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 Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: BP America Production Co.	OGRID: 778
Contact Name: Steve Moskal	Contact Telephone: (505) 330-9179
Contact email: steven.moskal@bpx.com	Incident # *(assigned by OCD)*
Contact mailing address: 380 Airport Road, Durango CO, 81303	NVF1812347519

Location of Release Source

Latitude: 36.795137 Longitude: -107.907089
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Bolack E 001	Site Type: Natural Gas Production Well Pad
Date Release Discovered: March 20; 1:00 PM	API#: 30-045-24103

Unit Letter	Section	Township	Range	County
L	33	28N	08W	San Juan

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): unknown	Volume Recovered (bbls): 0 bbls
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:
Historical impacts, possible former earthen pit.

NMOCD
OCT 04 2018
DISTRICT III

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Steve Moskal notified Vanessa Fields via phone on 8/24/18 at approximately 3:00 PM	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☐ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Steve Moskal Title: Environmental Coordinator

Signature: Date: October 3, 2018

email: steven.moskal@bpx.com Telephone: (505) 330-9179

OCD Only

Received by: Vanessa Fields Date: 10/12/2018

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Date: 10/12/2018

Printed Name: Vanessa Fields Title: Environmental Specialist

BP America

Bolack E 001 - API: 30-045-24103

(L) Sec 33 – T28N – R8W, San Juan County, New Mexico

Summary Record of Impact Remediation

March 20, 2018

1. Confirmation sampling conducted of a 45 barrel below grade tank (**BGT**). 5 point composite sample (**5pcs**) collected directly beneath BGT at 5 feet (**ft.**) below grade (**b.g.**).
2. New Mexico Oil Conservation Division (**NMOCD**) Spill & Release Guidelines site closure standard interpreted at 1,000 mg/kg TPH based on:

Distance to groundwater: > 100 ft. (bgt permit hydrogeological report)
Distance to nearest water source: > 1,000 ft.
Distance to surface water (Navajo Reservoir): > 200 ft. & < 1,000 ft.

3. Federal mineral & surface lease.

March 22, 2018 Laboratory results received from BGT sampling. Test results listed below.

BGT Confirmation & Initial Delineation Sampling Laboratory Analytical Results

Sample ID (composites)	Field OVM (ppm)	TPH (GRO+DRO+MRO) (mg/Kg)	Total BTEX (mg/Kg)	Benzene (mg/Kg)	Chloride (mg/Kg)
5PC-TB @ 5' (95)	403	4,200	ND	ND	ND

OVM – Organic Vapor Meter, ppm – parts per million, GRO – Gasoline Range Organics, DRO – Diesel Range Organics, mg/Kg – milligram per kilogram.

May 8, 2018 Initiate remediation via soil excavation and on-site shredding. Completed excavation of impacted media and conduct closure sampling. Final excavation 21'x21'x6' deep.

May 10, 2018 Received 05/08/2018 closure samples final laboratory report. Results listed below.

Excavation Closure Sample Laboratory Analytical Results

Sample ID	Field OVM (ppm)	TPH (GRO+DRO+MRO) (mg/Kg)	Total BTEX (mg/Kg)	Benzene (mg/Kg)	Chloride (mg/Kg)
Base 5-pt. @ 6'	0.1	ND	ND	ND	ND
Base Walls 8-pt. (3.5'-5.5')	0.1	ND	ND	ND	ND
Upper Tier 8-pt. @ 3'	0.2	ND	ND	ND	ND

OVM – Organic Vapor Meter, ppm – parts per million, GRO – Gasoline Range Organics, DRO – Diesel Range Organics, mg/Kg – milligram per kilogram.

May 11, 2018 Conduct treated pile sampling (1 each x 100 cubic yard piles).

May 16, 2018 Receive 05/11/2018 treated pile final laboratory reports. Results listed below.

