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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: BP America Production Co.	OGRID: 778	Final Report: NVF1824047287
Contact Name: Steve Moskal	Contact Telephone: (505) 330-9179	
Contact email: steven.moskal@bpx.com	Incident # *(assigned by OCD)*	
Contact mailing address: 1199 Main Street, Suite 101, Durango, CO 81301		

Location of Release Source

Latitude: 36.62140° Longitude: -108.09608°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: GALLEGOS CANYON UNIT 004	Site Type: Natural Gas Production Well Pad
Date Release Discovered: 6/20/2018	API#: 30-045-07045

Unit Letter	Section	Township	Range	County
G	34	T28N	R12W	San Juan

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

Nature and Volume of Release

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

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

Cause of Release:

During closure activities, impacts were identified beneath the 95 bbl BGT. Lab analysis confirmed the impacts are above the BGT permit and 19.15.29 NMAC closure standards for groundwater <50 feet (ft.).

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
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Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

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:

The released water absorbed into the ground surface.

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

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<50 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature:_____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date**:** _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

☐ Extents of contamination must be fully delineated.

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

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

Printed Name: _____ Title: _____

Signature:_____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Steve Moskal Title: Environmental Coordinator

Signature: Date: August 19, 2019

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

OCD Only

Received by: OCD Date: 8/20/19

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

Closure Approved by: Date: 8/26/19

Printed Name: Cory Title: Environmental Specalist

BPX Energy Inc.

Gallegos Canyon Unit 004
(G) Sec 34 – T28N – R12W
API: 30-045-07045
San Juan County, New Mexico
NMOCD Incident No: NVF1824047287

Summary Record of Impact Remediation

June 20, 2018
1. Confirmation sampling conducted of a 95 barrel below grade tank (**BGT**). 5 point composite sample (**5pcs**) collected directly beneath BGT at 5 feet (**ft.**) below grade (**b.g.**).
2. BGT permit closure standard for total petroleum hydrocarbons (**TPH**) per US EPA Method 8015M/D of 100 mg/Kg.
3. Gas well to be plugged and abandoned.
4. Federal mineral lease; Navajo Indian surface lease.

June 23, 2018 — Preliminary lab results were as follows: TPH = 590 mg/Kg, benzene, chloride, and total **BTEX (**benzene, toluene, ethylbenzene, and total xylenes) were not detected (**ND**).

June 25, 2018 — Received 06/20/2018 final laboratory reports. *Official date of impact discovery.*

August 22, 2018 — BPX submits Characterization Plan (Site Assessment/Delineation) to NMOCD. NMOCD approved 8/28/2018.

August 23, 2018 — BPX submits BGT closure report to NMOCD.

August 28, 2018 — Emails between BPX and NMOCD regarding site characterization scheduling (*see August Email Correspondence*).

January 2019 — Emails between BPX and NMOCD regarding site characterization scheduling (*see January Email Correspondence*).

January 22, 2019 — Conduct hand auger investigation at BGT site to characterize release. Submit samples to lab.

January 29, 2019 — Received 01/22/2019 characterization samples final laboratory report. Results listed below. Bore hole logs included.

Characterization Sample Laboratory Analytical Results

Sample ID (grab samples)	Field OVM (ppm)	TPH (GRO+DRO+MRO) (mg/Kg)	Benzene (mg/Kg)	Total BTEX (mg/Kg)	Chloride (mg/Kg)
HA-1 @ 7’	0.0	ND	ND	ND	ND
HA-1 @ 16’	0.0	ND	ND	ND	ND
HA-2 @ 7’	0.0	ND	ND	ND	ND
HA-2 @ 16’	0.0	ND	ND	ND	ND
HA-3 @ 7’	0.0	1,240	ND	ND	ND
HA-3 @ 16’	0.0	ND	ND	ND	ND
HA-4 @ 7’	0.0	ND	ND	ND	ND
HA-4 @ 16’	0.0	ND	ND	ND	ND
HA-4 @ 7’	0.0	ND	ND	ND	ND
HA-4 @ 16’	0.0	ND	ND	ND	ND

OVM – Organic Vapor Meter, ppm – parts per million, GRO – Gasoline Range Organics, DRO – Diesel Range Organics, MRO or ORO – Motor Oil Range Organics, BTEX – benzene, toluene, ethylbenzene, total xylenes, mg/Kg – milligram per kilogram, ND – Not detected at laboratory reporting limit.

March 2019 — Emails between BPX and NMOCD regarding site remediation scheduling/activities (*see March Email Correspondence*).

