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

OIL CONS. DIV DIST. 3
FEB 07 2018

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: 380-A Airport Rd., Durango, CO 81303	Telephone No.: 505-330-9179
Facility Name: Florance AB 031A	Facility Type: Natural gas well

Surface Owner: Fee	Mineral Owner: Fee	API No. 3004522116

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: San Juan
I	12	29N	08W	1,595	South	1,160	East	

Latitude 36.73687° **Longitude** -107.62225°

NATURE OF RELEASE

Type of Release: none	Volume of Release: unknown	Volume Recovered: N/A
Source of Release: below grade tank – 21 bbl	Date and Hour of Occurrence: none	Date and Hour of Discovery: none
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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. The results for chloride were below the stated standards. TPH is below standard for the site specific spill and release guidelines. BTEX was found to be elevated during the closure of the BGT. The impacted soil was remediated via excavation as documented in the attached report.

Describe Area Affected and Cleanup Action Taken.* The impacted soils were fully delineated via excavation, totaling 15'x15'x10D. Approximately 60 cubic yards was excavated and removed from the location. The attached report documents the activities.

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: 2/27/18	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval: —	Attached ☐
Date: February 5, 2018 Phone: 505-330-9179		

* Attach Additional Sheets If Necessary

#NCS1721255504

31

BP America
Florance AB 31A
(I) Sec 12 – T29N – R8W
San Juan County, New Mexico
API: 30-045-22116

Summary Record of Impact Remediation

February 20, 2017 Soils impacted with hydrocarbons encountered during closure of a 21 barrel below grade tank. Subsequent laboratory analytical report of impacted soils immediately below the BGT reported total petroleum hydrocarbons (TPH) at 1,629 ppm and total BTEX at 93.9 ppm.

Site closure standard determined at 5,000 ppm TPH and 50 ppm total BTEX (with 10 ppm benzene) based on:

Horizontal Distance to Water Course > 1,000 feet (0 points)
Distance to Nearest Water Well > 1,000 feet (0 points)
Depth to Groundwater >100 feet (0 points)

September 19, 2017 Conduct initial remediation via excavation of impacts with a backhoe. Site lithology (dense bedrock sandstone) limited vertical extent of excavation. Completed excavation 15' x 15' x 8' deep. Sample sidewalls and base for closure. Sidewalls pass on all constituents, base fails on TPH and BTEX:

Excavation Closure Sampling Test Results
September 19, 2017

Sample ID	Date/Time	Field OVM (ppm)	TPH Method 8015B (mg/Kg)	BTEX Method 8021 (mg/Kg)	Benzene Method 8021 (mg/Kg)	Chloride Method 300 (mg/Kg)
4-Pt Comp (N & E Sidewalls @ 3'-7')	09/19/2017 @ 11:55	1,411	1,950	3.7	ND	ND
4-Pt Comp (W & S Sidewalls @ 3'-7')	09/19/2017 @ 11:50	2,021	670	11.625	0.055	ND
5-Pt Comp (Base) @ 8'	09/19/2017 @ 11:45	2,355	5,370	253.9	3.9	ND
Site Closure Standard:			5,000	50	10	600

January 8, 2018 Resume remedial excavation using trackhoe. Extend vertical extent into dense sandstone an additional 2 feet to the 10' deep base and conduct witnessed sampling of the base. Note that a significant color change was present from the 8' depth (gray staining) to the 10' depth (tan, no staining):

