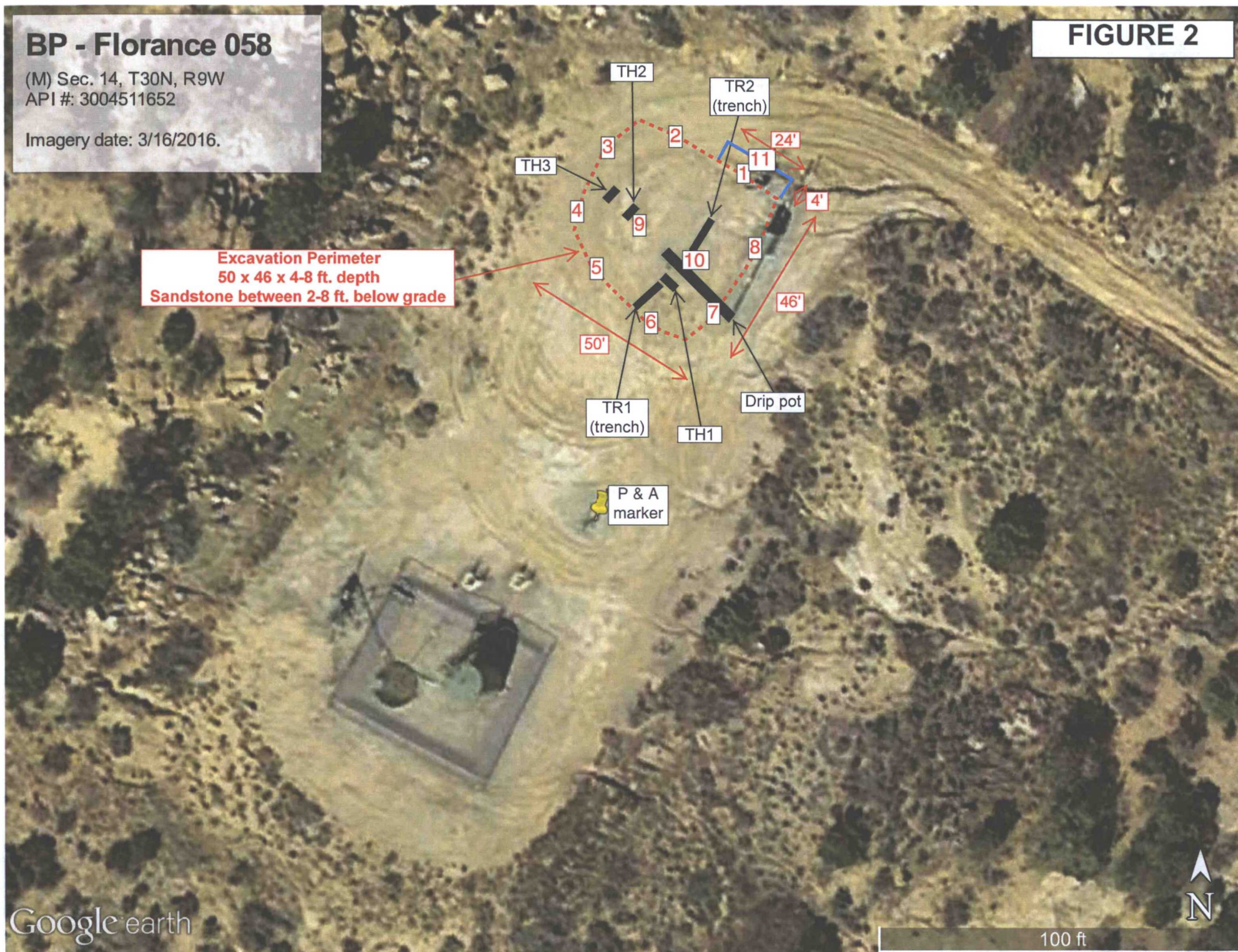
BP - Florance 058

(M) Sec. 14, T30N, R9W
API #: 3004511652

Imagery date: 3/16/2016.

FIGURE 2

Excavation Perimeter
50 x 46 x 4-8 ft. depth
Sandstone between 2-8 ft. below grade



BP AMERICA PRODUCTION COMPANY

Florance 058 - (Cleanup of Historical Release near Drip Pot)

Unit Letter M, Section 14, T30N, R9W - API Number: 30-045-11652

SAMPLE ID & MAP NUMBER		SAMPLE DATE	SAMPLE TIME	SAMPLING COLLECTION	FIELD OVM READING (ppm)	TPH - cumulative (ppm)	Benzene (ppm)	BTEX - cumulative (ppm)	Soil Description / Comments
TH1 @ 8' (RELEASE)	TH1	11/30/16	1340	GRAB	867	2,440	ND	14.8	Sandstone between 2'-8' below grade. Material ultimately excavated.
3pc_EB @ 5' - 8' Release		12/02/16	1445	COMP.	NA	3,150	ND	12.2	Sandstone between 2'-8' below grade.
3pc_NSW @ 3' - 5'		12/02/16	1455	COMP.	NA	38,500	3.9	109.6	Sandstone between 2'-8' below grade. Material ultimately excavated.
5PC - NESW @ 3' - 5'	1	12/06/16	1415	COMP.	50.4	9,000	0.47	34.17	Sandstone between 2'-8' below grade. Material ultimately excavated.
5PC - NWSW @ 3' - 5'	2	12/06/16	1418	COMP.	19.4	2,410	ND	2.25	Sandstone between 2'-8' below grade.
5PC - WNSW @ 2' - 5'	3	12/06/16	1423	COMP.	174	794	ND	1.79	Sandstone between 2'-8' below grade.
5PC - WSSW @ 2' - 8'	4	12/06/16	1429	COMP.	198	2,150	ND	10.1	Sandstone between 2'-8' below grade.
5PC - SWSW @ 2' - 6'	5	12/06/16	1445	COMP.	66	312	ND	ND	Sandstone between 2'-8' below grade.
5PC - SESW @ 2' - 6'	6	12/06/16	1433	COMP.	86	3,380	0.10	14.30	Sandstone between 2'-8' below grade.
5PC - ESSW @ 2' - 6'	7	12/06/16	1436	COMP.	17.5	1,880	ND	2.3	Sandstone between 2'-8' below grade.
5PC - ENSW @ 2' - 6'	8	12/06/16	1440	COMP.	3.6	2,082	ND	ND	Sandstone between 2'-8' below grade.
5PC - WEB @ 6' - 8'	9	12/06/16	1446	COMP.	21.6	1,290	ND	2.0	Sandstone between 2'-8' below grade.
5PC - EEB @ 4' - 8'	10	12/06/16	1451	COMP.	27.1	1,338	ND	0.36	Sandstone between 2'-8' below grade.
5PC-Ext. NE Wall@2'-5'	11	12/08/16	1340	COMP.	18.0	205	ND	ND	Sandstone between 2'-8' below grade.
NMOCD RELEASE CLOSURE STANDARDS (soils) -					100	5,000	10	50	

Notes:

OVM - Organic vapor meter or photo-ionization detector (PID).
 TPH - Total petroleum hydrocarbons by US EPA Method 8015B.
 BTEX - Benzene, toluene, ethylbenzene, total xylenes by US EPA Method 8021B.

ppm - Parts per million or milligram per kilogram (mg/Kg).
 ND - Not detected at Reporting Limit.
 NMOCD - New Mexico Oil Conservation Division.
 NA - Not available.