Treated Soil Pile Laboratory Analytical Results

Treated Pile ID (5-pt Comp)	Field OVM (ppm)	TPH (GRO+DRO+MRO) (mg/Kg)	Total BTEX (mg/Kg)	Benzene (mg/Kg)	Chloride (mg/Kg)
TSP-1	18.6	22	ND	ND	ND

OVM – Organic Vapor Meter, ppm – parts per million, GRO – Gasoline Range Organics, DRO – Diesel Range Organics, mg/Kg – milligram per kilogram.

May 18, 2018 Completed excavation backfilling.

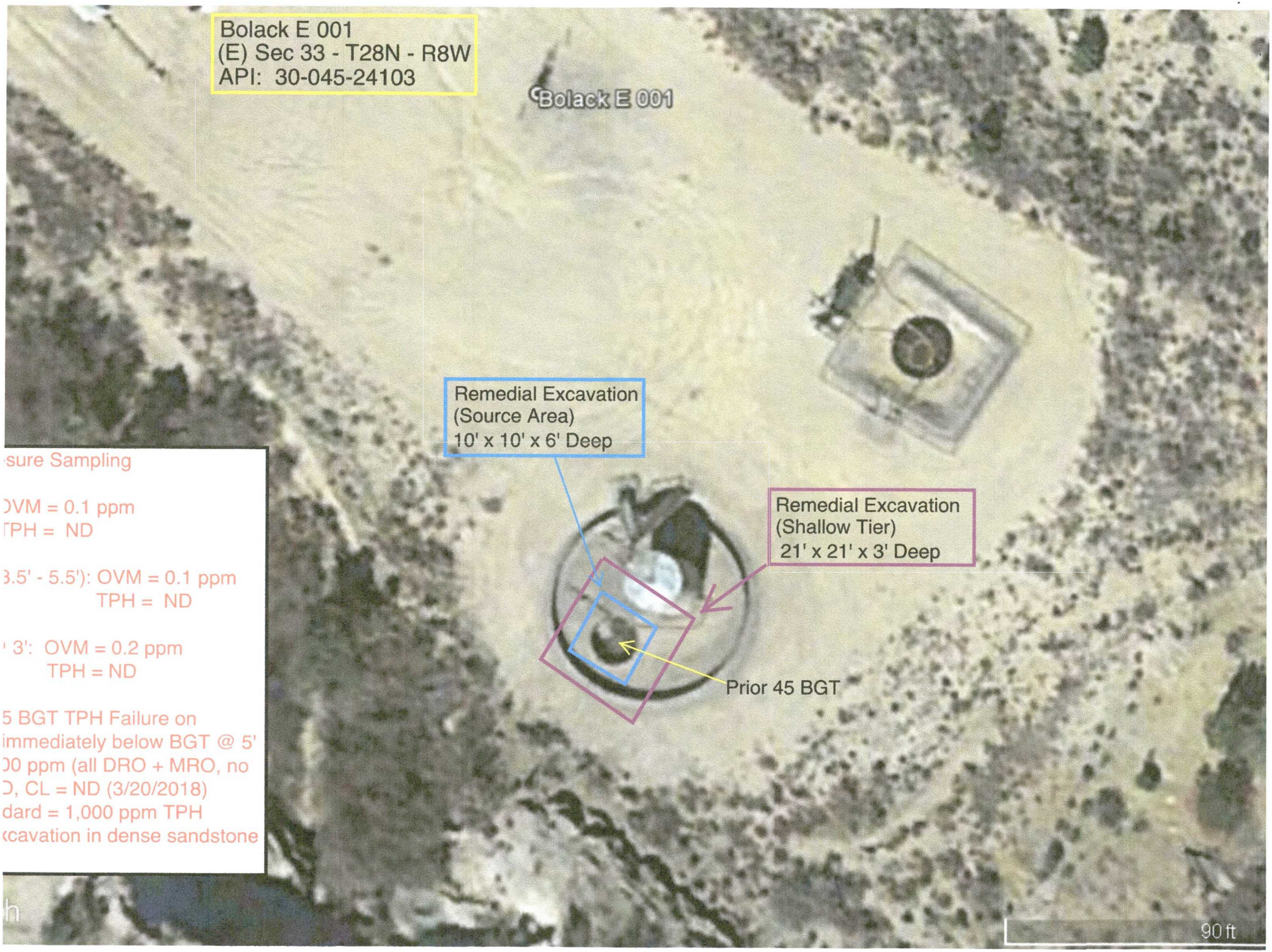
August 2, 2018 Conducted treated pile stacking area vadose zone sampling (1 each 5-point composite).