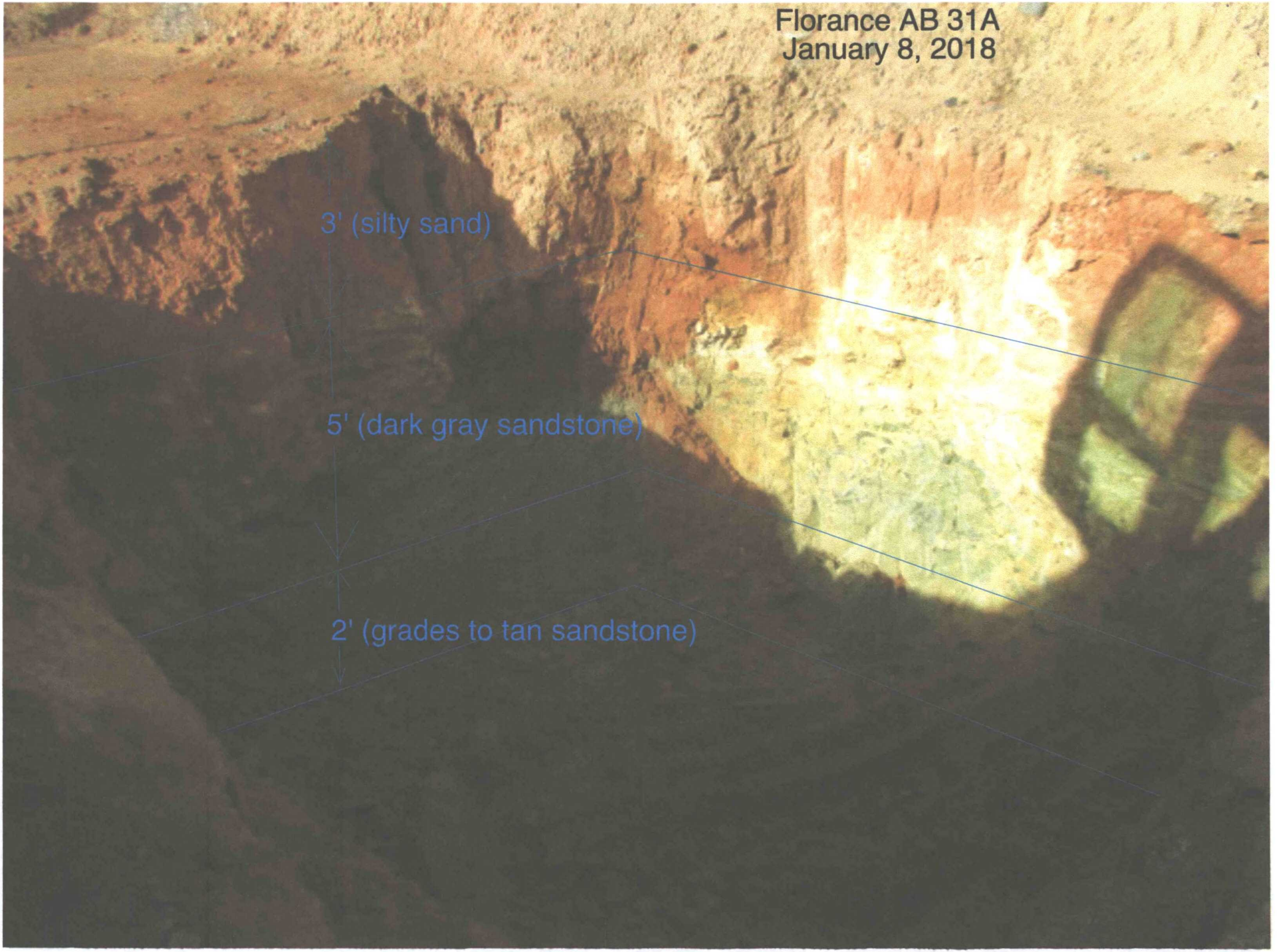
Excavation Closure Sampling Test Results
January 8, 2018

Sample ID	Date/Time	Field OVM (ppm)	TPH Method 8015B (mg/Kg)	BTEX Method 8021 (mg/Kg)	Benzene Method 8021 (mg/Kg)	Chloride Method 300 (mg/Kg)
5-Pt Comp (Base) @ 10'	01/08/2018 @ 11:45	2,793	960	20.5	ND	ND
Site Closure Standard:			5,000	50	10	600

January 9, 2018 Receive rush analytical lab results. Testing determines that excavation meets site closure standards for TPH, BTEX and Chlorides.

January 10, 2018 Remediation crew completes backfilling operations.


