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	NCS2005837120
District RP	
Facility ID	
Application ID	

Release Notification

DENIED

Responsible Party

Responsible Party: BP America Production Co.	OGRID: 778	Final
Contact Name: Steve Moskal	Contact Telephone: (505) 330-9179	
Contact email: steven.moskal@bpx.com	Incident # *(assigned by OCD)* NCS2005837120	
Contact mailing address: 1199 Main Street, Suite 101, Durango CO, 81301		

Location of Release Source

Latitude: 36.70059° Longitude: -108.17689°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Gallegos Canyon Unit 135	Site Type: Natural Gas Production Well Pad
Date Release Discovered: October 11, 2019	API#: 30-045-07885

Unit Letter	Section	Township	Range	County
F	26	T29N	R13W	San Juan

No Topomap/Siting Criteria/ Depth Water
No Site Map/Sampling Map
No Notice of Sampling to OCD
Resubmit no later than 4/10/2020

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

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): Unknown; historic	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): Unknown; historic	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:
Impacts were identified at the location on October 11, 2019 during a BGT closure following plugging and abandonment of the production well. The source of the impacts appeared historic, either being a former earthen pit of caused from pit overflow events prior to automation.

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State of New Mexico
Oil Conservation Division

Incident ID	
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Facility ID	
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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)?	

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: _____

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Page 3

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?	>100 (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.

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Page 4

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: _____

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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: December 4, 2019

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

OCD Only

Received by: _____ Date: _____

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: DENIED Date: _____

Printed Name: _____ Title: _____

No Topomap/Siting Criteria Map/Depth to water
No Site map/Sampling map
Operator did not Include Notification of Closure Sampling

BP America
GCU 135
(F) Sec 26 – T29N – R13W
San Juan County, New Mexico
API: 30-045-07885

Summary Record of Impact Remediation

October 11, 2019 Soils impacted with hydrocarbons were encountered during closure of a 95 barrel below grade tank. Analytical laboratory testing of impacted soils immediately below the BGT at the 5' depth reported total petroleum hydrocarbons (TPH) at 162 ppm, total BTEX at non-detect (ND) and chlorides at 100 ppm. A sample collected outside the BGT footprint at the 3' depth on dense sandstone reported TPH at 3,540 ppm.

Site closure standard determined at 100 ppm TPH, 50 ppm total BTEX (with 10 ppm benzene) and 600 ppm Chlorides based on:

Horizontal Distance to Dry Water Course < 300 feet
Distance to Nearest Water Well > 1,000 feet
Depth to Groundwater >100 feet

October 29, 2019 Initiate removal of impacts via excavation and transportation to JFJ commercial landfarm in San Juan County, NM

November 4, 2019 Conduct closure sampling on base and eastern extent of excavation, with analytical results as follows:

Closure Sampling Test Results
November 4, 2019

Sample ID	5-pt Comp. Depths	Time	Field OVM (ppm)	BTEX (mg/Kg)	Benzene (mg/Kg)	TPH GRO (mg/Kg)	TPH DRO (mg/Kg)	TPH MRO (mg/Kg)	TPH (GRO +DRO) (mg/Kg)	TPH Total (mg/Kg)	Cl- (mg/Kg)
Base 1	12'	12:00	1.1	ND	ND	ND	ND	ND	ND	ND	133
Base 2	12'	12:11	0.5	ND	ND	ND	ND	ND	ND	ND	75.3
Base 3	12'	12:17	0.2	ND	ND	ND	ND	ND	ND	ND	134
Base 4	12'	12:20	0.3	ND	ND	ND	ND	ND	ND	ND	178
Base 5	12'	12:23	1.7	ND	ND	ND	ND	ND	ND	ND	131
Base 6	12'	12:26	1.5	ND	ND	ND	ND	ND	ND	ND	85.9
Base 7	12'	12:31	1.0	ND	ND	ND	ND	ND	ND	ND	137
Sidewall 1	3'-10'	12:41	1.1	ND	ND	ND	ND	ND	ND	ND	161
Sidewall 2	3'-10'	12:45	0.6	ND	ND	ND	ND	ND	ND	ND	79.6
Sidewall 3	3'-10'	12:48	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Sidewall 4	3'-10'	12:53	1.0	ND	ND	ND	ND	ND	ND	ND	74.2
Sidewall 5	3'-10'	12:57	1.6	ND	ND	ND	ND	ND	ND	ND	163
Sidewall 6	3'-10'	13:00	1.7	ND	ND	ND	ND	ND	ND	ND	95.4
Sidewall 7	3'-10'	13:05	1.2	ND	ND	ND	ND	ND	ND	ND	77.9
			Standard:	50	10					100	600

November 5, 2019 Continue removal of impacts via excavation and transportation to JFJ commercial landfarm

November 8, 2019 Conduct final closure sampling on base and western extent of excavation, with analytical results as follows:

Closure Sampling Test Results
November 8, 2019

Sample ID	5-pt Comp. Depths	Time	Field OVM (ppm)	BTEX (mg/Kg)	Benzene (mg/Kg)	TPH GRO (mg/Kg)	TPH DRO (mg/Kg)	TPH MRO (mg/Kg)	TPH (GRO +DRO) (mg/Kg)	TPH Total (mg/Kg)	Cl- (mg/Kg)
Base 8	10’	12:00	0.5	ND	ND	ND	ND	ND	ND	ND	62.5
Base 9	10’	12:11	25.4	ND	ND	ND	ND	ND	ND	ND	127
Base 10	10’	12:17	24.7	ND	ND	ND	ND	ND	ND	ND	120
Base 11	10’	12:20	19.6	ND	ND	ND	ND	ND	ND	ND	73.4
Sidewall 8	3’-9’	12:41	0.1	ND	ND	ND	ND	ND	ND	ND	20.6
Sidewall 9	3’-9’	12:45	0.1	ND	ND	ND	ND	ND	ND	ND	ND
Sidewall 10	3’-9’	12:48	14.0	ND	ND	ND	ND	ND	ND	ND	71.7
Sidewall 11	3’-9’	12:53	52.6	ND	ND	ND	ND	ND	ND	ND	100
Sidewall 12	3’-9’	12:57	5.1	ND	ND	ND	ND	ND	ND	ND	127
			Standard:	50	10					100	600

November 13, 2019 Complete backfilling remedial excavation with clean imported soils.