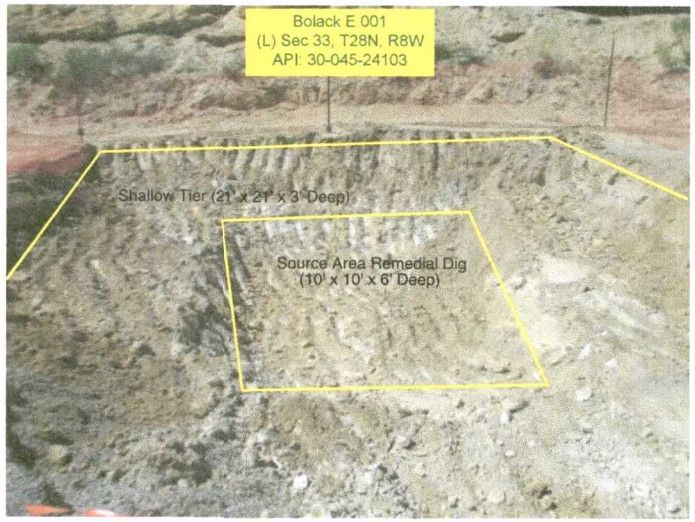
August 16, 2018 Receive final laboratory analytical test reports from vadose zone sampling. Results listed below.

Treated Pile Stacking Area Vadose Zone Laboratory Analytical Results

Vadose Zone ID (5-pt Comp)	Field OVM (ppm)	TPH (GRO+DRO+MRO) (mg/Kg)	Total BTEX (mg/Kg)	Benzene (mg/Kg)	Chloride (mg/Kg)
TSP BG-1 (5-pt)	1.2	ND	ND	ND	ND

OVM – Organic Vapor Meter, ppm – parts per million, GRO – Gasoline Range Organics, DRO – Diesel Range Organics, mg/Kg – milligram per kilogram.


Bolack E 001
(E) Sec 33 - T28N - R8W
API: 30-045-24103
Bolack E 001
Remedial Excavation
(Source Area)
10' x 10' x 6' Deep
Remedial Excavation
(Shallow Tier)
21' x 21' x 3' Deep
Prior 45 BGT
sure Sampling
)VM = 0.1 ppm
TPH = ND
3.5' - 5.5'): OVM = 0.1 ppm
TPH = ND
' 3': OVM = 0.2 ppm
TPH = ND
5 BGT TPH Failure on
immediately below BGT @ 5'
)0 ppm (all DRO + MRO, no
D, CL = ND (3/20/2018)
dard = 1,000 ppm TPH
cavation in dense sandstone
90 ft


Bolack E 001
(L) Sec 33, T28N, R8W
API: 30-045-24103
Shallow Tier (21' x 21' x 3' Deep)
Source Area Remedial Dig
(10' x 10' x 6' Deep)

LABORATORY
RESULTS

Analytical Report
Lab Order **1805467**
Date Reported: **5/10/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: BOLACK E 001
Lab ID: 1805467-001 **Matrix:** SOIL

Client Sample ID: BASE 5-pt @ 6'
Collection Date: 5/8/2018 11:06:00 AM
Received Date: 5/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	5/9/2018 10:48:05 AM	38010
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/9/2018 10:07:11 AM	38005
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/9/2018 10:07:11 AM	38005
Surr: DNOP	102	70-130		%Rec	1	5/9/2018 10:07:11 AM	38005
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	5/9/2018 9:34:12 AM	37995
Surr: BFB	87.7	15-316		%Rec	1	5/9/2018 9:34:12 AM	37995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/9/2018 9:34:12 AM	37995
Toluene	ND	0.038		mg/Kg	1	5/9/2018 9:34:12 AM	37995
Ethylbenzene	ND	0.038		mg/Kg	1	5/9/2018 9:34:12 AM	37995
Xylenes, Total	ND	0.075		mg/Kg	1	5/9/2018 9:34:12 AM	37995
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	5/9/2018 9:34:12 AM	37995