March 4, 2019 — Initiated remediation via excavation and haul. Impacted media later transported to Envirotech landfarm.

March 5, 2019 — Initial closure sampling conducted.

March 6, 2019 — Receive closure lab results. Combined north and west sidewalls fail.

March 15, 2019 — Continuation of remediation via excavation. Final closure sampling conducted.

March 20, 2019 — Received 03/15/2019 closure samples final laboratory report. Closure lab results listed below.

Excavation Closure Sample Laboratory Analytical Results

Sample ID (5 pt. composites)	Date	Field OVM (ppm)	TPH (GRO+DRO+MRO) (mg/Kg)	Benzene (mg/Kg)	Total BTEX (mg/Kg)	Chloride (mg/Kg)
Base 5-pt @ 12'	3/05/2019	0.2	ND	ND	ND	ND
N & W Walls (6-pt) 5'-10'	3/05/2019	0.3	435	ND	ND	ND
S & E Walls (6-pt) 5'-10'	3/05/2019	0.1	ND	ND	ND	ND
North Wall 5-pt. 5'-12'	3/15/2019	NA	ND	NA	NA	NA
West Wall 5-pt. 5'-12'	3/15/2019	NA	ND	NA	NA	NA

OVM – Organic Vapor Meter, ppm – parts per million, GRO – Gasoline Range Organics, DRO – Diesel Range Organics, MRO or ORO – Motor Oil Range Organics, BTEX – benzene, toluene, ethylbenzene, total xylenes, mg/Kg – milligram per kilogram, ND – Not detected at laboratory reporting limit, NA – not analyzed.

March 21, 2019 — Completed backfill of remediation excavation.

August 2018 Email Correspondence

From: Fields, Vanessa, EMNRD
Sent: Tuesday, August 28, 2018 1:30 PM
To: Steven Moskal
Cc: Smith, Cory, EMNRD
Subject: RE: GCU 004 30-045-07045 remediation

Good afternoon Steve,

The initial C-141 and characterization plan has been approved. A full characterization report must be submitted to the OCD by September 25, 2018. Please allow 48 hours business notification prior to sampling.

Thank you,

Vanessa Fields - Environmental Specialist
Oil Conservation Division - Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410 | (505)334-6178 ext 119

From: Steven Moskal
Sent: Tuesday, August 28, 2018 at 1:35 PM
To: Fields, Vanessa, EMNRD
Cc: Smith, Cory, EMNRD, jeffcblagg@aol.com, 'blagg_njv@yahoo.com', Erin Dunman
Subject: RE: GCU 004 30-045-07045 remediation

Vanessa,

BP will aim to meet the September 25th deadline, however due to ongoing irrigation in the crop circle where the release site is located, we may need additional time. Ideally, once irrigation is complete for the season.

Let me know your thoughts.

Steve Moskal - *Field Environmental Coordinator*
BP Lower 48 – San Juan

From: Fields, Vanessa, EMNRD
Sent: Tuesday, August 28, 2018 1:49 PM
To: Steven Moskal
Cc: Smith, Cory, EMNRD; Blagg, Jefferey; 'blagg_njv@yahoo.com'; Erin Dunman
Subject: RE: GCU 004 30-045-07045 remediation

Steve,

Keep us posted as the date gets closer.

Thank you,

Vanessa Fields - Environmental Specialist
Oil Conservation Division - Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410 | (505)334-6178 ext 119

January 2019 Email Correspondence

From: Fields, Vanessa, EMNRD
Sent: Friday, January 11, 2019 10:48 AM
To: Steven Moskal
Cc: Smith, Cory, EMNRD; Blagg, Jefferey; 'blagg_njv@yahoo.com'
Subject: RE: GCU 004 30-045-07045 remediation

Good morning Steve,

Could you provide the status on the GCU #004? Delineation was to be completed by 9/25/2018.

Thank you,

Vanessa Fields - Environmental Specialist
Oil Conservation Division - Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410 | (505)334-6178 ext 119

From: Steven Moskal
Sent: Friday, January 11, 2019 at 11:51 AM
To: Fields, Vanessa, EMNRD
Cc: Smith, Cory, EMNRD, Blagg, Jefferey,'blagg_njv@yahoo.com'
Subject: RE: GCU 004 30-045-07045 remediation

No, I don't believe we had any further action on this. I will get it prioritized and notify as appropriate.