NMOCD RELEASE CLOSURE STANDARDS REFERENCE: "Guidelines for Remediation of Leaks, Spills and Releases" dated: August 13, 1993.

OVM CALIBRATION: RESPONSE FACTOR = 1.00, CALIBRATION GAS - 100 ppm ISOBUTYLENE.

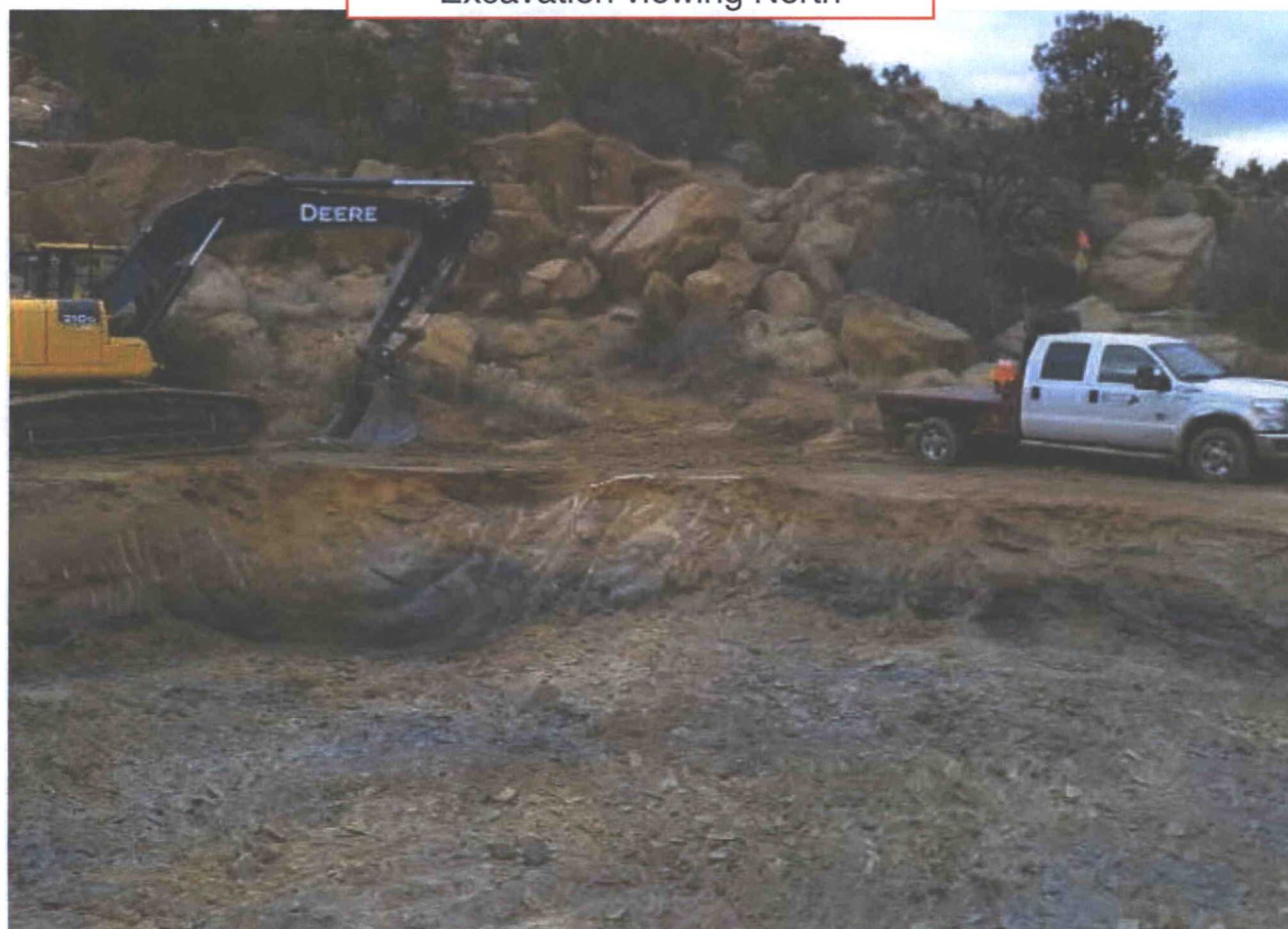
OVM CALIBRATION DATA

DATE	TIME	READING
11/30/16	1355	100.0
12/06/16	1500	100.4

DATE	TIME	READING
12/08/16	1353	100.3



Excavation viewing North



FLORANCE 058 - Excavation viewing West



Excavation viewing South



FLORANCE 058 - Excavation viewing East



Florance 58
Extended NE Wall
Dec 8, 2016



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

Lab Order 1612005

Date Reported: 12/2/2016

CLIENT: Blagg Engineering**Client Sample ID:** TH1 @ 8' (RELEASE)**Project:** Florance 58**Collection Date:** 11/30/2016 1:40:00 PM**Lab ID:** 1612005-001**Matrix:** MEOH (SOIL)**Received Date:** 12/1/2016 8:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	12/1/2016 11:12:59 AM	28951
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	1700	49		mg/Kg	5	12/1/2016 1:57:21 PM	28941
Motor Oil Range Organics (MRO)	310	240		mg/Kg	5	12/1/2016 1:57:21 PM	28941
Surr: DNOP	111	70-130		%Rec	5	12/1/2016 1:57:21 PM	28941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	430	39		mg/Kg	10	12/1/2016 10:22:51 AM	28928
Surr: BFB	346	68.3-144	S	%Rec	10	12/1/2016 10:22:51 AM	28928
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.20		mg/Kg	10	12/1/2016 10:22:51 AM	28928
Toluene	ND	0.39		mg/Kg	10	12/1/2016 10:22:51 AM	28928
Ethylbenzene	1.8	0.39		mg/Kg	10	12/1/2016 10:22:51 AM	28928
Xylenes, Total	13	0.79		mg/Kg	10	12/1/2016 10:22:51 AM	28928
Surr: 4-Bromofluorobenzene	123	80-120	S	%Rec	10	12/1/2016 10:22:51 AM	28928