GCU 135
Google Earth
©2018 Google
N
60 ft


DEERE
DEERE

envirotech
Analytical Laboratory

Analytical Report

Report Summary

Client: BP America Production Co.

Samples Received: 11/4/2019
Job Number: 03143-0424
Work Order: P911007
Project Name/Location: GCU 135

Report Reviewed By: Walter Hinchman Date: 11/6/19

Walter Hinchman, Laboratory Director

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/06/19 14:09

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Base 1	P911007-01A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Base 2	P911007-02A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Base 3	P911007-03A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Base 4	P911007-04A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Base 5	P911007-05A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Base 6	P911007-06A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Base 7	P911007-07A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Sidewall 1	P911007-08A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Sidewall 2	P911007-09A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Sidewall 3	P911007-10A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Sidewall 4	P911007-11A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Sidewall 5	P911007-12A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Sidewall 6	P911007-13A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.
Sidewall 7	P911007-14A	Soil	11/04/19	11/04/19	Glass Jar, 4 oz.

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/06/19 14:09

Base 1

P911007-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/04/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/04/19	EPA 8015D	
Surrogate: n-Nonane		*100 %*		*50-200*	*1945009*	*11/04/19*	*11/04/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*84.1 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**133**	20.0	mg/kg	1	1945010	11/04/19	11/04/19	EPA 300.0/9056A	

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/06/19 14:09

Base 2

P911007-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*103 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/04/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/04/19	EPA 8015D	
Surrogate: n-Nonane		*89.0 %*		*50-200*	*1945009*	*11/04/19*	*11/04/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.2 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**75.3**	20.0	mg/kg	1	1945010	11/04/19	11/04/19	EPA 300.0/9056A	

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/06/19 14:09

Base 3

P911007-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Surrogate: n-Nonane		*96.8 %*		*50-200*	*1945009*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.2 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**134**	20.0	mg/kg	1	1945010	11/04/19	11/04/19	EPA 300.0/9056A	

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/06/19 14:09

Base 4

P911007-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*96.7 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Surrogate: n-Nonane		*98.2 %*		*50-200*	*1945009*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*84.9 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**178**	20.0	mg/kg	1	1945010	11/04/19	11/04/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
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Base 5

P911007-05 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Surrogate: n-Nonane		*98.7 %*		*50-200*	*1945009*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.0 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**131**	20.0	mg/kg	1	1945010	11/04/19	11/04/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
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Base 6

P911007-06 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Surrogate: n-Nonane		*98.7 %*		*50-200*	*1945009*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.0 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**85.9**	20.0	mg/kg	1	1945010	11/04/19	11/04/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
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Base 7

P911007-07 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Surrogate: n-Nonane		*100 %*		*50-200*	*1945009*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.7 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**137**	20.0	mg/kg	1	1945010	11/04/19	11/05/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
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Sidewall 1
P911007-08 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Surrogate: n-Nonane		*85.3 %*		*50-200*	*1945009*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.9 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**161**	20.0	mg/kg	1	1945010	11/04/19	11/05/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
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Sidewall 2
P911007-09 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*105 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Surrogate: n-Nonane		*97.9 %*		*50-200*	*1945009*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*97.7 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**79.6**	20.0	mg/kg	1	1945010	11/04/19	11/05/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
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Sidewall 3
P911007-10 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Surrogate: n-Nonane		*100 %*		*50-200*	*1945009*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.9 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	1945010	11/04/19	11/05/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
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Sidewall 4
P911007-11 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*104 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Surrogate: n-Nonane		*99.5 %*		*50-200*	*1945009*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.3 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**74.2**	20.0	mg/kg	1	1945010	11/04/19	11/05/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
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Sidewall 5
P911007-12 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*104 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Surrogate: n-Nonane		*98.7 %*		*50-200*	*1945009*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*97.3 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**163**	20.0	mg/kg	1	1945010	11/04/19	11/05/19	EPA 300.0/9056A	

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Sidewall 6
P911007-13 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*105 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Surrogate: n-Nonane		*101 %*		*50-200*	*1945009*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*98.7 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**95.4**	20.0	mg/kg	1	1945010	11/04/19	11/05/19	EPA 300.0/9056A	

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Sidewall 7
P911007-14 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*103 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945009	11/04/19	11/05/19	EPA 8015D	
Surrogate: n-Nonane		*101 %*		*50-200*	*1945009*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945008	11/04/19	11/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.2 %*		*50-150*	*1945008*	*11/04/19*	*11/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**77.9**	20.0	mg/kg	1	1945010	11/04/19	11/05/19	EPA 300.0/9056A	