Steve Moskal - Environmental Coordinator
BP San Juan

Sent from my mobile device

From: Fields, Vanessa, EMNRD
Sent: Friday, January 11, 2019 at 11:54 AM
To: Steven Moskal
Cc: Smith, Cory, EMNRD; Blagg, Jefferey; 'blagg_njv@yahoo.com'
Subject: RE: GCU 004 30-045-07045 remediation

Thank you Steve.

Vanessa Fields - Environmental Specialist
Oil Conservation Division - Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410 | (505)334-6178 ext 119

From: Steven Moskal
Sent: Monday, January 14, 2019 at 2:09 PM
To: Fields, Vanessa, EMNRD
Cc: Smith, Cory, EMNRD, Blagg, Jefferey, 'blagg_njv@yahoo.com', Jody Gonzales, Vance Hixon
Subject: Re: GCU 004 30-045-07045 remediation

Vanessa,

This work is scheduled for Friday morning, 1/18.

Thank you,

Steve Moskal - *Environmental Coordinator*
BP America Production Co. - bpx energy - WBU
1199 Main Ave. | Suite 101 | Durango | CO | 81301

From: Steven Moskal
Sent: Thursday, January 17, 2019 at 11:11 AM
To: Fields, Vanessa, EMNRD
Cc: Smith, Cory, EMNRD; Blagg, Jefferey; 'blagg_njv@yahoo.com'; Jody Gonzales; Vance Hixon
Subject: Re: GCU 004 30-045-07045 remediation

This work will be postponed until the plugging and abandonment of the production well is complete.

Thank you,

Steve Moskal - Environmental Coordinator
BP San Juan

Sent from my mobile device

From: Steven Moskal
Sent: Thursday, January 17, 2019 at 11:50 AM
To: Fields, Vanessa, EMNRD
Cc: Smith, Cory, EMNRD, Blagg, Jefferey, 'blagg_njv@yahoo.com', Jody Gonzales, Vance Hixon
Subject: GCU 004 30-045-07045 remediation

The plugging rig will be removed tomorrow. We will shoot for Monday morning of next week to complete this sampling.

Thanks,

Steve Moskal - Environmental Coordinator
BP San Juan

Sent from my mobile device

From: Fields, Vanessa, EMNRD <vanessa.fields@state.nm.us>
Sent: Thursday, January 17, 2019 1:28 PM
To: Steven Moskal
Cc: Smith, Cory, EMNRD; Blagg, Jefferey; 'blagg_njv@yahoo.com'; Jody Gonzales; Vance Hixon
Subject: RE: GCU 004 30-045-07045 remediation

Good afternoon Steve,

Could we schedule for Tuesday January 22, 2019? I forgot the office was closed.

Thank you,

Vanessa Fields-Environmental Specialist
Oil Conservation Division- Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410 | (505)334-6178 ext 119

From: Steven Moskal
Sent: Monday, January 21, 2019 at 7:20 PM
To: Fields, Vanessa, EMNRD
Cc: Smith, Cory, EMNRD, Blagg, Jefferey, 'blagg_njv@yahoo.com', Jody Gonzales, Vance Hixon
Subject: GCU 004 30-045-07045 remediation

We plan to be on site at 8:30 AM tomorrow, Tuesday, 1/22.

Thank you,

Steve Moskal - Environmental Coordinator
BP San Juan

Sent from my mobile device

March 2019 Email Correspondence

From: Steven Moskal
Sent: Friday, March 1, 2019 at 7:08 AM
To: Fields, Vanessa, EMNRD, Cory Smith - NMOCD
Cc: Sabre Beebe, jeffcblagg@aol.com, 'blagg_njv@yahoo.com'
Subject: Sampling Notification - GCU 004

Vanessa and Cory,

BP will begin to excavate at the GCU 004 BGT on Monday, 3/4. We plan to sample the excavation on Tuesday, 3/5 around 1:30 PM.

I will let you know if anything changes.

Thank you,

Steve Moskal - *Environmental Coordinator*
BP America Production Co. - bpx energy - WBU
1199 Main Ave. | Suite 101 | Durango | CO | 81301

From: Steven Moskal
Sent: Wednesday, March 6, 2019 at 4:17 PM
To: Fields, Vanessa, EMNRD
Cc: Cory Smith - NMOCD, Sabre Beebe, jeffcblagg@aol.com, 'blagg_njv@yahoo.com'
Subject: GCU 004 Sample Results 3/6/2019

Vanessa,

The combined North (pipeline) wall & West wall failed on TPH at 335 ppm. The excavation will be extended the north wall past the NAPI waterline. We are currently working with NAPI to determine how the waterline will be addressed. I hope that we will be able to resample tomorrow mid day.