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1612116

Date Reported: 12/6/2016

CLIENT: Blagg Engineering

Client Sample ID: 3pc_EB@5'-8' Release

Project: Florance 58

Collection Date: 12/2/2016 2:45:00 PM

Lab ID: 1612116-001

Matrix: MEOH (SOIL)

Received Date: 12/3/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	2300	96		mg/Kg	10	12/5/2016 2:24:20 PM	28987
Motor Oil Range Organics (MRO)	590	480		mg/Kg	10	12/5/2016 2:24:20 PM	28987
Surr: DNOP	0	70-130	S	%Rec	10	12/5/2016 2:24:20 PM	28987
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	260	18		mg/Kg	5	12/5/2016 11:52:52 AM	28975
Surr: BFB	442	68.3-144	S	%Rec	5	12/5/2016 11:52:52 AM	28975
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.089		mg/Kg	5	12/5/2016 11:52:52 AM	28975
Toluene	ND	0.18		mg/Kg	5	12/5/2016 11:52:52 AM	28975
Ethylbenzene	1.2	0.18		mg/Kg	5	12/5/2016 11:52:52 AM	28975
Xylenes, Total	11	0.36		mg/Kg	5	12/5/2016 11:52:52 AM	28975
Surr: 4-Bromofluorobenzene	137	80-120	S	%Rec	5	12/5/2016 11:52:52 AM	28975

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1612116

Date Reported: 12/6/2016

CLIENT: Blagg Engineering

Client Sample ID: 3pc-N5W@3'-5'

Project: Florance 58

Collection Date: 12/2/2016 2:55:00 PM

Lab ID: 1612116-002

Matrix: MEOH (SOIL)

Received Date: 12/3/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	26000	930		mg/Kg	100	12/5/2016 1:29:43 PM	28987
Motor Oil Range Organics (MRO)	11000	4600		mg/Kg	100	12/5/2016 1:29:43 PM	28987
Surr: DNOP	0	70-130	S	%Rec	100	12/5/2016 1:29:43 PM	28987
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	1500	79		mg/Kg	20	12/5/2016 11:05:35 AM	28975
Surr: BFB	253	68.3-144	S	%Rec	20	12/5/2016 11:05:35 AM	28975
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	3.9	0.40		mg/Kg	20	12/5/2016 11:05:35 AM	28975
Toluene	19	0.79		mg/Kg	20	12/5/2016 11:05:35 AM	28975
Ethylbenzene	5.7	0.79		mg/Kg	20	12/5/2016 11:05:35 AM	28975
Xylenes, Total	81	1.6		mg/Kg	20	12/5/2016 11:05:35 AM	28975
Surr: 4-Bromofluorobenzene	124	80-120	S	%Rec	20	12/5/2016 11:05:35 AM	28975

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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

Lab Order 1612292

Date Reported: 12/8/2016

CLIENT: Blagg Engineering**Client Sample ID:** 5PC-NESW@3'-5'**Project:** Florance 58**Collection Date:** 12/6/2016 2:15:00 PM**Lab ID:** 1612292-001**Matrix:** MEOH (SOIL)**Received Date:** 12/7/2016 8:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	12/7/2016 10:51:55 AM	29050
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	1400	21		mg/Kg	5	12/7/2016 11:20:00 AM	G39222
Surr: BFB	125	70-130		%Rec	5	12/7/2016 11:20:00 AM	G39222
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	5900	98		mg/Kg	10	12/7/2016 10:31:56 AM	29043
Motor Oil Range Organics (MRO)	1700	490		mg/Kg	10	12/7/2016 10:31:56 AM	29043
Surr: DNOP	0	70-130	S	%Rec	10	12/7/2016 10:31:56 AM	29043
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	0.47	0.10		mg/Kg	5	12/7/2016 11:20:00 AM	L39222
Toluene	ND	0.21		mg/Kg	5	12/7/2016 11:20:00 AM	L39222
Ethylbenzene	2.7	0.21		mg/Kg	5	12/7/2016 11:20:00 AM	L39222
Xylenes, Total	31	0.42		mg/Kg	5	12/7/2016 11:20:00 AM	L39222
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	5	12/7/2016 11:20:00 AM	L39222
Surr: 4-Bromofluorobenzene	82.2	70-130		%Rec	5	12/7/2016 11:20:00 AM	L39222
Surr: Dibromofluoromethane	102	70-130		%Rec	5	12/7/2016 11:20:00 AM	L39222
Surr: Toluene-d8	88.3	70-130		%Rec	5	12/7/2016 11:20:00 AM	L39222

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1612292

Date Reported: 12/8/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 5PC-NWSW@3'-5'

Project: Florance 58

Collection Date: 12/6/2016 2:18:00 PM

Lab ID: 1612292-002

Matrix: MEOH (SOIL)

Received Date: 12/7/2016 8:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	12/7/2016 11:04:19 AM	29050
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	260	4.0		mg/Kg	1	12/7/2016 12:41:01 PM	G39223
Surr: BFB	180	70-130	S	%Rec	1	12/7/2016 12:41:01 PM	G39223
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	1800	49		mg/Kg	5	12/7/2016 12:41:13 PM	29043
Motor Oil Range Organics (MRO)	350	240		mg/Kg	5	12/7/2016 12:41:13 PM	29043
Surr: DNOP	93.0	70-130		%Rec	5	12/7/2016 12:41:13 PM	29043
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.020		mg/Kg	1	12/7/2016 12:41:01 PM	SL39223
Toluene	ND	0.040		mg/Kg	1	12/7/2016 12:41:01 PM	SL39223
Ethylbenzene	0.15	0.040		mg/Kg	1	12/7/2016 12:41:01 PM	SL39223
Xylenes, Total	2.1	0.080		mg/Kg	1	12/7/2016 12:41:01 PM	SL39223
Surr: 1,2-Dichloroethane-d4	97.8	70-130		%Rec	1	12/7/2016 12:41:01 PM	SL39223
Surr: 4-Bromofluorobenzene	131	70-130	S	%Rec	1	12/7/2016 12:41:01 PM	SL39223
Surr: Dibromofluoromethane	93.6	70-130		%Rec	1	12/7/2016 12:41:01 PM	SL39223
Surr: Toluene-d8	95.6	70-130		%Rec	1	12/7/2016 12:41:01 PM	SL39223