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: BOLACK E 001
Lab ID: 1805467-002 **Matrix:** SOIL

Client Sample ID: BASE WALLS 8-pt (3.5-5.5)
Collection Date: 5/8/2018 11:11:00 AM
Received Date: 5/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	5/9/2018 11:00:30 AM	38010
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/9/2018 11:13:03 AM	38005
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/9/2018 11:13:03 AM	38005
Surr: DNOP	97.7	70-130		%Rec	1	5/9/2018 11:13:03 AM	38005
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	5/9/2018 9:57:29 AM	37995
Surr: BFB	88.0	15-316		%Rec	1	5/9/2018 9:57:29 AM	37995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	5/9/2018 9:57:29 AM	37995
Toluene	ND	0.036		mg/Kg	1	5/9/2018 9:57:29 AM	37995
Ethylbenzene	ND	0.036		mg/Kg	1	5/9/2018 9:57:29 AM	37995
Xylenes, Total	ND	0.071		mg/Kg	1	5/9/2018 9:57:29 AM	37995
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/9/2018 9:57:29 AM	37995

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: BOLACK E 001
Lab ID: 1805467-003 **Matrix:** SOIL

Client Sample ID: UPPER TIER 8-pt @ 3'
Collection Date: 5/8/2018 11:19:00 AM
Received Date: 5/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	5/9/2018 11:12:55 AM	38010
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/9/2018 11:35:08 AM	38005
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/9/2018 11:35:08 AM	38005
Surr: DNOP	101	70-130		%Rec	1	5/9/2018 11:35:08 AM	38005
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	5/9/2018 10:20:45 AM	37995
Surr: BFB	91.0	15-316		%Rec	1	5/9/2018 10:20:45 AM	37995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/9/2018 10:20:45 AM	37995
Toluene	ND	0.037		mg/Kg	1	5/9/2018 10:20:45 AM	37995
Ethylbenzene	ND	0.037		mg/Kg	1	5/9/2018 10:20:45 AM	37995
Xylenes, Total	ND	0.074		mg/Kg	1	5/9/2018 10:20:45 AM	37995
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/9/2018 10:20:45 AM	37995

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

Analytical Report
Lab Order **1805701**
Date Reported: **5/16/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Bolack E 001
Lab ID: 1805701-001
Client Sample ID: TSP-1
Collection Date: 5/11/2018 11:50:00 AM
Matrix: MEOH (SOIL)
Received Date: 5/12/2018 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	5/14/2018 12:14:34 PM	38091
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	22	10		mg/Kg	1	5/14/2018 10:02:41 AM	38088
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/14/2018 10:02:41 AM	38088
Surr: DNOP	106	70-130		%Rec	1	5/14/2018 10:02:41 AM	38088
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	5/14/2018 10:00:24 AM	38079
Surr: BFB	85.4	15-316		%Rec	1	5/14/2018 10:00:24 AM	38079
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/14/2018 10:00:24 AM	38079
Toluene	ND	0.038		mg/Kg	1	5/14/2018 10:00:24 AM	38079
Ethylbenzene	ND	0.038		mg/Kg	1	5/14/2018 10:00:24 AM	38079
Xylenes, Total	ND	0.075		mg/Kg	1	5/14/2018 10:00:24 AM	38079
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/14/2018 10:00:24 AM	38079

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

Analytical Report
Lab Order **1808222**
Date Reported: **8/16/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: BOLACK E 1
Lab ID: 1808222-001 **Matrix:** SOIL