Both the Base and South & East wall were non-detect.

Steve Moskal - *Environmental Coordinator*
BP America Production Co. - bpx energy - WBU
1199 Main Ave. | Suite 101 | Durango | CO | 81301

From: Sabre Beebe
Sent: Wednesday, March 6, 2019 at 5:18 PM
To: Steven Moskal, Fields, Vanessa, EMNRD
Cc: Cory Smith - NMOCD, jeffcblagg@aol.com, 'blagg_njv@yahoo.com'
Subject: RE: GCU 004 Sample Results 3/6/2019

All,

NAPI is working a plan to remove an adequate section of the abandoned water line where we need to perform excavation. They will communicate with me their timing for said removal. So to allow then to safely address their line we will not be able to resume excavation until they have completed their work. As soon as I hear back from NAPI on timing and/or completion I will communicate out to all involved when we can do more excavation work.

Sabre Beebe - Compliance Specialist – San Juan Basin Asset
BP America Production Company - BPX Energy, Inc.

From: Sabre Beebe
Sent: Tuesday, March 12, 2019 at 2:47 PM
To: Steven Moskal, Jeff Jantz, Nelson Velez, Clay Elkins
Subject: GCU 004 remediation and sampling

All,

I received word today from NAPI that the pipe has been removed from the excavation area on the GCU 004. I would like to propose that weather permitting we dig the extra Friday morning and set up sampling for around noon that day. Kelley's is available just need to know if Blagg Engineering will have someone available that day?

This timing by my calculations is cutting it close on the 72 hour notice so we could wait until Monday if we have to. Please let me know. Thank you

Sabre Beebe - Compliance Specialist – San Juan Basin Asset
BP America Production Company - BPX Energy, Inc.

From: Steven Moskal
Sent: Wednesday, March 13, 2019 at 8:36 AM
To: Vanessa Fields
Cc: Sabre Beebe, Jeff Blagg, 'blagg_njv@yahoo.com', Gabe Estrada
Subject: GCU 004 Sampling Notification

BP will resume excavation on Friday 3/15 with sampling planned for 12:00 noon.

Thank you,

Steve Moskal - Environmental Coordinator
BP San Juan

Sent from my mobile device

SITE

CHARACTERIZATION

Figure 1

BP - GCU 004

(G) Section 34, T28N, R12W
API #: 3004507045

Imagery date: 3/15/2015
WH GPS Coord.: 36.621296,-108.095822

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 320-1183

FIELD BORING LOG

BORING ID: HA-1

PROJECT: GCU 4
CLIENT: BPX Energy
DRILLING CONTRACTOR: Strike/Crossfire
EQUIPMENT USED: 4-Inch OD Hand Auger
DATE START: 1/22/2019 DATE FINISH: 1/22/2019 DRILLER: JCB LOGGED BY: JCB
TOTAL DEPTH: 16' CASING TYPE & SIZE: None SLOT SIZE: None
COMMENTS: Boring located at center of 95 BGT

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	Field OVM	Lab TPH	SAMPLE DESCRIPTION
	0840	Cuttings			Silty sand with minor angular gravel (backfill)
1'					
2'					
3'					
4'					
5'	0848	Cuttings	0.0		Fine sand/silt, yellow tan, lite moisture, no odor or stain
6'					
7'	0852	Cuttings	0.0	ND	Same as Above
8'					
9'					
10	0901	Cuttings	0.0		Same as Above
11'					
12'					
13'	0910	Cuttings	0.0		Same as Above
14'					
15					
16	0954	Cuttings	0.0	ND	Same as Above

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 320-1183

FIELD BORING LOG

BORING ID: HA-2

PROJECT: GCU 4
CLIENT: BPX Energy
DRILLING CONTRACTOR: Strike/Crossfire
EQUIPMENT USED: 4-Inch OD Hand Auger
DATE START: 1/22/2019 DATE FINISH: 1/22/2019 DRILLER: JCB LOGGED BY: JCB
TOTAL DEPTH: 16' CASING TYPE & SIZE: None SLOT SIZE: None
COMMENTS: Boring located 7.5' north of HA-1, at northern edge of prior 95 BGT