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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

Lab Order 1612292

Date Reported: 12/8/2016

CLIENT: Blagg Engineering**Client Sample ID:** SPC-WNSW@2'-5'**Project:** Florance 58**Collection Date:** 12/6/2016 2:23:00 PM**Lab ID:** 1612292-003**Matrix:** MEOH (SOIL)**Received Date:** 12/7/2016 8:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	12/7/2016 11:16:44 AM	29050
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	190	3.8		mg/Kg	1	12/7/2016 1:09:46 PM	G39223
Surr: BFB	120	70-130		%Rec	1	12/7/2016 1:09:46 PM	G39223
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	510	9.5		mg/Kg	1	12/7/2016 1:02:43 PM	29043
Motor Oil Range Organics (MRO)	94	48		mg/Kg	1	12/7/2016 1:02:43 PM	29043
Surr: DNOP	87.4	70-130		%Rec	1	12/7/2016 1:02:43 PM	29043
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.019		mg/Kg	1	12/7/2016 1:09:46 PM	SL39223
Toluene	ND	0.038		mg/Kg	1	12/7/2016 1:09:46 PM	SL39223
Ethylbenzene	0.19	0.038		mg/Kg	1	12/7/2016 1:09:46 PM	SL39223
Xylenes, Total	1.6	0.076		mg/Kg	1	12/7/2016 1:09:46 PM	SL39223
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%Rec	1	12/7/2016 1:09:46 PM	SL39223
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	12/7/2016 1:09:46 PM	SL39223
Surr: Dibromofluoromethane	96.7	70-130		%Rec	1	12/7/2016 1:09:46 PM	SL39223
Surr: Toluene-d8	97.4	70-130		%Rec	1	12/7/2016 1:09:46 PM	SL39223

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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

Lab Order 1612292

Date Reported: 12/8/2016

CLIENT: Blagg Engineering**Client Sample ID:** SPC-WSSW@2'-8'**Project:** Florance 58**Collection Date:** 12/6/2016 2:29:00 PM**Lab ID:** 1612292-004**Matrix:** MEOH (SOIL)**Received Date:** 12/7/2016 8:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	12/7/2016 11:29:08 AM	29050
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	600	20		mg/Kg	5	12/7/2016 12:04:45 PM	G39222
Surr: BFB	109	70-130		%Rec	5	12/7/2016 12:04:45 PM	G39222
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	1300	19		mg/Kg	2	12/7/2016 1:24:11 PM	29043
Motor Oil Range Organics (MRO)	250	96		mg/Kg	2	12/7/2016 1:24:11 PM	29043
Surr: DNOP	93.9	70-130		%Rec	2	12/7/2016 1:24:11 PM	29043
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.10		mg/Kg	5	12/7/2016 12:04:45 PM	L39222
Toluene	ND	0.20		mg/Kg	5	12/7/2016 12:04:45 PM	L39222
Ethylbenzene	1.1	0.20		mg/Kg	5	12/7/2016 12:04:45 PM	L39222
Xylenes, Total	9.0	0.41		mg/Kg	5	12/7/2016 12:04:45 PM	L39222
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	5	12/7/2016 12:04:45 PM	L39222
Surr: 4-Bromofluorobenzene	78.0	70-130		%Rec	5	12/7/2016 12:04:45 PM	L39222
Surr: Dibromofluoromethane	108	70-130		%Rec	5	12/7/2016 12:04:45 PM	L39222
Surr: Toluene-d8	96.4	70-130		%Rec	5	12/7/2016 12:04:45 PM	L39222

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1612292

Date Reported: 12/8/2016

CLIENT: Blagg Engineering

Client Sample ID: SPC-SWSW@2'-6'

Project: Florance 58

Collection Date: 12/6/2016 2:45:00 PM

Lab ID: 1612292-005

Matrix: MEOH (SOIL)

Received Date: 12/7/2016 8:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	12/7/2016 11:41:33 AM	29050
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	59	21		mg/Kg	5	12/7/2016 12:33:33 PM	G39222
Surr: BFB	91.4	70-130		%Rec	5	12/7/2016 12:33:33 PM	G39222
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	180	9.9		mg/Kg	1	12/7/2016 1:45:46 PM	29043
Motor Oil Range Organics (MRO)	73	50		mg/Kg	1	12/7/2016 1:45:46 PM	29043
Surr: DNOP	84.9	70-130		%Rec	1	12/7/2016 1:45:46 PM	29043
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.10		mg/Kg	5	12/7/2016 12:33:33 PM	L39222
Toluene	ND	0.21		mg/Kg	5	12/7/2016 12:33:33 PM	L39222
Ethylbenzene	ND	0.21		mg/Kg	5	12/7/2016 12:33:33 PM	L39222
Xylenes, Total	ND	0.41		mg/Kg	5	12/7/2016 12:33:33 PM	L39222
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	5	12/7/2016 12:33:33 PM	L39222
Surr: 4-Bromofluorobenzene	76.5	70-130		%Rec	5	12/7/2016 12:33:33 PM	L39222
Surr: Dibromofluoromethane	108	70-130		%Rec	5	12/7/2016 12:33:33 PM	L39222
Surr: Toluene-d8	92.2	70-130		%Rec	5	12/7/2016 12:33:33 PM	L39222

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1612292

Date Reported: 12/8/2016

CLIENT: Blagg Engineering

Client Sample ID: SPC-SESW@2'-6'

Project: Florance 58

Collection Date: 12/6/2016 2:33:00 PM

Lab ID: 1612292-006

Matrix: MEOH (SOIL)