Client Sample ID: TSP BG-1 (5-pt)
Collection Date: 8/2/2018 10:41:00 AM
Received Date: 8/3/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/14/2018 4:02:22 PM	39747
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/7/2018 5:46:26 PM	39617
Surr: BFB	115	70-130		%Rec	1	8/7/2018 5:46:26 PM	39617
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/8/2018 2:03:22 PM	39630
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/8/2018 2:03:22 PM	39630
Surr: DNOP	84.0	50.6-138		%Rec	1	8/8/2018 2:03:22 PM	39630
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.024		mg/Kg	1	8/7/2018 5:46:26 PM	39617
Toluene	ND	0.049		mg/Kg	1	8/7/2018 5:46:26 PM	39617
Ethylbenzene	ND	0.049		mg/Kg	1	8/7/2018 5:46:26 PM	39617
Xylenes, Total	ND	0.097		mg/Kg	1	8/7/2018 5:46:26 PM	39617
Surr: 4-Bromofluorobenzene	130	70-130		%Rec	1	8/7/2018 5:46:26 PM	39617
Surr: Toluene-d8	93.4	70-130		%Rec	1	8/7/2018 5:46:26 PM	39617

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

LABORATORY CHAIN-OF-CUSTODY RECORDS

Chain-of-Custody Record

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: BOLACK E 001
Project #:
Project Manager: STEVE MOSKAL
Sampler: JEFF BLAGG
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.4

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 # (*VOA 5/10/18)	Preservative Type	HEAL No. 805467	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)
5/8/2018	1106	SOIL	BASE 5-pt @ 6'	4 oz x 1	COOL	001	X		X									X				
"	1111	"	BASE Walls 8-pt (3½-5½)	"	"	002	"		"									"				
"	1119	"	UPPER TIER 8-pt @ 3'	"	"	003	"		"									"				

Date	Time	Relinquished by:	Received by:	Date	Time
5/8/2018	1710	JH Blagg	[signature]	5/8/18	1710
5/8/18	1901	[signature]	[signature]	05/09/18	0700

Remarks: BILL BP
CONTACT: STEVE MOSKAL
WBS ELEMENT: L1-001CT-E:BOLACK_E1

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.

Chain-of-Custody Record

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: BOLACK E 001
Project #:
Project Manager: J. BLAGG
Sampler: J. BLAGG
On Ice: ☒ Yes ☐ No
Sample Temperature: 39.0 (cf) - 3.6

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. 1805701	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)
5/11/2018	1150	SOIL	TSP-1	4 oz x 1	COOL	-001	X		X									X				

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/11/18	1704	Jeff Blagg		5/11/18	1704
5/11/18	1747			05/12/18	0740

Remarks: BILL BP
CONTACT: STEVE MOSKAL
WBS ELEMENT: L1-001CT-E:BOLACK_E1

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.

Chain-of-Custody Record

Client: BP AMERICA
BLAGG ENGINEERING
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
Project Name: BOLACK E 1
Project #:
Project Manager: STEVE MOSKAL
Sampler: JEFF BLAGG
On Ice: ☑ Yes ☐ No
Sample Temperature: 3.4 -CF-1.0=1.4

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. 1808222	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)
8/2/2018	1041	SOIL	TSP BG-1 (5-pt)	4oz x1	COOL	001	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/2/2018	1730	Jeff Blagg	Mystie Waeta	8/2/18	1730
8/2/18	1810	Mystie Waeta		08/03/18	0030

Remarks: BILL BP
CONTACT: STEVE MOSKAL
VID: VHIXONEVRM
WBS: L1-001CT-E:BOLACK_E1

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.

LABORATORY QUALITY ASSURANCE / QUALITY CONTROL

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1805467**

10-May-18

Client: Blagg Engineering

Project: BOLACK E 001

Sample ID	**MB-38010**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**38010**	RunNo:	**51146**				
Prep Date:	**5/9/2018**	Analysis Date:	**5/9/2018**	SeqNo:	**1662412**	Units:	**mg/Kg**		

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

Sample ID	**LCS-38010**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**38010**	RunNo:	**51146**				
Prep Date:	**5/9/2018**	Analysis Date:	**5/9/2018**	SeqNo:	**1662413**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	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#: **1805467**