Florance AB 31A
(I) Sec 12 - T29N - R8W
API: 30-045-22116
Sept 19, 2017
Excavation Sampling (Site Closure Standard = 5,000 ppm TPH, 10 ppm Benzene, 50 ppm BTEX)
.
N&E Sidewalls: OVM = 1,411 ppm, TPH = 1,950 ppm, BTEX = 3.7 ppm
S&W Sidewalls: OVM = 2,021 ppm, TPH = 670 ppm, BTEX = 11.6 ppm
Base @ 8' depth: OVM = 2,355 ppm, TPH = 5,370 ppm, BTEX = 254 ppm
January 8, 2018
Excavation Sampling
.
Base @ 10' depth: OVM = 2,793 ppm, TPH = 960 ppm, BTEX = 20.5 ppm
(Note: Significant color change between 8' (gray) to 10' (tan), all in dense Sandstone)
Sept 19, 2017
Excavation 15'x15'x8' deep
January 8, 2018
Excavation 15'x15'x10' deep
N
E
W
S
Google earth
60 ft
N


Florance AB 31A
January 8, 2018
3' (silty sand)
5' (dark gray sandstone)
2' (grades to tan sandstone)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 21, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 632-1199
FAX (505) 632-3903

RE: FLORANCE AB #31A OrderNo.: 1709A73

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/20/2017 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 **1709A73**
Date Reported: **9/21/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: FLORANCE AB #31A
Lab ID: 1709A73-001 **Matrix:** SOIL

Client Sample ID: 5PC-EB @ 8' (21)
Collection Date: 9/19/2017 11:45:00 AM
Received Date: 9/20/2017 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/20/2017 11:55:02 AM	33964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	1600	48		mg/Kg	5	9/20/2017 11:05:02 AM	33953
Motor Oil Range Organics (MRO)	470	240		mg/Kg	5	9/20/2017 11:05:02 AM	33953
Surr: DNOP	132	70-130	S	%Rec	5	9/20/2017 11:05:02 AM	33953
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	3300	200		mg/Kg	50	9/20/2017 9:59:54 AM	G45760
Surr: BFB	274	54-150	S	%Rec	50	9/20/2017 9:59:54 AM	G45760
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	3.9	1.0		mg/Kg	50	9/20/2017 9:59:54 AM	B45760
Toluene	57	2.0		mg/Kg	50	9/20/2017 9:59:54 AM	B45760
Ethylbenzene	13	2.0		mg/Kg	50	9/20/2017 9:59:54 AM	B45760
Xylenes, Total	180	4.1		mg/Kg	50	9/20/2017 9:59:54 AM	B45760
Surr: 4-Bromofluorobenzene	132	66.6-132	S	%Rec	50	9/20/2017 9:59:54 AM	B45760

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
PQL	Practical Quanitative Limit	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.

CLIENT: Blagg Engineering
Client Sample ID: 5PC-STOCKPILE (21)
Project: FLORANCE AB #31A
Collection Date: 9/19/2017 12:35:00 PM
Lab ID: 1709A73-002
Matrix: SOIL
Received Date: 9/20/2017 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/20/2017 12:07:26 PM	33964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	500	9.8		mg/Kg	1	9/20/2017 10:31:57 AM	33953
Motor Oil Range Organics (MRO)	190	49		mg/Kg	1	9/20/2017 10:31:57 AM	33953
Surr: DNOP	101	70-130		%Rec	1	9/20/2017 10:31:57 AM	33953
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	660	22		mg/Kg	5	9/20/2017 10:23:28 AM	G45760
Surr: BFB	522	54-150	S	%Rec	5	9/20/2017 10:23:28 AM	G45760
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.38	0.11		mg/Kg	5	9/20/2017 10:23:28 AM	B45760
Toluene	5.9	0.22		mg/Kg	5	9/20/2017 10:23:28 AM	B45760
Ethylbenzene	2.1	0.22		mg/Kg	5	9/20/2017 10:23:28 AM	B45760
Xylenes, Total	31	0.43		mg/Kg	5	9/20/2017 10:23:28 AM	B45760
Surr: 4-Bromofluorobenzene	160	66.6-132	S	%Rec	5	9/20/2017 10:23:28 AM	B45760

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
PQL	Practical Quanitative Limit	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#: 1709A73

21-Sep-17

Client: Blagg Engineering
Project: FLORANCE AB #31A

Sample ID	MB-33964	SampType:	mblk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS	Batch ID:	33964		RunNo:	45763				
Prep Date:	9/20/2017	Analysis Date:	9/20/2017		SeqNo:	1453873	Units:	mg/Kg		