Received Date: 12/7/2016 8:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	12/7/2016 11:53:57 AM	29050
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	730	20		mg/Kg	5	12/7/2016 1:02:38 PM	G39222
Surr: BFB	117	70-130		%Rec	5	12/7/2016 1:02:38 PM	G39222
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	2200	46		mg/Kg	5	12/7/2016 2:28:44 PM	29043
Motor Oil Range Organics (MRO)	450	230		mg/Kg	5	12/7/2016 2:28:44 PM	29043
Surr: DNOP	101	70-130		%Rec	5	12/7/2016 2:28:44 PM	29043
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	0.10	0.10		mg/Kg	5	12/7/2016 1:02:38 PM	L39222
Toluene	ND	0.20		mg/Kg	5	12/7/2016 1:02:38 PM	L39222
Ethylbenzene	1.2	0.20		mg/Kg	5	12/7/2016 1:02:38 PM	L39222
Xylenes, Total	13	0.40		mg/Kg	5	12/7/2016 1:02:38 PM	L39222
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	5	12/7/2016 1:02:38 PM	L39222
Surr: 4-Bromofluorobenzene	73.8	70-130		%Rec	5	12/7/2016 1:02:38 PM	L39222
Surr: Dibromofluoromethane	110	70-130		%Rec	5	12/7/2016 1:02:38 PM	L39222
Surr: Toluene-d8	89.6	70-130		%Rec	5	12/7/2016 1:02:38 PM	L39222

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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

Lab Order 1612292

Date Reported: 12/8/2016

CLIENT: Blagg Engineering**Client Sample ID:** 5PC-ESSW@2'-6'**Project:** Florance 58**Collection Date:** 12/6/2016 2:36:00 PM**Lab ID:** 1612292-007**Matrix:** MEOH (SOIL)**Received Date:** 12/7/2016 8:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	12/7/2016 12:06:21 PM	29050
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	240	37		mg/Kg	10	12/7/2016 1:31:29 PM	G39222
Surr: BFB	96.1	70-130		%Rec	10	12/7/2016 1:31:29 PM	G39222
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	1300	19		mg/Kg	2	12/7/2016 1:56:05 PM	29043
Motor Oil Range Organics (MRO)	340	97		mg/Kg	2	12/7/2016 1:56:05 PM	29043
Surr: DNOP	102	70-130		%Rec	2	12/7/2016 1:56:05 PM	29043
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.18		mg/Kg	10	12/7/2016 1:31:29 PM	L39222
Toluene	ND	0.37		mg/Kg	10	12/7/2016 1:31:29 PM	L39222
Ethylbenzene	ND	0.37		mg/Kg	10	12/7/2016 1:31:29 PM	L39222
Xylenes, Total	2.3	0.74		mg/Kg	10	12/7/2016 1:31:29 PM	L39222
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	10	12/7/2016 1:31:29 PM	L39222
Surr: 4-Bromofluorobenzene	71.1	70-130		%Rec	10	12/7/2016 1:31:29 PM	L39222
Surr: Dibromofluoromethane	115	70-130		%Rec	10	12/7/2016 1:31:29 PM	L39222
Surr: Toluene-d8	92.4	70-130		%Rec	10	12/7/2016 1:31:29 PM	L39222

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1612292

Date Reported: 12/8/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: SPC-ENSW@2'-6'

Project: Florance 58

Collection Date: 12/6/2016 2:40:00 PM

Lab ID: 1612292-008

Matrix: MEOH (SOIL)

Received Date: 12/7/2016 8:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	12/7/2016 12:18:47 PM	29050
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	32	8.1		mg/Kg	2	12/7/2016 1:38:30 PM	G39223
Surr: BFB	100	70-130		%Rec	2	12/7/2016 1:38:30 PM	G39223
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	1400	99		mg/Kg	10	12/7/2016 12:08:07 PM	29043
Motor Oil Range Organics (MRO)	650	500		mg/Kg	10	12/7/2016 12:08:07 PM	29043
Surr: DNOP	0	70-130	S	%Rec	10	12/7/2016 12:08:07 PM	29043
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.041		mg/Kg	2	12/7/2016 1:38:30 PM	SL39223
Toluene	ND	0.081		mg/Kg	2	12/7/2016 1:38:30 PM	SL39223
Ethylbenzene	ND	0.081		mg/Kg	2	12/7/2016 1:38:30 PM	SL39223
Xylenes, Total	ND	0.16		mg/Kg	2	12/7/2016 1:38:30 PM	SL39223
Surr: 1,2-Dichloroethane-d4	97.2	70-130		%Rec	2	12/7/2016 1:38:30 PM	SL39223
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	2	12/7/2016 1:38:30 PM	SL39223
Surr: Dibromofluoromethane	101	70-130		%Rec	2	12/7/2016 1:38:30 PM	SL39223
Surr: Toluene-d8	96.8	70-130		%Rec	2	12/7/2016 1:38:30 PM	SL39223

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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

Lab Order 1612292

Date Reported: 12/8/2016

CLIENT: Blagg Engineering**Client Sample ID:** SPC-WEB@6'-8'**Project:** Florance 58**Collection Date:** 12/6/2016 2:46:00 PM**Lab ID:** 1612292-009**Matrix:** MEOH (SOIL)**Received Date:** 12/7/2016 8:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	12/7/2016 12:56:01 PM	29050
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	150	24		mg/Kg	5	12/7/2016 11:43:38 AM	G39223
Surr: BFB	94.7	70-130		%Rec	5	12/7/2016 11:43:38 AM	G39223
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	890	40		mg/Kg	4	12/7/2016 1:29:00 PM	29043
Motor Oil Range Organics (MRO)	250	200		mg/Kg	4	12/7/2016 1:29:00 PM	29043
Surr: DNOP	118	70-130		%Rec	4	12/7/2016 1:29:00 PM	29043
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.12		mg/Kg	5	12/7/2016 11:43:38 AM	SL39223
Toluene	ND	0.24		mg/Kg	5	12/7/2016 11:43:38 AM	SL39223
Ethylbenzene	ND	0.24		mg/Kg	5	12/7/2016 11:43:38 AM	SL39223
Xylenes, Total	2.0	0.49		mg/Kg	5	12/7/2016 11:43:38 AM	SL39223
Surr: 1,2-Dichloroethane-d4	99.1	70-130		%Rec	5	12/7/2016 11:43:38 AM	SL39223
Surr: 4-Bromofluorobenzene	83.3	70-130		%Rec	5	12/7/2016 11:43:38 AM	SL39223
Surr: Dibromofluoromethane	102	70-130		%Rec	5	12/7/2016 11:43:38 AM	SL39223
Surr: Toluene-d8	98.3	70-130		%Rec	5	12/7/2016 11:43:38 AM	SL39223