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Analytical Laboratory

BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/06/19 14:09

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1945008 - Purge and Trap EPA 5030A										
Blank (1945008-BLK1)				Prepared: 11/04/19 1 Analyzed: 11/05/19 1						
Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	*7.85*		*"*	*8.00*		*98.1*	*50-150*			
LCS (1945008-BS1)				Prepared: 11/04/19 1 Analyzed: 11/05/19 1						
Benzene	5.10	0.0250	mg/kg	5.00		102	70-130			
Toluene	5.19	0.0250	"	5.00		104	70-130			
Ethylbenzene	5.12	0.0250	"	5.00		102	70-130			
p,m-Xylene	10.2	0.0500	"	10.0		102	70-130			
o-Xylene	5.09	0.0250	"	5.00		102	70-130			
Total Xylenes	15.3	0.0250	"	15.0		102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*8.09*		*"*	*8.00*		*101*	*50-150*			
Matrix Spike (1945008-MS1)		**Source: P911007-01**		Prepared: 11/04/19 1 Analyzed: 11/05/19 1						
Benzene	5.02	0.0250	mg/kg	5.00	ND	100	54.3-133			
Toluene	5.15	0.0250	"	5.00	ND	103	61.4-130			
Ethylbenzene	5.11	0.0250	"	5.00	ND	102	61.4-133			
p,m-Xylene	10.2	0.0500	"	10.0	ND	102	63.3-131			
o-Xylene	5.07	0.0250	"	5.00	ND	101	63.3-131			
Total Xylenes	15.2	0.0250	"	15.0	ND	102	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	*8.26*		*"*	*8.00*		*103*	*50-150*			
Matrix Spike Dup (1945008-MSD1)		**Source: P911007-01**		Prepared: 11/04/19 1 Analyzed: 11/05/19 2						
Benzene	5.12	0.0250	mg/kg	5.00	ND	102	54.3-133	1.95	20	
Toluene	5.22	0.0250	"	5.00	ND	104	61.4-130	1.33	20	
Ethylbenzene	5.16	0.0250	"	5.00	ND	103	61.4-133	1.09	20	
p,m-Xylene	10.3	0.0500	"	10.0	ND	103	63.3-131	1.06	20	
o-Xylene	5.14	0.0250	"	5.00	ND	103	63.3-131	1.32	20	
Total Xylenes	15.4	0.0250	"	15.0	ND	103	63.3-131	1.15	20	
Surrogate: 4-Bromochlorobenzene-PID	*8.25*		*"*	*8.00*		*103*	*50-150*			

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Analytical Laboratory

BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/06/19 14:09

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1945009 - DRO Extraction EPA 3570										
Blank (1945009-BLK1)				Prepared: 11/04/19 1 Analyzed: 11/04/19 2						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*46.7*		*"*	*50.0*		*93.4*	*50-200*			
LCS (1945009-BS1)				Prepared: 11/04/19 1 Analyzed: 11/04/19 2						
Diesel Range Organics (C10-C28)	457	25.0	mg/kg	500		91.4	38-132			
Surrogate: n-Nonane	*45.5*		*"*	*50.0*		*91.1*	*50-200*			
Matrix Spike (1945009-MS1)		**Source: P911007-01**		Prepared: 11/04/19 1 Analyzed: 11/04/19 2						
Diesel Range Organics (C10-C28)	480	25.0	mg/kg	500	ND	96.0	38-132			
Surrogate: n-Nonane	*50.3*		*"*	*50.0*		*101*	*50-200*			
Matrix Spike Dup (1945009-MSD1)		**Source: P911007-01**		Prepared: 11/04/19 1 Analyzed: 11/04/19 2						
Diesel Range Organics (C10-C28)	508	25.0	mg/kg	500	ND	102	38-132	5.66	20	
Surrogate: n-Nonane	*51.8*		*"*	*50.0*		*104*	*50-200*			

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Analytical Laboratory

BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/06/19 14:09

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1945008 - Purge and Trap EPA 5030A										
Blank (1945008-BLK1)				Prepared: 11/04/19 1 Analyzed: 11/05/19 1						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.93*		"	*8.00*		*86.6*	*50-150*			
LCS (1945008-BS2)				Prepared: 11/04/19 1 Analyzed: 11/05/19 2						
Gasoline Range Organics (C6-C10)	49.4	20.0	mg/kg	50.0		98.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.92*		"	*8.00*		*86.5*	*50-150*			
Matrix Spike (1945008-MS2)		**Source: P911007-01**		Prepared: 11/04/19 1 Analyzed: 11/06/19 1						
Gasoline Range Organics (C6-C10)	47.3	20.0	mg/kg	50.0	ND	94.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.86*		"	*8.00*		*85.8*	*50-150*			
Matrix Spike Dup (1945008-MSD2)		**Source: P911007-01**		Prepared: 11/04/19 1 Analyzed: 11/05/19 2						
Gasoline Range Organics (C6-C10)	49.2	20.0	mg/kg	50.0	ND	98.4	70-130	4.01	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.89*		"	*8.00*		*86.1*	*50-150*			

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/06/19 14:09

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1945010 - Anion Extraction EPA 300.0/9056A										
Blank (1945010-BLK1)				Prepared: 11/04/19 1 Analyzed: 11/05/19 0						
Chloride	ND	20.0	mg/kg							
LCS (1945010-BS1)				Prepared: 11/04/19 1 Analyzed: 11/05/19 0						
Chloride	253	20.0	mg/kg	250		101	90-110			
Matrix Spike (1945010-MS1)	**Source: P911007-01**			Prepared: 11/04/19 1 Analyzed: 11/05/19 0						
Chloride	377	20.0	mg/kg	250	133	97.5	80-120			
Matrix Spike Dup (1945010-MSD1)	**Source: P911007-01**			Prepared: 11/04/19 1 Analyzed: 11/05/19 0						
Chloride	360	20.0	mg/kg	250	133	91.0	80-120	4.35	20	

QC Summary Report
Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values my differ slightly.

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Analytical Laboratory

BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/06/19 14:09

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information

Chain of Custody

Page 1 of 2

Client: BPX ENERGY
Project: GCU 135
Project Manager: SABRE BEEBE
Address:
City, State, Zip
Phone:
Email:

Report Attention
Report due by: NOV. 5, 2019
Attention: SABRE BEEBE/ERIN DUNMAN/JEFF BLAGG
Address:
City, State, Zip
Phone:
Email:

Lab Use Only: Lab WO# P911007 | Job Number 03143-0424

TAT: 1D X | 3D

EPA Program: RCRA | CWA | SDWA

State: NM X | CO | UT | AZ | TX | OK

Analysis and Method: DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	Remarks
1200	11/4/2019	SOIL	1	BASE 1	1	X	X	X			X	
1211	"	"	1	BASE 2	2	"	"	"			"	
1217	"	"	1	BASE 3	3	"	"	"			"	
1220	"	"	1	BASE 4	4	"	"	"			"	
1223	"	"	1	BASE 5	5	"	"	"			"	
1226	"	"	1	BASE 6	6	"	"	"			"	
1231	"	"	1	BASE 7	7	"	"	"			"	

Additional Instructions: BP CONTACT: SABRE BEEBE
Bill to Project P.O.