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

Sample ID	LCS-33964	SampType:	lcs		TestCode:	EPA Method 300.0: Anions				
Client ID:	LCSS	Batch ID:	33964		RunNo:	45763				
Prep Date:	9/20/2017	Analysis Date:	9/20/2017		SeqNo:	1453874	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	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
PQL	Practical Quanitative Limit	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#: 1709A73

21-Sep-17

Client: Blagg Engineering
Project: FLORANCE AB #31A

Sample ID MB-33953	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 33953	RunNo: 45752
Prep Date: 9/20/2017	Analysis Date: 9/20/2017	SeqNo: 1453008 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	9.9		10.00		99.0	70	130			

Sample ID LCS-33953	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 33953	RunNo: 45752
Prep Date: 9/20/2017	Analysis Date: 9/20/2017	SeqNo: 1453009 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	88.0	73.2	114			
Surr: DNOP	4.6		5.000		91.7	70	130			

Sample ID MB-33921	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 33921	RunNo: 45752
Prep Date: 9/18/2017	Analysis Date: 9/20/2017	SeqNo: 1453598 Units: %Rec

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		102	70	130			

Sample ID LCS-33921	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 33921	RunNo: 45752
Prep Date: 9/18/2017	Analysis Date: 9/20/2017	SeqNo: 1453599 Units: %Rec

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		95.9	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
PQL	Practical Quanitative Limit	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#: 1709A73

21-Sep-17

Client: Blagg Engineering

Project: FLORANCE AB #31A

Sample ID RB	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range
Client ID: PBS	Batch ID: G45760	RunNo: 45760
Prep Date:	Analysis Date: 9/20/2017	SeqNo: 1453626 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	1000		1000		101	54	150			

Sample ID 2.5UG GRO LCS	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range
Client ID: LCSS	Batch ID: G45760	RunNo: 45760
Prep Date:	Analysis Date: 9/20/2017	SeqNo: 1453627 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.3	76.4	125			
Surr: BFB	1100		1000		114	54	150			

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
PQL	Practical Quanitative Limit	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#: 1709A73

21-Sep-17

Client: Blagg Engineering
Project: FLORANCE AB #31A

Sample ID RB	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles
Client ID: PBS	Batch ID: B45760	RunNo: 45760
Prep Date:	Analysis Date: 9/20/2017	SeqNo: 1453638 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	1.1		1.000		108	66.6	132			

Sample ID 100NG BTEX LCS	SampType: LCS	TestCode: EPA Method 8021B: Volatiles
Client ID: LCSS	Batch ID: B45760	RunNo: 45760
Prep Date:	Analysis Date: 9/20/2017	SeqNo: 1453639 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.8	80	120			
Toluene	0.91	0.050	1.000	0	90.6	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.9	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.8	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		112	66.6	132			

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
PQL	Practical Quanitative Limit	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

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: 1709A73 | RcptNo: 1

Received By: Anne Thorne 9/20/2017 7:20:00 AM

Completed By: Anne Thorne 9/20/2017 7:27:49 AM

Reviewed By: JB 9/20/17

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

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

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

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

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush SAME DAY

Project Name: FLORANCE AB # 31A

Project #:

Project Manager: JEFFREY C. BLAGG

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	# pt. composite sample	Air Bubbles (Y or N)
9/19/17	1145	SOIL	5PC - EB @ 8' (21)	4 oz. - 1	Cool	201	✓		✓									✓			5	
9/19/17	1235	SOIL	5PC - STOCKPILE (21)	4 oz. - 1	Cool	202	✓		✓									✓			5	

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/19/17	1455			9/19/17	1455
9/19/17	1915			09/20/17	0720

Remarks: BILL DIRECTLY TO BP USING THE CONTACT WITH CORRESPONDING VID & REFERENCE # WHEN APPLICABLE;
CONTACT: ERIN GARIFALOS / VANCE HIXON / STEVE MOSKAL
VID: VHIXONEVRM
Reference # -

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 29, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 632-1199
FAX (505) 632-3903