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1612292

Date Reported: 12/8/2016

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** 5PC-EEB@4'-8'**Project:** Florance 58**Collection Date:** 12/6/2016 2:51:00 PM**Lab ID:** 1612292-010**Matrix:** MEOH (SOIL)**Received Date:** 12/7/2016 8:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	12/7/2016 1:08:26 PM	29050
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	68	4.3		mg/Kg	1	12/7/2016 12:12:19 PM	G39223
Surr: BFB	108	70-130		%Rec	1	12/7/2016 12:12:19 PM	G39223
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	980	40		mg/Kg	4	12/7/2016 1:02:02 PM	29043
Motor Oil Range Organics (MRO)	290	200		mg/Kg	4	12/7/2016 1:02:02 PM	29043
Surr: DNOP	116	70-130		%Rec	4	12/7/2016 1:02:02 PM	29043
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.021		mg/Kg	1	12/7/2016 12:12:19 PM	SL39223
Toluene	ND	0.043		mg/Kg	1	12/7/2016 12:12:19 PM	SL39223
Ethylbenzene	ND	0.043		mg/Kg	1	12/7/2016 12:12:19 PM	SL39223
Xylenes, Total	0.36	0.086		mg/Kg	1	12/7/2016 12:12:19 PM	SL39223
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%Rec	1	12/7/2016 12:12:19 PM	SL39223
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	12/7/2016 12:12:19 PM	SL39223
Surr: Dibromofluoromethane	101	70-130		%Rec	1	12/7/2016 12:12:19 PM	SL39223
Surr: Toluene-d8	94.2	70-130		%Rec	1	12/7/2016 12:12:19 PM	SL39223

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1612497

Date Reported: 12/12/2016

CLIENT: Blagg Engineering

Client Sample ID: Extended NE Wall 5-pt @ 2'-5'

Project: Florance 58

Collection Date: 12/8/2016 1:40:00 PM

Lab ID: 1612497-001

Matrix: MEOH (SOIL)

Received Date: 12/9/2016 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	12/9/2016 10:48:10 AM	29104
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	140	9.9		mg/Kg	1	12/9/2016 10:15:30 AM	29095
Motor Oil Range Organics (MRO)	65	49		mg/Kg	1	12/9/2016 10:15:30 AM	29095
Surr: DNOP	98.2	70-130		%Rec	1	12/9/2016 10:15:30 AM	29095
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	15		mg/Kg	4	12/9/2016 9:56:54 AM	29078
Surr: BFB	110	68.3-144		%Rec	4	12/9/2016 9:56:54 AM	29078
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.075		mg/Kg	4	12/9/2016 9:56:54 AM	29078
Toluene	ND	0.15		mg/Kg	4	12/9/2016 9:56:54 AM	29078
Ethylbenzene	ND	0.15		mg/Kg	4	12/9/2016 9:56:54 AM	29078
Xylenes, Total	ND	0.30		mg/Kg	4	12/9/2016 9:56:54 AM	29078
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	4	12/9/2016 9:56:54 AM	29078

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Chain-of-Custody Record		Turn-Around Time: SAME DAY	
Client: BLAGG ENGR. / BP AMERICA		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush	
Mailing Address: P.O. BOX 87		Project Name: FLORANCE # 58	
BLOOMFIELD, NM 87413		Project #:	
Phone #: (505) 632-1199		Project Manager: NELSON VELEZ	
Email or Fax#:		Sampler: NELSON VELEZ	
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		Office: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Accreditation: <input checked="" type="checkbox"/> NELAP <input type="checkbox"/> Other _____		Sample Temperature: _____	
EDD (Type) _____			

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

ste:	Time:	Relinquished by:	Received by:	Date	Time
1/30/16	1830	[Signature]	[Signature]	1/30/16	1830
ste:	Time:	Relinquished by:	Received by:	Date	Time
3/4/16	1904	[Signature]	[Signature]	12/01/16	0825

Remarks: <u>BILL DIRECTLY TO BP USING CONTACT LISTED WITH CORRESPONDING VID & OTHER CODES REFERENCED:</u>	
Steve Moskal	
VID: ZBEEBSOPLG	GL: 745277
AFE #: X7-006LW-E:REST	SIO: 190040007679

If necessary, samples submitted to Hail 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.

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.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612005

02-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	MB-28951	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	28951	RunNo:	39109					
Prep Date:	12/1/2016	Analysis Date:	12/1/2016	SeqNo:	1223465	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	2.5	1.5								

Sample ID	LCS-28951	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	28951	RunNo:	39109					
Prep Date:	12/1/2016	Analysis Date:	12/1/2016	SeqNo:	1223466	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			B

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612005

02-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	LCS-28941	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	28941	RunNo:	39082					
Prep Date:	12/1/2016	Analysis Date:	12/1/2016	SeqNo:	1222609	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.4	62.6	124			
Surr: DNOP	4.4		5.000		88.4	70	130			

Sample ID	MB-28941	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	28941	RunNo:	39082					
Prep Date:	12/1/2016	Analysis Date:	12/1/2016	SeqNo:	1222610	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		94.5	70	130			

Sample ID	1612005-001AMS	SampType:	MS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	TH1 @ 8' (RELEASE	Batch ID:	28941	RunNo:	39082					
Prep Date:	12/1/2016	Analysis Date:	12/1/2016	SeqNo:	1222684	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	1800	48	47.53	1677	209	51.6	130			S
Surr: DNOP	6.0		4.753		126	70	130			

Sample ID	1612005-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	TH1 @ 8' (RELEASE	Batch ID:	28941	RunNo:	39082					
Prep Date:	12/1/2016	Analysis Date:	12/1/2016	SeqNo:	1222685	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	1600	47	46.55	1677	-130	51.6	130	9.44	20	S
Surr: DNOP	5.7		4.655		123	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612005

02-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	MB-28928	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	28928	RunNo:	39086					
Prep Date:	11/30/2016	Analysis Date:	12/1/2016	SeqNo:	1222904	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

810

1000

81.3

68.3

144

Sample ID	LCS-28928	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	28928	RunNo:	39086					
Prep Date:	11/30/2016	Analysis Date:	12/1/2016	SeqNo:	1222905	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Gasoline Range Organics (GRO)

24

5.0

25.00

0

97.8

74.6

123

Surr: BFB

880

1000

88.0

68.3

144

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612005

02-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	MB-28928	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID:	PBS	Batch ID: 28928		RunNo: 39086						
Prep Date:	11/30/2016	Analysis Date: 12/1/2016		SeqNo: 1222915		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.8	80	120			

Sample ID	LCS-28928	SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID: 28928			RunNo: 39086					
Prep Date:	11/30/2016	Analysis Date: 12/1/2016			SeqNo: 1222916		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.4	75.2	115			
Toluene	0.95	0.050	1.000	0	94.7	80.7	112			
Ethylbenzene	0.96	0.050	1.000	0	96.2	78.9	117			
Xylenes, Total	2.8	0.10	3.000	0	94.8	79.2	115			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.7	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