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: JH Blagg

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
JH Blagg	11/4/2019	1438	Hlesse	11.4.19	1438
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only
Received on ice: (Y) / N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech Analytical Laboratory
5795 US Highway 64, Farmington, NM 87401
24 Hour Emergency Response Phone (800) 362-1879
Ph (505) 632-1881 Fx (505) 632-1865
envirotech-inc.com
labadmin@envirotech-inc.com

Project Information

Chain of Custody

Page 2 of 2

Client:	BPX ENERGY
Project:	GCU 135
Project Manager:	SABRE BEEBE
Address:	
City, State, Zip	
Phone:	
Email:	

Report Attention

Report due by:	NOV. 5, 2019
Attention:	SABRE BEEBE/ERIN DUNMAN/JEFF BLAGG
Address:	
City, State, Zip	
Phone:	
Email:	

Lab Use Only

Lab WO#	Job Number
P911007	03143.0424

TAT

1D	3D
X	

EPA Program

RCRA	CWA	SDWA

State

NM	CO	UT	AZ
X			
TX	OK		

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	Remarks
1241	11/4/19	SOIL	1	SIDEWALL 1	8	X	X	X			X	
1245	"	"	1	SIDEWALL 2	9	"	"	"			"	
1248	"	"	1	SIDEWALL 3	10	"	"	"			"	
1253	"	"	1	SIDEWALL 4	11	"	"	"			"	
1257	"	"	1	SIDEWALL 5	12	"	"	"			"	
1300	"	"	1	SIDEWALL 6	13	"	"	"			"	
1305	"	"	1	SIDEWALL 7	14	"	"	"			"	

Additional Instructions: BP CONTACT: SABRE BEEBE
BILL to Project P.O.

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Jeff Blagg

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Jeff Blagg	11/4/2019	1438	Ariesse	11.4.19	14:38

Lab Use Only

Received on ice: (Y) / N

T1 _____ T2 _____ T3 _____

AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other _____

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech Analytical Laboratory

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labadmin@envirotech-inc.com

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Analytical Laboratory

Analytical Report

Report Summary

Client: BP America Production Co.

Samples Received: 11/7/2019
Job Number: 03143-0424
Work Order: P911023
Project Name/Location: GCU 135

Report Reviewed By: Date: 11/11/19

Walter Hinchman, Laboratory Director

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Base 8	P911023-01A	Soil	11/07/19	11/07/19	Glass Jar, 4 oz.
Base 9	P911023-02A	Soil	11/07/19	11/07/19	Glass Jar, 4 oz.
Base 10	P911023-03A	Soil	11/07/19	11/07/19	Glass Jar, 4 oz.
Base 11	P911023-04A	Soil	11/07/19	11/07/19	Glass Jar, 4 oz.
Sidewall 8	P911023-05A	Soil	11/07/19	11/07/19	Glass Jar, 4 oz.
Sidewall 9	P911023-06A	Soil	11/07/19	11/07/19	Glass Jar, 4 oz.
Sidewall 10	P911023-07A	Soil	11/07/19	11/07/19	Glass Jar, 4 oz.
Sidewall 11	P911023-08A	Soil	11/07/19	11/07/19	Glass Jar, 4 oz.
Sidewall 12	P911023-09A	Soil	11/07/19	11/07/19	Glass Jar, 4 oz.

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Base 8

P911023-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*		*50-150*	*1945032*	*11/07/19*	*11/07/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Surrogate: n-Nonane		*98.7 %*		*50-200*	*1945033*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*81.7 %*		*50-150*	*1945032*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**62.5**	20.0	mg/kg	1	1945036	11/07/19	11/07/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Base 9
P911023-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*105 %*		*50-150*	*1945032*	*11/07/19*	*11/07/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Surrogate: n-Nonane		*99.4 %*		*50-200*	*1945033*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*81.9 %*		*50-150*	*1945032*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**127**	20.0	mg/kg	1	1945036	11/07/19	11/07/19	EPA 300.0/9056A	

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Analytical Laboratory

BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Base 10

P911023-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*105 %*		*50-150*	*1945032*	*11/07/19*	*11/07/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Surrogate: n-Nonane		*95.5 %*		*50-200*	*1945033*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*82.0 %*		*50-150*	*1945032*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**120**	20.0	mg/kg	1	1945036	11/07/19	11/07/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Base 11

P911023-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*104 %*		*50-150*	*1945032*	*11/07/19*	*11/07/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Surrogate: n-Nonane		*98.5 %*		*50-200*	*1945033*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*82.3 %*		*50-150*	*1945032*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**73.4**	20.0	mg/kg	1	1945036	11/07/19	11/07/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Sidewall 8
P911023-05 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*105 %*		*50-150*	*1945032*	*11/07/19*	*11/07/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Surrogate: n-Nonane		*96.2 %*		*50-200*	*1945033*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945032	11/07/19	11/07/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*82.2 %*		*50-150*	*1945032*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**20.6**	20.0	mg/kg	1	1945036	11/07/19	11/07/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Sidewall 9
P911023-06 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*		*50-150*	*1945032*	*11/07/19*	*11/08/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Surrogate: n-Nonane		*97.9 %*		*50-200*	*1945033*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*81.9 %*		*50-150*	*1945032*	*11/07/19*	*11/08/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	1945036	11/07/19	11/07/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Sidewall 10
P911023-07 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*104 %*		*50-150*	*1945032*	*11/07/19*	*11/08/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Surrogate: n-Nonane		*97.7 %*		*50-200*	*1945033*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*82.4 %*		*50-150*	*1945032*	*11/07/19*	*11/08/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**71.7**	20.0	mg/kg	1	1945036	11/07/19	11/07/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Sidewall 11
P911023-08 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*105 %*		*50-150*	*1945032*	*11/07/19*	*11/08/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Surrogate: n-Nonane		*95.6 %*		*50-200*	*1945033*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*82.1 %*		*50-150*	*1945032*	*11/07/19*	*11/08/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**100**	20.0	mg/kg	1	1945036	11/07/19	11/07/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Sidewall 12
P911023-09 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*105 %*		*50-150*	*1945032*	*11/07/19*	*11/08/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945033	11/07/19	11/07/19	EPA 8015D	
Surrogate: n-Nonane		*99.2 %*		*50-200*	*1945033*	*11/07/19*	*11/07/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1945032	11/07/19	11/08/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*83.0 %*		*50-150*	*1945032*	*11/07/19*	*11/08/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**127**	20.0	mg/kg	1	1945036	11/07/19	11/07/19	EPA 300.0/9056A	