10-May-18

Client: Blagg Engineering
Project: BOLACK E 001

Sample ID **1805467-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BASE 5-pt @ 6'**	Batch ID: **38005**	RunNo: **51138**
Prep Date: **5/9/2018**	Analysis Date: **5/9/2018**	SeqNo: **1661628** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.7	48.64	2.789	99.1	55.8	125			
Surr: DNOP	4.9		4.864		102	70	130			

Sample ID **1805467-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BASE 5-pt @ 6'**	Batch ID: **38005**	RunNo: **51138**
Prep Date: **5/9/2018**	Analysis Date: **5/9/2018**	SeqNo: **1661629** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	49.80	2.789	92.0	55.8	125	4.83	20	
Surr: DNOP	4.7		4.980		93.5	70	130	0	0	

Sample ID **LCS-38005**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **38005**	RunNo: **51138**
Prep Date: **5/9/2018**	Analysis Date: **5/9/2018**	SeqNo: **1661633** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	110	70	130			
Surr: DNOP	4.7		5.000		94.0	70	130			

Sample ID **MB-38005**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **38005**	RunNo: **51138**
Prep Date: **5/9/2018**	Analysis Date: **5/9/2018**	SeqNo: **1661634** 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	9.2		10.00		91.5	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1805467**

10-May-18

Client: Blagg Engineering
Project: BOLACK E 001

Sample ID **MB-37995**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **37995**	RunNo: **51141**
Prep Date: **5/8/2018**	Analysis Date: **5/9/2018**	SeqNo: **1662198** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		90.7	15	316			

Sample ID **LCS-37995**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **37995**	RunNo: **51141**
Prep Date: **5/8/2018**	Analysis Date: **5/9/2018**	SeqNo: **1662199** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	106	75.9	131			
Surr: BFB	1000		1000		100	15	316			

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#: **1805467**

10-May-18

Client: Blagg Engineering
Project: BOLACK E 001

Sample ID **MB-37995**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **37995**	RunNo: **51141**
Prep Date: **5/8/2018**	Analysis Date: **5/9/2018**	SeqNo: **1662212** 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	1.0		1.000		100	80	120			

Sample ID **LCS-37995**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **37995**	RunNo: **51141**
Prep Date: **5/8/2018**	Analysis Date: **5/9/2018**	SeqNo: **1662213** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.7	77.3	128			
Toluene	0.99	0.050	1.000	0	98.7	79.2	125			
Ethylbenzene	0.98	0.050	1.000	0	98.0	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	100	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	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
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: 1805467 | RcptNo: 1

Received By: Anne Thorne 5/9/2018 7:00:00 AM

Completed By: Anne Thorne 5/9/2018 7:25:06 AM

Reviewed By: DNO 5/9/18

Labeled by AT 05/09/18

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 ☐	# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? _____
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 ☐	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	1.4	Good	Yes			

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 16, 2018

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Bolack E 001 OrderNo.: 1805701

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/12/2018 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1805701**

16-May-18

Client: Blagg Engineering

Project: Bolack E 001

Sample ID	**MB-38091**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**38091**	RunNo:	**51247**				
Prep Date:	**5/14/2018**	Analysis Date:	**5/14/2018**	SeqNo:	**1666509**	Units:	**mg/Kg**		

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

Sample ID	**LCS-38091**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**38091**	RunNo:	**51247**				
Prep Date:	**5/14/2018**	Analysis Date:	**5/14/2018**	SeqNo:	**1666510**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.9	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
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#: **1805701**

16-May-18

Client: Blagg Engineering
Project: Bolack E 001

Sample ID **MB-38088**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **38088**	RunNo: **51235**
Prep Date: **5/14/2018**	Analysis Date: **5/14/2018**	SeqNo: **1665522** 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		98.9	70	130			

Sample ID **LCS-38088**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **38088**	RunNo: **51235**
Prep Date: **5/14/2018**	Analysis Date: **5/14/2018**	SeqNo: **1665523** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.0	70	130			
Surr: DNOP	4.6		5.000		92.4	70	130			