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: 1612005

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

12/1/2016 8:25:00 AM

Completed By: Lindsay Mangin

12/1/2016 8:45:54 AM

Reviewed By: ajs

12/01/16

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	1.6	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612116

06-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	LCS-28971	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	28971	RunNo:	39131					
Prep Date:	12/2/2016	Analysis Date:	12/5/2016	SeqNo:	1224358	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.4	70	130			

Sample ID	MB-28971	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	28971	RunNo:	39131					
Prep Date:	12/2/2016	Analysis Date:	12/5/2016	SeqNo:	1224359	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.7		10.00		96.6	70	130			

Sample ID	MB-28987	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	28987	RunNo:	39131					
Prep Date:	12/5/2016	Analysis Date:	12/5/2016	SeqNo:	1224588	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		98.0	70	130			

Sample ID	LCS-28987	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	28987	RunNo:	39131					
Prep Date:	12/5/2016	Analysis Date:	12/5/2016	SeqNo:	1224590	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.6	62.6	124			
Surr: DNOP	4.8		5.000		96.0	70	130			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612116

06-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	MB-28975	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	28975	RunNo:	39140					
Prep Date:	12/2/2016	Analysis Date:	12/5/2016	SeqNo:	1224951	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	810		1000		80.7	68.3	144			

Sample ID	LCS-28975	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	28975	RunNo:	39140					
Prep Date:	12/2/2016	Analysis Date:	12/5/2016	SeqNo:	1224952	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.0	74.6	123			
Surr: BFB	860		1000		86.5	68.3	144			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612116

06-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	MB-28975	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID:	PBS	Batch ID: 28975		RunNo: 39140						
Prep Date:	12/2/2016	Analysis Date: 12/5/2016		SeqNo: 1224968		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		93.7	80	120			

Sample ID	LCS-28975	SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID: 28975			RunNo: 39140					
Prep Date:	12/2/2016	Analysis Date: 12/5/2016			SeqNo: 1224969		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	108	75.2	115			
Toluene	0.99	0.050	1.000	0	99.1	80.7	112			
Ethylbenzene	0.95	0.050	1.000	0	95.5	78.9	117			
Xylenes, Total	2.8	0.10	3.000	0	94.6	79.2	115			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.9	80	120			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



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: 1612116

RcptNo: 1

Received by/date:

[Signature] 12/03/16

Logged By: Lindsay Mangin

12/3/2016 8:00:00 AM

[Signature]

Completed By: Lindsay Mangin

12/5/2016 7:22:26 AM

[Signature]

Reviewed By:

[Signature] 12/05/16

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 8.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612292

08-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	MB-29050	SampType:	mblk	TestCode:	EPA Method 300.0: Anlons					
Client ID:	PBS	Batch ID:	29050	RunNo:	39240					
Prep Date:	12/7/2016	Analysis Date:	12/7/2016	SeqNo:	1228016	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-29050	SampType:	lcs	TestCode:	EPA Method 300.0: Anlons					
Client ID:	LCSS	Batch ID:	29050	RunNo:	39240					
Prep Date:	12/7/2016	Analysis Date:	12/7/2016	SeqNo:	1228017	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612292

08-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	LCS-29043	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	29043	RunNo:	39207					
Prep Date:	12/7/2016	Analysis Date:	12/7/2016	SeqNo:	1226819	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.0	62.6	124			
Surr: DNOP	3.8		5.000		76.4	70	130			

Sample ID	MB-29043	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	29043	RunNo:	39207					
Prep Date:	12/7/2016	Analysis Date:	12/7/2016	SeqNo:	1226821	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.2		10.00		82.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612292

08-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	L39222	RunNo:	39222					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227148	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	109	70	130			
Toluene	0.97	0.050	1.000	0	97.0	70	130			
Surr: 1,2-Dichloroethane-d4	0.54		0.5000		108	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.0	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130			
Surr: Toluene-d8	0.47		0.5000		93.1	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	L39222	RunNo:	39222					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227150	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		104	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.2	70	130			
Surr: Dibromofluoromethane	0.57		0.5000		114	70	130			
Surr: Toluene-d8	0.47		0.5000		93.3	70	130			

Sample ID	1612292-001ams	SampType:	MS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	5PC-NESW@3'-5'	Batch ID:	L39222	RunNo:	39222					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227632	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.5	0.10	4.180	0.4735	95.7	49.2	155			
Toluene	4.2	0.21	4.180	0	100	52	154			
Surr: 1,2-Dichloroethane-d4	2.2		2.090		103	70	130			
Surr: 4-Bromofluorobenzene	1.6		2.090		74.6	70	130			
Surr: Dibromofluoromethane	2.0		2.090		96.3	70	130			
Surr: Toluene-d8	2.1		2.090		98.3	70	130			

Sample ID	1612292-001amsd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	5PC-NESW@3'-5'	Batch ID:	L39222	RunNo:	39222					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227633	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.3	0.10	4.180	0.4735	91.5	49.2	155	4.03	20	
Toluene	4.1	0.21	4.180	0	98.5	52	154	1.74	20	

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612292

08-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	1612292-001amsd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	5PC-NESW@3'-5'	Batch ID:	L39222	RunNo:	39222					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227633	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	2.1		2.090		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	1.5		2.090		73.0	70	130	0	0	
Surr: Dibromofluoromethane	1.9		2.090		92.3	70	130	0	0	
Surr: Toluene-d8	2.1		2.090		98.1	70	130	0	0	

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	SL39223	RunNo:	39223					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227669	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		98.0	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.4	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		105	70	130			
Surr: Toluene-d8	0.50		0.5000		99.5	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	SL39223	RunNo:	39223					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227670	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	108	70	130			
Toluene	1.1	0.050	1.000	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		97.9	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.4	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.1	70	130			
Surr: Toluene-d8	0.48		0.5000		96.8	70	130			

Sample ID	1612292-009ams	SampType:	MS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	5PC-WEB@6'-8'	Batch ID:	SL39223	RunNo:	39223					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227671	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	5.3	0.12	4.855	0	109	49.2	155			
Toluene	5.0	0.24	4.855	0	104	52	154			
Surr: 1,2-Dichloroethane-d4	2.5		2.427		102	70	130			
Surr: 4-Bromofluorobenzene	2.2		2.427		89.2	70	130			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612292