RE: FLORANCE AB #31A OrderNo.: 1709C01

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/21/2017 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 **1709C01**
Date Reported: **9/29/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: FLORANCE AB #31A
Lab ID: 1709C01-001 **Matrix:** SOIL

Client Sample ID: 4 PC-N & E (SW) @ 3'-7' (21)
Collection Date: 9/19/2017 11:55:00 AM
Received Date: 9/21/2017 1:15:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/26/2017 11:04:33 AM	34063
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	1300	20		mg/Kg	2	9/22/2017 7:24:19 PM	34002
Motor Oil Range Organics (MRO)	490	99		mg/Kg	2	9/22/2017 7:24:19 PM	34002
Surr: DNOP	101	70-130		%Rec	2	9/22/2017 7:24:19 PM	34002
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	160	23		mg/Kg	5	9/22/2017 7:01:35 PM	33985
Surr: BFB	247	54-150	S	%Rec	5	9/22/2017 7:01:35 PM	33985
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.12		mg/Kg	5	9/22/2017 7:01:35 PM	33985
Toluene	ND	0.23		mg/Kg	5	9/22/2017 7:01:35 PM	33985
Ethylbenzene	ND	0.23		mg/Kg	5	9/22/2017 7:01:35 PM	33985
Xylenes, Total	3.7	0.47		mg/Kg	5	9/22/2017 7:01:35 PM	33985
Surr: 4-Bromofluorobenzene	126	66.6-132		%Rec	5	9/22/2017 7:01:35 PM	33985

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
PQL	Practical Quanitative Limit	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.

CLIENT: Blagg Engineering
Project: FLORANCE AB #31A
Lab ID: 1709C01-002 **Matrix:** SOIL

Client Sample ID: 4 PC-W & S (SW) @ 3'-7' (21)
Collection Date: 9/19/2017 11:50:00 AM
Received Date: 9/21/2017 1:15:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/26/2017 11:16:57 AM	34063
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	310	9.8		mg/Kg	1	9/22/2017 7:52:58 PM	34002
Motor Oil Range Organics (MRO)	180	49		mg/Kg	1	9/22/2017 7:52:58 PM	34002
Surr: DNOP	105	70-130		%Rec	1	9/22/2017 7:52:58 PM	34002
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	180	4.7		mg/Kg	1	9/22/2017 7:24:54 PM	33985
Surr: BFB	549	54-150	S	%Rec	1	9/22/2017 7:24:54 PM	33985
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.055	0.023		mg/Kg	1	9/22/2017 7:24:54 PM	33985
Toluene	1.5	0.047		mg/Kg	1	9/22/2017 7:24:54 PM	33985
Ethylbenzene	0.57	0.047		mg/Kg	1	9/22/2017 7:24:54 PM	33985
Xylenes, Total	9.5	0.093		mg/Kg	1	9/22/2017 7:24:54 PM	33985
Surr: 4-Bromofluorobenzene	136	66.6-132	S	%Rec	1	9/22/2017 7:24:54 PM	33985

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
PQL	Practical Quanitative Limit	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#: 1709C01

29-Sep-17

Client: Blagg Engineering

Project: FLORANCE AB #31A

Sample ID	MB-34063	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	34063	RunNo:	45881					
Prep Date:	9/25/2017	Analysis Date:	9/26/2017	SeqNo:	1459275	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-34063	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	34063	RunNo:	45881					
Prep Date:	9/25/2017	Analysis Date:	9/26/2017	SeqNo:	1459276	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.2	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
PQL	Practical Quanitative Limit	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#: 1709C01

29-Sep-17

Client: Blagg Engineering

Project: FLORANCE AB #31A

Sample ID	MB-34002	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	34002		RunNo:	45806				
Prep Date:	9/21/2017	Analysis Date:	9/22/2017		SeqNo:	1455637	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	9.0		10.00		90.4	70	130			

Sample ID	LCS-34002	SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	34002		RunNo:	45806				
Prep Date:	9/21/2017	Analysis Date:	9/22/2017		SeqNo:	1455751	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	95.6	73.2	114			
Surr: DNOP	4.6		5.000		91.1	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
PQL	Practical Quanitative Limit	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#: 1709C01