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	Field OVM	Lab TPH	SAMPLE DESCRIPTION
	0915	Cuttings			Silty sand with minor angular gravel (backfill)
1'					
2'					
3'					
4'					
5'	0924	Cuttings	0.0		Fine sand/silt, yellow tan, lite moisture, no odor or stain
6'					
7'	0929	Cuttings	0.0	ND	Same as Above
8'					
9'					
10	0935	Cuttings	0.0		Same as Above
11'					
12'					
13'	0939	Cuttings	0.0		Same as Above
14'					
15					
16	0947	Cuttings	0.0	ND	Same as Above

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 320-1183

FIELD BORING LOG

BORING ID: HA-3

PROJECT: GCU 4
CLIENT: BPX Energy
DRILLING CONTRACTOR: Strike/Crossfire
EQUIPMENT USED: 4-Inch OD Hand Auger
DATE START: 1/22/2019 DATE FINISH: 1/22/2019 DRILLER: JCB LOGGED BY: JCB
TOTAL DEPTH: 16' CASING TYPE & SIZE: None SLOT SIZE: None
COMMENTS: Boring located 7.5' South of HA-1, at southern edge of prior 95 BGT

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	Field OVM	Lab TPH	SAMPLE DESCRIPTION
	0956	Cuttings			Silty sand with minor angular gravel (backfill)
1'					
2'					
3'					
4'					
5'	1000	Cuttings	0.0		Fine sand/silt, yellow tan, lite moisture, no odor or stain
6'					
7'	1003	Cuttings	0.0	GRO=ND DRO=260 MRO=980 TPH = 1,240	Same as Above
8'					
9'					
10	1009	Cuttings	0.0		Same as Above
11'					
12'					
13'	1015	Cuttings	0.0		Same as Above
14'					
15					
16	1023	Cuttings	0.0	ND	Same as Above

BLAGG ENGINEERING, INC.
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FIELD BORING LOG

BORING ID: HA-4

PROJECT: GCU 4
CLIENT: BPX Energy
DRILLING CONTRACTOR: Strike/Crossfire
EQUIPMENT USED: 4-Inch OD Hand Auger
DATE START: 1/22/2019 DATE FINISH: 1/22/2019 DRILLER: JCB LOGGED BY: JCB
TOTAL DEPTH: 16' CASING TYPE & SIZE: None SLOT SIZE: None
COMMENTS: Boring located 7.5' East of HA-1, at eastern edge of prior 95 BGT

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	Field OVM	Lab TPH	SAMPLE DESCRIPTION
	1025	Cuttings			Silty sand with minor angular gravel (backfill)
1'					
2'					
3'					
4'					
5'	1030	Cuttings	0.0		Fine sand/silt, yellow tan, lite moisture, no odor or stain
6'					
7'	1032	Cuttings	0.0	ND	Same as Above
8'					
9'					
10	1038	Cuttings	0.0		Same as Above
11'					
12'					
13'	1044	Cuttings	0.0		Same as Above
14'					
15					
16	1050	Cuttings	0.0	ND	Same as Above

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FIELD BORING LOG

BORING ID: HA-5

PROJECT: GCU 4
CLIENT: BPX Energy
DRILLING CONTRACTOR: Strike/Crossfire
EQUIPMENT USED: 4-Inch OD Hand Auger
DATE START: 1/22/2019 DATE FINISH: 1/22/2019 DRILLER: JCB LOGGED BY: JCB
TOTAL DEPTH: 16' CASING TYPE & SIZE: None SLOT SIZE: None
COMMENTS: Boring located 7.5' West of HA-1, at western edge of prior 95 BGT

DEPTH FEET	SAMPLE TIME	SAMPLE TYPE	Field OVM	Lab TPH	SAMPLE DESCRIPTION
	1056	Cuttings			Silty sand with minor angular gravel (backfill)
1'					
2'					
3'					
4'					
5'	1103	Cuttings	0.0		Fine sand/silt, yellow tan, lite moisture, no odor or stain
6'					
7'	1106	Cuttings	0.0	ND	Same as Above
8'					
9'					
10	1112	Cuttings	0.0		Same as Above
11'					
12'					
13'	1118	Cuttings	0.0		Same as Above
14'					
15					
16	1127	Cuttings	0.0	ND	Same as Above