Sample ID **MB-38056**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **38056**	RunNo: **51235**
Prep Date: **5/10/2018**	Analysis Date: **5/14/2018**	SeqNo: **1666875** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		107	70	130			

Sample ID **LCS-38056**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **38056**	RunNo: **51235**
Prep Date: **5/10/2018**	Analysis Date: **5/14/2018**	SeqNo: **1666887** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		99.8	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#: **1805701**

16-May-18

Client: Blagg Engineering
Project: Bolack E 001

Sample ID **MB-38079**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **38079**	RunNo: **51246**
Prep Date: **5/11/2018**	Analysis Date: **5/14/2018**	SeqNo: **1666086** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.4	15	316			

Sample ID **LCS-38079**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **38079**	RunNo: **51246**
Prep Date: **5/11/2018**	Analysis Date: **5/14/2018**	SeqNo: **1666087** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	75.9	131			
Surr: BFB	1000		1000		105	15	316			

Sample ID **MB-38083**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **38083**	RunNo: **51246**
Prep Date: **5/12/2018**	Analysis Date: **5/14/2018**	SeqNo: **1666100** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	890		1000		89.4	15	316			

Sample ID **LCS-38083**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **38083**	RunNo: **51246**
Prep Date: **5/12/2018**	Analysis Date: **5/14/2018**	SeqNo: **1666101** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		97.2	15	316			

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#: **1805701**

16-May-18

Client: Blagg Engineering
Project: Bolack E 001

Sample ID **MB-38079**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **38079**	RunNo: **51246**
Prep Date: **5/11/2018**	Analysis Date: **5/14/2018**	SeqNo: **1666130** 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		106	80	120			

Sample ID **LCS-38079**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **38079**	RunNo: **51246**
Prep Date: **5/11/2018**	Analysis Date: **5/14/2018**	SeqNo: **1666140** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.3	77.3	128			
Toluene	0.97	0.050	1.000	0	97.3	79.2	125			
Ethylbenzene	0.96	0.050	1.000	0	95.7	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	98.3	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID **MB-38083**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **38083**	RunNo: **51246**
Prep Date: **5/12/2018**	Analysis Date: **5/14/2018**	SeqNo: **1666147** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID **LCS-38083**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **38083**	RunNo: **51246**
Prep Date: **5/12/2018**	Analysis Date: **5/14/2018**	SeqNo: **1666148** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	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
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: **1805701** RcptNo: **1**

Received By: **Ashley Gallegos** **5/12/2018 7:40:00 AM**

Completed By: **Ashley Gallegos** **5/12/2018 8:13:19 AM**

Reviewed By: 05/12/18 Labeled by: MWS 5/12/18

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? _____
MWS 5/12/18
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	3.6	Good	Yes			

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

August 16, 2018

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

RE: BOLACK E 1 OrderNo.: 1808222

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/3/2018 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 #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808222**

16-Aug-18

Client: Blagg Engineering
Project: BOLACK E 1

Sample ID	**MB-39747**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**39747**		RunNo:	**53422**				
Prep Date:	**8/13/2018**	Analysis Date:	**8/14/2018**		SeqNo:	**1760975**	Units:	**mg/Kg**		

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

Sample ID	**LCS-39747**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**39747**		RunNo:	**53422**				
Prep Date:	**8/13/2018**	Analysis Date:	**8/14/2018**		SeqNo:	**1760976**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.4	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#: **1808222**

16-Aug-18

Client: Blagg Engineering
Project: BOLACK E 1

Sample ID **MB-39630**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **39630**	RunNo: **53282**
Prep Date: **8/7/2018**	Analysis Date: **8/8/2018**	SeqNo: **1753763** 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	8.0		10.00		80.2	50.6	138			

Sample ID **LCS-39630**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **39630**	RunNo: **53282**
Prep Date: **8/7/2018**	Analysis Date: **8/8/2018**	SeqNo: **1753885** 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	88.5	70	130			
Surr: DNOP	3.9		5.000		78.8	50.6	138			