29-Sep-17

Client: Blagg Engineering
Project: FLORANCE AB #31A

Sample ID	MB-33985	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	33985		RunNo:	45817				
Prep Date:	9/21/2017	Analysis Date:	9/22/2017		SeqNo:	1457079	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	1100		1000		110	54	150			

Sample ID	LCS-33985	SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS	Batch ID:	33985		RunNo:	45817				
Prep Date:	9/21/2017	Analysis Date:	9/22/2017		SeqNo:	1457080	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	76.4	125			
Surr: BFB	1200		1000		120	54	150			

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
PQL	Practical Quanitative Limit	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#: 1709C01

29-Sep-17

Client: Blagg Engineering

Project: FLORANCE AB #31A

Sample ID	MB-33985	SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS	Batch ID:	33985		RunNo:	45817				
Prep Date:	9/21/2017	Analysis Date:	9/22/2017		SeqNo:	1457105	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	1.2		1.000		125	66.6	132			

Sample ID	LCS-33985	SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	LCSS	Batch ID:	33985		RunNo:	45817				
Prep Date:	9/21/2017	Analysis Date:	9/22/2017		SeqNo:	1457106	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	112	80	120			
Toluene	1.1	0.050	1.000	0	109	80	120			
Ethylbenzene	1.1	0.050	1.000	0	113	80	120			
Xylenes, Total	3.4	0.10	3.000	0	114	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		132	66.6	132			S

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
PQL	Practical Quanitative Limit	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

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: 1709C01 | RcptNo: 1

Received By: Anne Thome 9/21/2017 1:15:00 PM
Completed By: Anne Thome 9/21/2017 1:34:56 PM
Reviewed By: 9/21/17

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

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

17. Additional remarks:

18. Cooler Information

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

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time: per NV
☐ Standard ☒ Rush 3 DAY TAT

Project Name: FLORANCE AB # 31A

Project #:

Project Manager: JEFFREY C. BLAGG

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 2.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1709211	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	# pt. composite sample
9/19/17	1155	SOIL	4PC - N&E (SW) @ 3'-7' (21)	4 oz. - 1	Cool	-001	✓		✓									✓			5
9/19/17	1150	SOIL	4PC - W&S (SW) @ 3'-7' (21)	4 oz. - 1	Cool	002	✓		✓									✓			5

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/19/17	1455			9/19/17	1455
9/19/17	1919			09/20/17	

Remarks: BILL DIRECTLY TO BP USING THE CONTACT WITH CORRESPONDING & REFERENCE # WHEN APPLICABLE:
CONTACT: ERIN GARIFALOS / VANCE HIXON / STEVE MOSKAL
VID: VHIXONEVRM
Reference # -
09/20/17 Samples on hold. 09/21/17 Per NV Analyze on 3 Day

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

January 11, 2018

Steve Moskal
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 632-1199
FAX (505) 632-3903

RE: Florance AB 31A OrderNo.: 1801373

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/9/2018 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 **1801373**
Date Reported: **1/11/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Florance AB 31A
Lab ID: 1801373-001 **Matrix:** MEOH (SOIL)

Client Sample ID: 21 BGT 5-PT@10'
Collection Date: 1/8/2018 11:55:00 AM
Received Date: 1/9/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/9/2018 11:44:58 AM	35930
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	370	18		mg/Kg	5	1/9/2018 10:09:23 AM	G48294
Surr: BFB	101	70-130		%Rec	5	1/9/2018 10:09:23 AM	G48294
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	390	10		mg/Kg	1	1/9/2018 11:28:01 AM	35924
Motor Oil Range Organics (MRO)	200	50		mg/Kg	1	1/9/2018 11:28:01 AM	35924
Surr: DNOP	112	70-130		%Rec	1	1/9/2018 11:28:01 AM	35924
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.089		mg/Kg	5	1/9/2018 10:09:23 AM	R48294
Toluene	3.4	0.18		mg/Kg	5	1/9/2018 10:09:23 AM	R48294
Ethylbenzene	1.1	0.18		mg/Kg	5	1/9/2018 10:09:23 AM	R48294
Xylenes, Total	16	0.36		mg/Kg	5	1/9/2018 10:09:23 AM	R48294
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	5	1/9/2018 10:09:23 AM	R48294
Surr: Toluene-d8	108	70-130		%Rec	5	1/9/2018 10:09:23 AM	R48294