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: HA-1 @ 7'
Project: GCU 4
Collection Date: 1/22/2019 8:52:00 AM
Lab ID: 1901862-001 **Matrix:** SOIL **Received Date:** 1/23/2019 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	ND	30		mg/Kg	20	1/26/2019 10:40:14 PM	42827
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/25/2019 8:04:16 PM	42785
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/25/2019 8:04:16 PM	42785
Surr: DNOP	93.9	50.6-138		%Rec	1	1/25/2019 8:04:16 PM	42785
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/24/2019 1:51:25 PM	42756
Surr: BFB	97.7	73.8-119		%Rec	1	1/24/2019 1:51:25 PM	42756
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	1/24/2019 1:51:25 PM	42756
Toluene	ND	0.047		mg/Kg	1	1/24/2019 1:51:25 PM	42756
Ethylbenzene	ND	0.047		mg/Kg	1	1/24/2019 1:51:25 PM	42756
Xylenes, Total	ND	0.094		mg/Kg	1	1/24/2019 1:51:25 PM	42756
Surr: 4-Bromofluorobenzene	97.6	80-120		%Rec	1	1/24/2019 1:51:25 PM	42756

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: HA-1 @ 16'
Project: GCU 4
Collection Date: 1/22/2019 9:54:00 AM
Lab ID: 1901862-002 **Matrix:** SOIL **Received Date:** 1/23/2019 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/26/2019 11:17:27 PM	42827
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/25/2019 8:26:04 PM	42785
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/25/2019 8:26:04 PM	42785
Surr: DNOP	85.8	50.6-138		%Rec	1	1/25/2019 8:26:04 PM	42785
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/24/2019 2:15:03 PM	42756
Surr: BFB	96.9	73.8-119		%Rec	1	1/24/2019 2:15:03 PM	42756
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	1/24/2019 2:15:03 PM	42756
Toluene	ND	0.048		mg/Kg	1	1/24/2019 2:15:03 PM	42756
Ethylbenzene	ND	0.048		mg/Kg	1	1/24/2019 2:15:03 PM	42756
Xylenes, Total	ND	0.095		mg/Kg	1	1/24/2019 2:15:03 PM	42756
Surr: 4-Bromofluorobenzene	96.6	80-120		%Rec	1	1/24/2019 2:15:03 PM	42756

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: HA-2 @ 7'
Project: GCU 4
Collection Date: 1/22/2019 9:29:00 AM
Lab ID: 1901862-003 **Matrix:** SOIL **Received Date:** 1/23/2019 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/26/2019 11:29:52 PM	42827
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/25/2019 8:47:56 PM	42785
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/25/2019 8:47:56 PM	42785
Surr: DNOP	90.0	50.6-138		%Rec	1	1/25/2019 8:47:56 PM	42785
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/24/2019 2:38:41 PM	42756
Surr: BFB	97.9	73.8-119		%Rec	1	1/24/2019 2:38:41 PM	42756
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	1/24/2019 2:38:41 PM	42756
Toluene	ND	0.047		mg/Kg	1	1/24/2019 2:38:41 PM	42756
Ethylbenzene	ND	0.047		mg/Kg	1	1/24/2019 2:38:41 PM	42756
Xylenes, Total	ND	0.095		mg/Kg	1	1/24/2019 2:38:41 PM	42756
Surr: 4-Bromofluorobenzene	97.7	80-120		%Rec	1	1/24/2019 2:38:41 PM	42756

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: HA-2 @ 16'
Project: GCU 4
Collection Date: 1/22/2019 9:47:00 AM
Lab ID: 1901862-004 **Matrix:** SOIL **Received Date:** 1/23/2019 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/26/2019 11:42:16 PM	42827
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/25/2019 9:09:42 PM	42785
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/25/2019 9:09:42 PM	42785
Surr: DNOP	96.1	50.6-138		%Rec	1	1/25/2019 9:09:42 PM	42785
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/24/2019 3:02:13 PM	42756
Surr: BFB	96.0	73.8-119		%Rec	1	1/24/2019 3:02:13 PM	42756
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	1/24/2019 3:02:13 PM	42756
Toluene	ND	0.046		mg/Kg	1	1/24/2019 3:02:13 PM	42756
Ethylbenzene	ND	0.046		mg/Kg	1	1/24/2019 3:02:13 PM	42756
Xylenes, Total	ND	0.093		mg/Kg	1	1/24/2019 3:02:13 PM	42756
Surr: 4-Bromofluorobenzene	96.4	80-120		%Rec	1	1/24/2019 3:02:13 PM	42756