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1945032 - Purge and Trap EPA 5030A										
Blank (1945032-BLK1)				Prepared: 11/07/19 0 Analyzed: 11/07/19 1						
Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	*8.48*		*"*	*8.00*		*106*	*50-150*			
LCS (1945032-BS1)				Prepared: 11/07/19 0 Analyzed: 11/07/19 1						
Benzene	4.62	0.0250	mg/kg	5.00		92.3	70-130			
Toluene	4.58	0.0250	"	5.00		91.6	70-130			
Ethylbenzene	4.56	0.0250	"	5.00		91.1	70-130			
p,m-Xylene	9.11	0.0500	"	10.0		91.1	70-130			
o-Xylene	4.55	0.0250	"	5.00		91.0	70-130			
Total Xylenes	13.7	0.0250	"	15.0		91.0	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*8.54*		*"*	*8.00*		*107*	*50-150*			
Matrix Spike (1945032-MS1)		**Source: P911021-01**		Prepared: 11/07/19 0 Analyzed: 11/07/19 1						
Benzene	4.61	0.0250	mg/kg	5.00	ND	92.1	54.3-133			
Toluene	4.57	0.0250	"	5.00	ND	91.3	61.4-130			
Ethylbenzene	4.55	0.0250	"	5.00	ND	91.0	61.4-133			
p,m-Xylene	9.09	0.0500	"	10.0	ND	90.9	63.3-131			
o-Xylene	4.54	0.0250	"	5.00	ND	90.8	63.3-131			
Total Xylenes	13.6	0.0250	"	15.0	ND	90.8	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	*8.42*		*"*	*8.00*		*105*	*50-150*			
Matrix Spike Dup (1945032-MSD1)		**Source: P911021-01**		Prepared: 11/07/19 0 Analyzed: 11/07/19 1						
Benzene	4.51	0.0250	mg/kg	5.00	ND	90.2	54.3-133	2.15	20	
Toluene	4.46	0.0250	"	5.00	ND	89.3	61.4-130	2.28	20	
Ethylbenzene	4.44	0.0250	"	5.00	ND	88.8	61.4-133	2.36	20	
p,m-Xylene	8.88	0.0500	"	10.0	ND	88.8	63.3-131	2.33	20	
o-Xylene	4.44	0.0250	"	5.00	ND	88.8	63.3-131	2.19	20	
Total Xylenes	13.3	0.0250	"	15.0	ND	88.8	63.3-131	2.28	20	
Surrogate: 4-Bromochlorobenzene-PID	*8.51*		*"*	*8.00*		*106*	*50-150*			

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
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Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1945033 - DRO Extraction EPA 3570										
Blank (1945033-BLK1)				Prepared: 11/07/19 0 Analyzed: 11/07/19 1						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*54.0*		*"*	*50.0*		*108*	*50-200*			
LCS (1945033-BS1)				Prepared: 11/07/19 0 Analyzed: 11/07/19 1						
Diesel Range Organics (C10-C28)	484	25.0	mg/kg	500		96.7	38-132			
Surrogate: n-Nonane	*51.6*		*"*	*50.0*		*103*	*50-200*			
Matrix Spike (1945033-MS1)		**Source: P911021-01**		Prepared: 11/07/19 0 Analyzed: 11/07/19 1						
Diesel Range Organics (C10-C28)	507	25.0	mg/kg	500	ND	101	38-132			
Surrogate: n-Nonane	*51.5*		*"*	*50.0*		*103*	*50-200*			
Matrix Spike Dup (1945033-MSD1)		**Source: P911021-01**		Prepared: 11/07/19 0 Analyzed: 11/07/19 1						
Diesel Range Organics (C10-C28)	524	25.0	mg/kg	500	ND	105	38-132	3.28	20	
Surrogate: n-Nonane	*53.1*		*"*	*50.0*		*106*	*50-200*			

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
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Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1945032 - Purge and Trap EPA 5030A										
Blank (1945032-BLK1)				Prepared: 11/07/19 0 Analyzed: 11/07/19 1						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.66*		*"*	*8.00*		*95.8*	*50-150*			
LCS (1945032-BS2)				Prepared: 11/07/19 0 Analyzed: 11/07/19 1						
Gasoline Range Organics (C6-C10)	56.9	20.0	mg/kg	50.0		114	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.71*		*"*	*8.00*		*96.4*	*50-150*			
Matrix Spike (1945032-MS2)		**Source: P911021-01**		Prepared: 11/07/19 0 Analyzed: 11/07/19 1						
Gasoline Range Organics (C6-C10)	57.6	20.0	mg/kg	50.0	ND	115	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.74*		*"*	*8.00*		*96.8*	*50-150*			
Matrix Spike Dup (1945032-MSD2)		**Source: P911021-01**		Prepared: 11/07/19 0 Analyzed: 11/07/19 1						
Gasoline Range Organics (C6-C10)	56.6	20.0	mg/kg	50.0	ND	113	70-130	1.78	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.75*		*"*	*8.00*		*96.9*	*50-150*			

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BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1945036 - Anion Extraction EPA 300.0/9056A										
Blank (1945036-BLK1)				Prepared & Analyzed: 11/07/19 1						
Chloride	ND	20.0	mg/kg							
LCS (1945036-BS1)				Prepared & Analyzed: 11/07/19 1						
Chloride	253	20.0	mg/kg	250		101	90-110			
Matrix Spike (1945036-MS1)	**Source: P911023-01**			Prepared & Analyzed: 11/07/19 1						
Chloride	313	20.0	mg/kg	250	62.5	100	80-120			
Matrix Spike Dup (1945036-MSD1)	**Source: P911023-01**			Prepared & Analyzed: 11/07/19 1						
Chloride	310	20.0	mg/kg	250	62.5	99.2	80-120	0.949	20	

QC Summary Report
Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values my differ slightly.