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
PQL	Practical Quanitative Limit	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#: **1801373**

11-Jan-18

Client: Blagg Engineering
Project: Florance AB 31A

Sample ID	MB-35930	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	35930	RunNo:	48302					
Prep Date:	1/9/2018	Analysis Date:	1/9/2018	SeqNo:	1552307	Units:	mg/Kg			

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

Sample ID	LCS-35930	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	35930	RunNo:	48302					
Prep Date:	1/9/2018	Analysis Date:	1/9/2018	SeqNo:	1552308	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.1	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
PQL	Practical Quanitative Limit	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#: **1801373**

11-Jan-18

Client: Blagg Engineering
Project: Florance AB 31A

Sample ID	LCS-35924	SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	35924		RunNo:	48292				
Prep Date:	1/9/2018	Analysis Date:	1/9/2018		SeqNo:	1550980	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	90.4	70	130			
Surr: DNOP	4.5		5.000		90.8	70	130			

Sample ID	MB-35924	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	35924		RunNo:	48292				
Prep Date:	1/9/2018	Analysis Date:	1/9/2018		SeqNo:	1550981	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	10		10.00		102	70	130			

Sample ID	LCS-35915	SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	35915		RunNo:	48292				
Prep Date:	1/8/2018	Analysis Date:	1/9/2018		SeqNo:	1551228	Units:	%Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		96.3	70	130			

Sample ID	MB-35915	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	35915		RunNo:	48292				
Prep Date:	1/8/2018	Analysis Date:	1/9/2018		SeqNo:	1551229	Units:	%Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		103	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
PQL	Practical Quanitative Limit	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#: **1801373**

11-Jan-18

Client: Blagg Engineering

Project: Florance AB 31A

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **R48294**	RunNo: **48294**
Prep Date:	Analysis Date: **1/9/2018**	SeqNo: **1551049** 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	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.54		0.5000		108	70	130			

Sample ID **100ng btex lcs**	SampType: **LCS4**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC**	Batch ID: **R48294**	RunNo: **48294**
Prep Date:	Analysis Date: **1/9/2018**	SeqNo: **1551978** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	122	80	120			S
Toluene	1.1	0.050	1.000	0	106	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.4	80	120			
Surr: 4-Bromofluorobenzene	0.43		0.5000		86.5	70	130			
Surr: Toluene-d8	0.52		0.5000		103	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
- PQL Practical Quanitative Limit
- 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#: 1801373

11-Jan-18

Client: Blagg Engineering
Project: Florance AB 31A

Sample ID rb	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range
Client ID: PBS	Batch ID: G48294	RunNo: 48294
Prep Date:	Analysis Date: 1/9/2018	SeqNo: 1550990 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	530		500.0		105	70	130			

Sample ID 2.5ug gro lcs	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range
Client ID: LCSS	Batch ID: G48294	RunNo: 48294
Prep Date:	Analysis Date: 1/9/2018	SeqNo: 1552011 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	110	70	130			
Surr: BFB	480		500.0		96.5	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
PQL	Practical Quanitative Limit	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

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: 1801373 | RcptNo: 1

Received By: Erin Melendrez 1/9/2018 7:45:00 AM

Completed By: Sophia Campuzano 1/9/2018 8:28:48 AM

Reviewed By: ENM 1/9/18

Chain of Custody

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

Log In

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

15. 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: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: BP AMERICA

BLAGG ENGINEERING INC.

Mailing Address:

Phone #: (505) 320-1183

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush SAME DAY

Project Name: FLORANCE AB 31A

Project #:

Project Manager: STEVE MOSKAL

Sampler: JEFF BLAGG

On Ice: ☑ Yes ☐ No

Sample Temperature: 3.4-0.5(CF) = 2.9

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1801373	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride				Air Bubbles (Y or N)
1/8/2018	1155	SOIL	21 BGT SVE-2 @ 10'	4oz x1	COOL	-001	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
1/8/2018	1545		(courier)	1/9/18	0745
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: BILL BP
contact: STEVE MOSKAL
VID: VHIXONEVRM

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.