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: HA-3 @ 7'
Project: GCU 4
Collection Date: 1/22/2019 10:03:00 AM
Lab ID: 1901862-005 **Matrix:** SOIL **Received Date:** 1/23/2019 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/26/2019 11:54:40 PM	42827
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	260	98		mg/Kg	10	1/28/2019 3:14:23 PM	42785
Motor Oil Range Organics (MRO)	980	490		mg/Kg	10	1/28/2019 3:14:23 PM	42785
Surr: DNOP	0	50.6-138	S	%Rec	10	1/28/2019 3:14:23 PM	42785
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/24/2019 3:25:39 PM	42756
Surr: BFB	92.4	73.8-119		%Rec	1	1/24/2019 3:25:39 PM	42756
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	1/24/2019 3:25:39 PM	42756
Toluene	ND	0.048		mg/Kg	1	1/24/2019 3:25:39 PM	42756
Ethylbenzene	ND	0.048		mg/Kg	1	1/24/2019 3:25:39 PM	42756
Xylenes, Total	ND	0.096		mg/Kg	1	1/24/2019 3:25:39 PM	42756
Surr: 4-Bromofluorobenzene	91.9	80-120		%Rec	1	1/24/2019 3:25:39 PM	42756

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: HA-3 @ 16'
Project: GCU 4
Collection Date: 1/22/2019 10:23:00 AM
Lab ID: 1901862-006 **Matrix:** SOIL **Received Date:** 1/23/2019 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/27/2019 12:31:54 AM	42827
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/25/2019 10:36:46 PM	42785
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/25/2019 10:36:46 PM	42785
Surr: DNOP	116	50.6-138		%Rec	1	1/25/2019 10:36:46 PM	42785
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/24/2019 8:07:16 PM	42756
Surr: BFB	94.7	73.8-119		%Rec	1	1/24/2019 8:07:16 PM	42756
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	1/24/2019 8:07:16 PM	42756
Toluene	ND	0.047		mg/Kg	1	1/24/2019 8:07:16 PM	42756
Ethylbenzene	ND	0.047		mg/Kg	1	1/24/2019 8:07:16 PM	42756
Xylenes, Total	ND	0.095		mg/Kg	1	1/24/2019 8:07:16 PM	42756
Surr: 4-Bromofluorobenzene	94.5	80-120		%Rec	1	1/24/2019 8:07:16 PM	42756

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: HA-4 @ 7'
Project: GCU 4
Collection Date: 1/22/2019 10:32:00 AM
Lab ID: 1901862-007 **Matrix:** SOIL **Received Date:** 1/23/2019 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/27/2019 12:44:19 AM	42827
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/25/2019 10:58:36 PM	42785
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/25/2019 10:58:36 PM	42785
Surr: DNOP	104	50.6-138		%Rec	1	1/25/2019 10:58:36 PM	42785
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/24/2019 8:30:39 PM	42756
Surr: BFB	94.7	73.8-119		%Rec	1	1/24/2019 8:30:39 PM	42756
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	1/24/2019 8:30:39 PM	42756
Toluene	ND	0.048		mg/Kg	1	1/24/2019 8:30:39 PM	42756
Ethylbenzene	ND	0.048		mg/Kg	1	1/24/2019 8:30:39 PM	42756
Xylenes, Total	ND	0.096		mg/Kg	1	1/24/2019 8:30:39 PM	42756
Surr: 4-Bromofluorobenzene	95.2	80-120		%Rec	1	1/24/2019 8:30:39 PM	42756

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: HA-4 @ 16'
Project: GCU 4
Collection Date: 1/22/2019 10:50:00 AM
Lab ID: 1901862-008 **Matrix:** SOIL **Received Date:** 1/23/2019 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/27/2019 12:56:43 AM	42827
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/25/2019 11:20:25 PM	42785
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/25/2019 11:20:25 PM	42785
Surr: DNOP	107	50.6-138		%Rec	1	1/25/2019 11:20:25 PM	42785
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/24/2019 8:54:09 PM	42756
Surr: BFB	93.5	73.8-119		%Rec	1	1/24/2019 8:54:09 PM	42756
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	1/24/2019 8:54:09 PM	42756
Toluene	ND	0.047		mg/Kg	1	1/24/2019 8:54:09 PM	42756
Ethylbenzene	ND	0.047		mg/Kg	1	1/24/2019 8:54:09 PM	42756
Xylenes, Total	ND	0.093		mg/Kg	1	1/24/2019 8:54:09 PM	42756
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	1	1/24/2019 8:54:09 PM	42756