08-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	1612292-009ams	SampType:	MS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	5PC-WEB@6'-8'	Batch ID:	SL39223	RunNo:	39223					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227671	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	2.4		2.427		99.4	70	130			
Surr: Toluene-d8	2.3		2.427		93.6	70	130			

Sample ID	1612292-009amsd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	5PC-WEB@6'-8'	Batch ID:	SL39223	RunNo:	39223					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227672	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	5.3	0.12	4.855	0	109	49.2	155	0.129	20	
Toluene	4.9	0.24	4.855	0	100	52	154	3.55	20	
Surr: 1,2-Dichloroethane-d4	2.5		2.427		102	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.1		2.427		86.2	70	130	0	0	
Surr: Dibromofluoromethane	2.5		2.427		101	70	130	0	0	
Surr: Toluene-d8	2.2		2.427		91.5	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612292

08-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	G39222	RunNo:	39222					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227171	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	400		500.0		80.2	70	130			

Sample ID	1612292-001AM	SampType:	MS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	5PC-NESW@3'-5'	Batch ID:	G39222	RunNo:	39222					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227623	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	1400	21	104.5	1381	11.4	52.3	132			S
Surr: BFB	2500		2090		120	70	130			

Sample ID	1612292-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	5PC-NESW@3'-5'	Batch ID:	G39222	RunNo:	39222					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227624	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	1400	21	104.5	1381	-28.5	52.3	132	3.04	20	S
Surr: BFB	2200		2090		106	70	130	0	0	

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	G39222	RunNo:	39222					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227625	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	62.9	123			
Surr: BFB	420		500.0		83.7	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	G39223	RunNo:	39223					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227689	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	470		500.0		94.5	70	130			

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	G39223	RunNo:	39223					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227690	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612292

08-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	2.5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS	Batch ID: G39223			RunNo: 39223					
Prep Date:		Analysis Date: 12/7/2016			SeqNo: 1227690		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.4	62.9	123			
Surr: BFB	490		500.0		98.5	70	130			

Sample ID	1612292-008ams		SampType:	MS		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	5PC-ENSW@2'-6'		Batch ID:	G39223		RunNo:	39223				
Prep Date:			Analysis Date:	12/7/2016		SeqNo:	1227691		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	64	8.1	40.52	32.35	78.0	52.3	132				
Surr: BFB	820		810.4		101	70	130				

Sample ID	1612292-008amsd	SampType:	MSD	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	5PC-ENSW@2'-6'	Batch ID:	G39223	RunNo:	39223					
Prep Date:		Analysis Date:	12/7/2016	SeqNo:	1227692	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	62	8.1	40.52	32.35	73.9	52.3	132	2.67	20	
Surr: BFB	780		810.4		95.8	70	130	0	0	

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



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: 1612292

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

12/7/2016 8:25:00 AM

Completed By: Lindsay Mangin

12/7/2016 8:34:28 AM

Reviewed By:

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

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

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612497

12-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	MB-29104	SampType:	MBLK	TestCode:	EPA Method 300.0: Anlons					
Client ID:	PBS	Batch ID:	29104	RunNo:	39301					
Prep Date:	12/9/2016	Analysis Date:	12/9/2016	SeqNo:	1230101	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-29104	SampType:	LCS	TestCode:	EPA Method 300.0: Anlons					
Client ID:	LCSS	Batch ID:	29104	RunNo:	39301					
Prep Date:	12/9/2016	Analysis Date:	12/9/2016	SeqNo:	1230102	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.5	90	110			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612497

12-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	LCS-29095	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	29095	RunNo:	39269					
Prep Date:	12/9/2016	Analysis Date:	12/9/2016	SeqNo:	1229305	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.1	62.6	124			
Surr: DNOP	4.8		5.000		95.9	70	130			

Sample ID	MB-29095	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	29095	RunNo:	39269					
Prep Date:	12/9/2016	Analysis Date:	12/9/2016	SeqNo:	1229306	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		109	70	130			

Sample ID	1612497-001AMS	SampType:	MS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	Extended NE Wall 5	Batch ID:	29095	RunNo:	39269					
Prep Date:	12/9/2016	Analysis Date:	12/9/2016	SeqNo:	1229449	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	170	9.3	46.51	143.4	48.7	51.6	130			S
Surr: DNOP	4.7		4.651		100	70	130			

Sample ID	1612497-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	Extended NE Wall 5	Batch ID:	29095	RunNo:	39269					
Prep Date:	12/9/2016	Analysis Date:	12/9/2016	SeqNo:	1229450	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	190	9.3	46.60	143.4	89.3	51.6	130	10.8	20	
Surr: DNOP	4.8		4.660		103	70	130	0	0	

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612497

12-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	MB-29078	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	29078	RunNo:	39283					
Prep Date:	12/8/2016	Analysis Date:	12/9/2016	SeqNo:	1229674	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	860		1000		85.7	68.3	144			

Sample ID	LCS-29078	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	29078	RunNo:	39283					
Prep Date:	12/8/2016	Analysis Date:	12/9/2016	SeqNo:	1229675	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.9	74.6	123			
Surr: BFB	920		1000		92.3	68.3	144			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612497

12-Dec-16

Client: Blagg Engineering

Project: Florance 58

Sample ID	MB-29078	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	29078	RunNo:	39283					
Prep Date:	12/8/2016	Analysis Date:	12/9/2016	SeqNo:	1229693	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.5	80	120			

Sample ID	LCS-29078	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	29078	RunNo:	39283					
Prep Date:	12/8/2016	Analysis Date:	12/9/2016	SeqNo:	1229694	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.9	75.2	115			
Toluene	0.95	0.050	1.000	0	95.1	80.7	112			
Ethylbenzene	0.95	0.050	1.000	0	94.6	78.9	117			
Xylenes, Total	2.9	0.10	3.000	0	95.4	79.2	115			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.5	80	120			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



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

Sample Log-In Check List

Client Name: BLAGG

Work Order Number: 1612497

RcptNo: 1

Received by/date:

Logged By: Ashley Gallegos

12/9/2016 8:20:00 AM

Completed By: Ashley Gallegos

12/9/2016 8:25:11 AM

Reviewed By:

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? Yes ✓ No
(Note discrepancies on chain of custody) # of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ✓ No Adjusted?
14. Is it clear what analyses were requested? Yes ✓ No
15. Were all holding times able to be met? Yes ✓ No Checked by:
(If no, notify customer for authorization.)

Special Handling (if applicable)

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

Person Notified:

Date

By Whom:

Via:

eMail

Phone

Fax

In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

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