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	GCU 135	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	11/11/19 14:58

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information

Chain of Custody

Page 1 of 1

Client:	BPX ENERGY
Project:	GCU 135
Project Manager:	SABRE BEEBE
Address:	
City, State, Zip	
Phone:	
Email:	

Report Attention

Report due by:	NOV. 8, 2019
Attention:	SABRE BEEBE / ERIN DUNMAN / JEFF BLAND
Address:	
City, State, Zip	
Phone:	
Email:	

Lab Use Only

Lab WO#	Job Number
P 911023	03143-0424

TAT

1D	3D
X	

EPA Program

RCRA	CWA	SDWA

State

NM	CO	UT	AZ
X			
TX	OK		

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	Remarks
0933	11/7/2019	SOIL	1	BASE 8	1	X	X	X			X	
0940			1	BASE 9	2							
0947			1	BASE 10	3							
0955			1	BASE 11	4							
1021			1	SIDEWALL 8	5							
1027			1	SIDEWALL 9	6							
1031			1	SIDEWALL 10	7							
1034			1	SIDEWALL 11	8							
1037			1	SIDEWALL 12	9							

Additional Instructions: BP CONTACT: SABRE BEEBE
BILL TO Project P.O.

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: J M Bugg

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
J M Bugg	11/7/2019	1257	Raina Lopez	11/7/19	12:57
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only

Received on ice: (Y) / N

T1 _____ T2 _____ T3 _____

AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other _____

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech Analytical Laboratory

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-1881 Fx (505) 632-1865

24 Hour Emergency Response Phone (800) 362-1879

envirotech-inc.com

labadmin@envirotech-inc.com

CLIENT: BPX

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

API #: 30045 07885
TANK ID (if applicble): A

FIELD REPORT:

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

PAGE #: 1 of

SITE INFORMATION:

SITE NAME: GCU #135
DATE STARTED: 10/11/19
DATE FINISHED:
QUAD/UNIT: F SEC: 26 TWP: 29 N RNG: 13 W PM: NM CNTY: SJ ST: NM
1/4 -1/4/FOOTAGE: 1545'N/2076'W SE/NW LEASE TYPE: FEDERAL / STATE / FEE / INDIAN
LEASE #: SF078926A PROD. FORMATION: DK CONTRACTOR: KELLEY BROS. CONTACT: BPX - J. BEEBE
ENVIRONMENTAL SPECIALIST(S): NJV / JCB

REFERENCE POINT:

WELL HEAD (W.H.) GPS COORD.: 36.70046 x 108.17743 GL ELEV.: 5728'
1) 95 BGT (SW/OB) GPS COORD.: 36.70057 x 108.17689 DISTANCE/BEARING FROM W.H.: 166', N76.5E
2) GPS COORD.: DISTANCE/BEARING FROM W.H.:
3) GPS COORD.: DISTANCE/BEARING FROM W.H.:
4) GPS COORD.: DISTANCE/BEARING FROM W.H.:

SAMPLING DATA:

CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL

	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	LAB ANALYSIS	OVM READING (ppm)
1)	95 BGT - 5pc @ 5'	10/11/19	0910	8015B/8021B/300.0 (Cl)	0.2
2)	Impact Grab @ 3'	10/11/19	0915	"	357
3)					
4)					
5)					

SOIL DESCRIPTION:

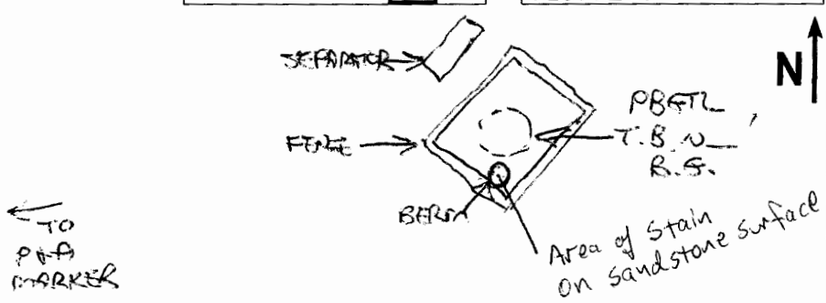
SOIL TYPE: SAND / (SILTY SAND) / SILT / SILTY CLAY / CLAY / GRAVEL / (OTHER) Sandstone South of BGT
SOIL COLOR: TAN
COHESION (ALL OTHERS): NON COHESIVE / (SLIGHTLY COHESIVE) / COHESIVE / HIGHLY COHESIVE
CONSISTENCY (NON COHESIVE SOILS): LOOSE / (FIRM) / DENSE / VERY DENSE
MOISTURE: DRY / (SLIGHTLY MOIST) / MOIST / WET / SATURATED / SUPER SATURATED
SAMPLE TYPE: GRAB / (COMPOSITE) # OF PTS. 5
DISCOLORATION/STAINING OBSERVED: (YES) NO EXPLANATION - ON SANDSTONE RAMP @ South Side of BGT
PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC
DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD
HC ODOR DETECTED: (YES) NO EXPLANATION - ON SANDSTONE RAMP
ANY AREAS DISPLAYING WETNESS: YES / NO EXPLANATION -

SITE OBSERVATIONS:

LOST INTEGRITY OF EQUIPMENT: YES / NO EXPLANATION - UNKNOWN - BGT APPEARS GOOD
APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED : (YES) NO EXPLANATION: GREY STAIN ON RAMP
EQUIPMENT SET OVER RECLAIMED AREA: YES / (NO) EXPLANATION -
OTHER: NMOCD / BLM REP(S) ~~PRESENT~~ / NOT PRESENT TO WITNESS CONFIRMATION SAMPLING.
EXCAVATION DIMENSION ESTIMATION: ____ ft. X ____ ft. X ____ ft. EXCAVATION ESTIMATION (Cubic Yards) :
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER 300'<X<1000' NMOCD TPH CLOSURE STD: 2500 ppm

SITE SKETCH

BGT Located : off / (on) site
PLOT PLAN circle: attached



X - S.P.D.