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#: **1808222**

16-Aug-18

Client: Blagg Engineering
Project: BOLACK E 1

Sample ID	1808222-001ams	SampType:	MS4	TestCode:	EPA Method 8260B: Volatiles Short List
Client ID:	TSP BG-1 (5-pt)	Batch ID:	39617	RunNo:	53276
Prep Date:	8/6/2018	Analysis Date:	8/7/2018	SeqNo:	1753600
Units:	mg/Kg				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9497	0	95.6	80	120			
Toluene	0.97	0.047	0.9497	0.006319	101	80	120			
Ethylbenzene	0.99	0.047	0.9497	0.008121	103	82	121			
Xylenes, Total	3.0	0.095	2.849	0.02168	105	80.2	120			
Surr: 4-Bromofluorobenzene	0.55		0.4748		117	70	130			
Surr: Toluene-d8	0.46		0.4748		96.5	70	130			

Sample ID	1808222-001amsd	SampType:	MSD4	TestCode:	EPA Method 8260B: Volatiles Short List
Client ID:	TSP BG-1 (5-pt)	Batch ID:	39617	RunNo:	53276
Prep Date:	8/6/2018	Analysis Date:	8/7/2018	SeqNo:	1753601
Units:	mg/Kg				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.024	0.9794	0	95.1	80	120	2.56	20	
Toluene	0.98	0.049	0.9794	0.006319	99.8	80	120	1.48	20	
Ethylbenzene	1.0	0.049	0.9794	0.008121	101	82	121	1.57	20	
Xylenes, Total	3.0	0.098	2.938	0.02168	103	80.2	120	0.590	20	
Surr: 4-Bromofluorobenzene	0.55		0.4897		113	70	130	0	0	
Surr: Toluene-d8	0.48		0.4897		97.1	70	130	0	0	

Sample ID	lcs-39617	SampType:	LCS4	TestCode:	EPA Method 8260B: Volatiles Short List
Client ID:	BatchQC	Batch ID:	39617	RunNo:	53276
Prep Date:	8/6/2018	Analysis Date:	8/7/2018	SeqNo:	1753620
Units:	mg/Kg				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.7	80	120			
Toluene	0.98	0.050	1.000	0	97.8	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.2	80	120			
Surr: 4-Bromofluorobenzene	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.47		0.5000		93.4	70	130			

Sample ID	mb-39617	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List
Client ID:	PBS	Batch ID:	39617	RunNo:	53276
Prep Date:	8/6/2018	Analysis Date:	8/7/2018	SeqNo:	1753621
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								

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#: **1808222**

16-Aug-18

Client: Blagg Engineering
Project: BOLACK E 1

Sample ID	**mb-39617**	SampType:	**MBLK**	TestCode:	**EPA Method 8260B: Volatiles Short List**
Client ID:	**PBS**	Batch ID:	**39617**	RunNo:	**53276**
Prep Date:	**8/6/2018**	Analysis Date:	**8/7/2018**	SeqNo:	**1753621** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.64		0.5000		129	70	130			
Surr: Toluene-d8	0.48		0.5000		95.4	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#: **1808222**

16-Aug-18

Client: Blagg Engineering
Project: BOLACK E 1

Sample ID	lcs-39617	SampType:	LCS		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	LCSS	Batch ID:	39617		RunNo:	53276				
Prep Date:	8/6/2018	Analysis Date:	8/7/2018		SeqNo:	1753428	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	70	130			
Surr: BFB	530		500.0		106	70	130			

Sample ID	mb-39617	SampType:	MBLK		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	PBS	Batch ID:	39617		RunNo:	53276				
Prep Date:	8/6/2018	Analysis Date:	8/7/2018		SeqNo:	1753429	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	570		500.0		114	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: 1808222 RcptNo: 1

Received By: Anne Thorne 8/3/2018 7:30:00 AM Anne Thorne

Completed By: Anne Thorne 8/3/2018 2:00:23 PM Anne Thorne

Reviewed By: JO 8/03/18

Labeled by AT 080317

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 ☐	# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? _____
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 ☐	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	1.4	Good	Yes			