OVM CALIB. READ. = 100.2 ppm RF = 1.00
OVM CALIB. GAS = 100 ppm
TIME: 0630 (am)pm DATE: 10/11/19

MISCELL. NOTES

PO:
AFE #:
SIO #: 190C40007672
GL #: 745277
Permit date(s): 06/08/10
OCD Appr. date(s): 03/07/17

Tank ID	OVM = Organic Vapor Meter ppm = parts per million
A	BGT Sidewalls Visible: Y (N)
	BGT Sidewalls Visible: Y / N
	BGT Sidewalls Visible: Y / N

Magnetic declination: 10° E

NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD; T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA - NOT APPLICABLE OR NOT AVAILABLE; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM.

NOTES: GOOGLE EARTH IMAGERY DATE: 4/6/2019 . ONSITE: 10/11/19

revised: 10/01/19 BEI1005E-6.SKF

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

October 15, 2019

Sabre Beebe

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

RE: GCU 135 OrderNo.: 1910773

Dear Sabre Beebe:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/12/2019 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

Analytical Report
Lab Order **1910773**
Date Reported: **10/15/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU 135
Lab ID: 1910773-001 **Matrix:** SOIL

Client Sample ID: 95 BGT-5 PC @ 5'
Collection Date: 10/11/2019 9:10:00 AM
Received Date: 10/12/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	100	60		mg/Kg	20	10/14/2019 12:30:53 PM	48121
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	10/14/2019 11:29:04 AM	G63641
Surr: BFB	97.5	70-130		%Rec	1	10/14/2019 11:29:04 AM	G63641
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	52	9.5		mg/Kg	1	10/14/2019 10:19:59 AM	48116
Motor Oil Range Organics (MRO)	110	48		mg/Kg	1	10/14/2019 10:19:59 AM	48116
Surr: DNOP	109	70-130		%Rec	1	10/14/2019 10:19:59 AM	48116
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.016		mg/Kg	1	10/14/2019 11:29:04 AM	S63641
Toluene	ND	0.032		mg/Kg	1	10/14/2019 11:29:04 AM	S63641
Ethylbenzene	ND	0.032		mg/Kg	1	10/14/2019 11:29:04 AM	S63641
Xylenes, Total	ND	0.064		mg/Kg	1	10/14/2019 11:29:04 AM	S63641
Surr: 1,2-Dichloroethane-d4	99.0	70-130		%Rec	1	10/14/2019 11:29:04 AM	S63641
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	10/14/2019 11:29:04 AM	S63641
Surr: Dibromofluoromethane	98.9	70-130		%Rec	1	10/14/2019 11:29:04 AM	S63641
Surr: Toluene-d8	104	70-130		%Rec	1	10/14/2019 11:29:04 AM	S63641

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 Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910773**

15-Oct-19

Client: Blagg Engineering

Project: GCU 135

Sample ID: **MB-48121**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **48121**	RunNo: **63657**							
Prep Date: **10/14/2019**	Analysis Date: **10/14/2019**	SeqNo: **2176026**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-48121**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **48121**	RunNo: **63657**							
Prep Date: **10/14/2019**	Analysis Date: **10/14/2019**	SeqNo: **2176027**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.2	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910773**

15-Oct-19

Client: Blagg Engineering

Project: GCU 135

Sample ID: **LCS-48116**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **48116**	RunNo: **63647**
Prep Date: **10/14/2019**	Analysis Date: **10/14/2019**	SeqNo: **2174624** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	63.9	124			
Surr: DNOP	4.9		5.000		97.4	70	130			

Sample ID: **MB-48116**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **48116**	RunNo: **63647**
Prep Date: **10/14/2019**	Analysis Date: **10/14/2019**	SeqNo: **2174625** 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		103	70	130			

Sample ID: **LCS-48112**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **48112**	RunNo: **63647**
Prep Date: **10/11/2019**	Analysis Date: **10/14/2019**	SeqNo: **2175390** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		103	70	130			

Sample ID: **MB-48112**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **48112**	RunNo: **63647**
Prep Date: **10/11/2019**	Analysis Date: **10/14/2019**	SeqNo: **2175391** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		115	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 Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910773**

15-Oct-19

Client: Blagg Engineering

Project: GCU 135

Sample ID: **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **S63641**	RunNo: **63641**
Prep Date:	Analysis Date: **10/14/2019**	SeqNo: **2175836** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.5	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.0	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.5	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **S63641**	RunNo: **63641**
Prep Date:	Analysis Date: **10/14/2019**	SeqNo: **2175837** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.4	68	135			
Toluene	0.95	0.050	1.000	0	94.7	70	130			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.3	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.7	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.0	70	130			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910773**

15-Oct-19

Client: Blagg Engineering

Project: GCU 135

Sample ID: **rb**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **G63641**	RunNo: **63641**
Prep Date:	Analysis Date: **10/14/2019**	SeqNo: **2175888** 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	490		500.0		97.6	70	130			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G63641**	RunNo: **63641**
Prep Date:	Analysis Date: **10/14/2019**	SeqNo: **2175889** 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	96.0	70	130			
Surr: BFB	450		500.0		90.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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: 1910773 RcptNo: 1

Received By: Isaiah Ortiz 10/12/2019 8:00:00 AM I-Ox

Completed By: Anne Thorne 10/14/2019 7:49:33 AM Anne Thorne

Reviewed By: DM 10/14/19

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: AT 10/14/19

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	5.1	Good	Yes			

Chain-of-Custody Record

Client: **BLAGG ENGR. / BPX ENERGY**

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:
GCU # 135

Project #:

Project Manager:
SABRE BEEBE

Sampler: **JEFFREY C. BLAGG**

On Ice: ☑ Yes ☐ No

Sample Temperature: 5.1-0 (F) 5.1 °C

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and # (10/14/19 AC)	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	5 pt. composite sample	Air Bubbles (Y or N)
10/11/2019	0910	SOIL	95 BGT - 5pc @ 5'	4 oz x1 Mentha	COOL	001	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/11/2019	1345	Jeff Blagg	FedEx Courier	10/12/19	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: **BILL DIRECTLY TO BPX USING THE CONTACT(S) BELOW. PO DELIVERED VIA EMAIL OR IS PENDING.**

CONTACT: **SABRE BEEBE / ERIN DUNMAN**

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

October 15, 2019

Sabre Beebe

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

RE: GCU 135 OrderNo.: 1910777

Dear Sabre Beebe:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/12/2019 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

Analytical Report
Lab Order **1910777**
Date Reported: **10/15/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: Impact Grab @ 3'
Project: GCU 135
Collection Date: 10/11/2019 9:15:00 AM
Lab ID: 1910777-001 **Matrix:** SOIL **Received Date:** 10/12/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	110	60		mg/Kg	20	10/14/2019 12:43:17 PM	48121
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	340	18		mg/Kg	5	10/14/2019 11:58:34 AM	G63641
Surr: BFB	128	70-130		%Rec	5	10/14/2019 11:58:34 AM	G63641
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	2100	92		mg/Kg	10	10/14/2019 11:04:06 AM	48116
Motor Oil Range Organics (MRO)	1100	460		mg/Kg	10	10/14/2019 11:04:06 AM	48116
Surr: DNOP	0	70-130	S	%Rec	10	10/14/2019 11:04:06 AM	48116
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.090		mg/Kg	5	10/14/2019 11:58:34 AM	S63641
Toluene	ND	0.18		mg/Kg	5	10/14/2019 11:58:34 AM	S63641
Ethylbenzene	0.25	0.18		mg/Kg	5	10/14/2019 11:58:34 AM	S63641
Xylenes, Total	2.7	0.36		mg/Kg	5	10/14/2019 11:58:34 AM	S63641
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%Rec	5	10/14/2019 11:58:34 AM	S63641
Surr: 4-Bromofluorobenzene	132	70-130	S	%Rec	5	10/14/2019 11:58:34 AM	S63641
Surr: Dibromofluoromethane	91.1	70-130		%Rec	5	10/14/2019 11:58:34 AM	S63641
Surr: Toluene-d8	96.9	70-130		%Rec	5	10/14/2019 11:58:34 AM	S63641

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 Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910777**

15-Oct-19

Client: Blagg Engineering

Project: GCU 135

Sample ID: **MB-48121**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **48121**	RunNo: **63657**
Prep Date: **10/14/2019**	Analysis Date: **10/14/2019**	SeqNo: **2176026** Units: **mg/Kg**

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

Sample ID: **LCS-48121**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **48121**	RunNo: **63657**
Prep Date: **10/14/2019**	Analysis Date: **10/14/2019**	SeqNo: **2176027** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.2	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910777**

15-Oct-19

Client: Blagg Engineering

Project: GCU 135

Sample ID: **LCS-48116**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **48116**	RunNo: **63647**
Prep Date: **10/14/2019**	Analysis Date: **10/14/2019**	SeqNo: **2174624** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	63.9	124			
Surr: DNOP	4.9		5.000		97.4	70	130			

Sample ID: **MB-48116**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **48116**	RunNo: **63647**
Prep Date: **10/14/2019**	Analysis Date: **10/14/2019**	SeqNo: **2174625** 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		103	70	130			

Sample ID: **LCS-48112**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **48112**	RunNo: **63647**
Prep Date: **10/11/2019**	Analysis Date: **10/14/2019**	SeqNo: **2175390** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		103	70	130			

Sample ID: **MB-48112**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **48112**	RunNo: **63647**
Prep Date: **10/11/2019**	Analysis Date: **10/14/2019**	SeqNo: **2175391** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		115	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910777**

15-Oct-19

Client: Blagg Engineering

Project: GCU 135

Sample ID: **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **S63641**	RunNo: **63641**
Prep Date:	Analysis Date: **10/14/2019**	SeqNo: **2175836** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.5	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.0	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.5	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **S63641**	RunNo: **63641**
Prep Date:	Analysis Date: **10/14/2019**	SeqNo: **2175837** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.4	68	135			
Toluene	0.95	0.050	1.000	0	94.7	70	130			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.3	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.7	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.0	70	130			
Surr: Toluene-d8	0.50		0.5000		101	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 Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910777**

15-Oct-19

Client: Blagg Engineering

Project: GCU 135

Sample ID: **rb**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **G63641**	RunNo: **63641**
Prep Date:	Analysis Date: **10/14/2019**	SeqNo: **2175888** 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	490		500.0		97.6	70	130			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G63641**	RunNo: **63641**
Prep Date:	Analysis Date: **10/14/2019**	SeqNo: **2175889** 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	96.0	70	130			
Surr: BFB	450		500.0		90.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
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Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1910777 RcptNo: 1

Received By: Isaiah Ortiz 10/12/2019 8:00:00 AM I-Ok

Completed By: Anne Thorne 10/14/2019 8:00:45 AM Anne Thorne

Reviewed By: DM 10/14/19

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: AT 10/14/19

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	5.1	Good	Yes			

Chain-of-Custody Record

Client: **BLAGG ENGR. / BPX ENERGY**

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:
GCU # 135

Project #:

Project Manager:
SABRE BEEBE

Sampler: **JEFFREY C. BLAGG**

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.1 - 0 (+) 5.1 °C

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and # (10/11/19 MeOH Kit)	Preservative Type	HEAL No. 910777	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	5 pt. composite sample	Air Bubbles (Y or N)
10/11/2019	0915	SOIL	Impact Grab @ 3'	4oz x 1	COOL	001	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/11/2019	1345	Jeff Blagg	[illegible]	10/12/19	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: **BILL DIRECTLY TO BPX USING THE CONTACT(S) BELOW. PO DELIVERED VIA EMAIL OR IS PENDING.**

CONTACT: **SABRE BEEBE / ERIN DUNMAN**

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