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: HA-5 @ 7'
Project: GCU 4
Collection Date: 1/22/2019 11:06:00 AM
Lab ID: 1901862-009 **Matrix:** SOIL **Received Date:** 1/23/2019 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/28/2019 3:43:02 PM	42842
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/25/2019 11:42:15 PM	42785
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/25/2019 11:42:15 PM	42785
Surr: DNOP	93.3	50.6-138		%Rec	1	1/25/2019 11:42:15 PM	42785
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/24/2019 9:17:36 PM	42756
Surr: BFB	93.5	73.8-119		%Rec	1	1/24/2019 9:17:36 PM	42756
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	1/24/2019 9:17:36 PM	42756
Toluene	ND	0.048		mg/Kg	1	1/24/2019 9:17:36 PM	42756
Ethylbenzene	ND	0.048		mg/Kg	1	1/24/2019 9:17:36 PM	42756
Xylenes, Total	ND	0.096		mg/Kg	1	1/24/2019 9:17:36 PM	42756
Surr: 4-Bromofluorobenzene	93.1	80-120		%Rec	1	1/24/2019 9:17:36 PM	42756

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: HA-5 @ 16'
Project: GCU 4
Collection Date: 1/22/2019 11:27:00 AM
Lab ID: 1901862-010 **Matrix:** SOIL **Received Date:** 1/23/2019 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/28/2019 3:55:27 PM	42842
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/26/2019 12:04:01 AM	42785
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/26/2019 12:04:01 AM	42785
Surr: DNOP	103	50.6-138		%Rec	1	1/26/2019 12:04:01 AM	42785
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/24/2019 9:41:06 PM	42756
Surr: BFB	95.8	73.8-119		%Rec	1	1/24/2019 9:41:06 PM	42756
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	1/24/2019 9:41:06 PM	42756
Toluene	ND	0.048		mg/Kg	1	1/24/2019 9:41:06 PM	42756
Ethylbenzene	ND	0.048		mg/Kg	1	1/24/2019 9:41:06 PM	42756
Xylenes, Total	ND	0.097		mg/Kg	1	1/24/2019 9:41:06 PM	42756
Surr: 4-Bromofluorobenzene	95.5	80-120		%Rec	1	1/24/2019 9:41:06 PM	42756

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

Qualifiers:

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

Chain-of-Custody Record

Client: BPX ENERGY
BLAGG ENGINEERING INC.
Mailing Address:

Phone #: 505-320-1183
email or Fax#:
QA/QC Package:
[X] Standard [ ] Level 4 (Full Validation)
Accreditation
[ ] NELAP [ ] Other
[ ] EDD (Type)

Turn-Around Time:
[X] Standard [ ] Rush
Project Name: GCU #4
Project #:
Project Manager: STEVE MOSKAL
Sampler: JEFF BLAGG
On Ice: [X] Yes [ ] No
Sample Temperature: 1.3°, 2.3°

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1901862	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHLORIDE				Air Bubbles (Y or N)
1/22/2019	0852	SOIL	HA-1 @ 7'	4 oz x 1	COOL	-001	X		X									X				
	0954		HA-1 @ 16'			-002																
	0929		HA-2 @ 7'			-003																
	0947		HA-2 @ 16'			-004																
	1003		HA-3 @ 7'			-005																
	1023		HA-3 @ 16'			-006																
	1032		HA-4 @ 7'			-007																
	1050		HA-4 @ 16'			-008																
	1106		HA-5 @ 7'			-009																
	1127		HA-5 @ 16'			-010																

Date:	Time:	Relinquished by:	Received by:	Date	Time
1/22/2019	1750	Jeff Blagg	[signature]	1/22/19	1750
1/22/19	1821	[signature]	[signature]	1/23/19	0810

Remarks: BILL BPX ENERGY
CONTACT: STEVE MOSKAL
VID: VHIXONEVB2

XVC 1/23/19

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

SITE

REMEDIATION

Figure 2

BP - GCU 004

(G) Section 34, T28N, R12W
API #: 3004507045

Imagery date: 3/15/2015
WH GPS Coord.: 36.621296,-108.095822

Remedial Excavation
Top Perimeter: 19' x 16'

Closure Sampling - March 5, 2019

.

Base 5-pt @ 12':	OVM = 0.2, TPH = ND
N&W Walls, 6-pt, 5'-10':	OVM = 0.3, TPH = 435
S&E Walls, 6-pt, 5'-10':	OVM = 0.1, TPH = ND

Closure Sampling - March 15, 2019

.

North Wall 5-pt, 5'-12':	OVM = NA, TPH = ND
West Wall 5-pt, 5'-12':	OVM = NA, TPH = ND

North & West
Sidewall Base Perimeter
Extended Additional 5'

North & West
Sidewall Top Perimeter
Extended Additional 5'

Prior 95 BGT

W

N

S

E

WH

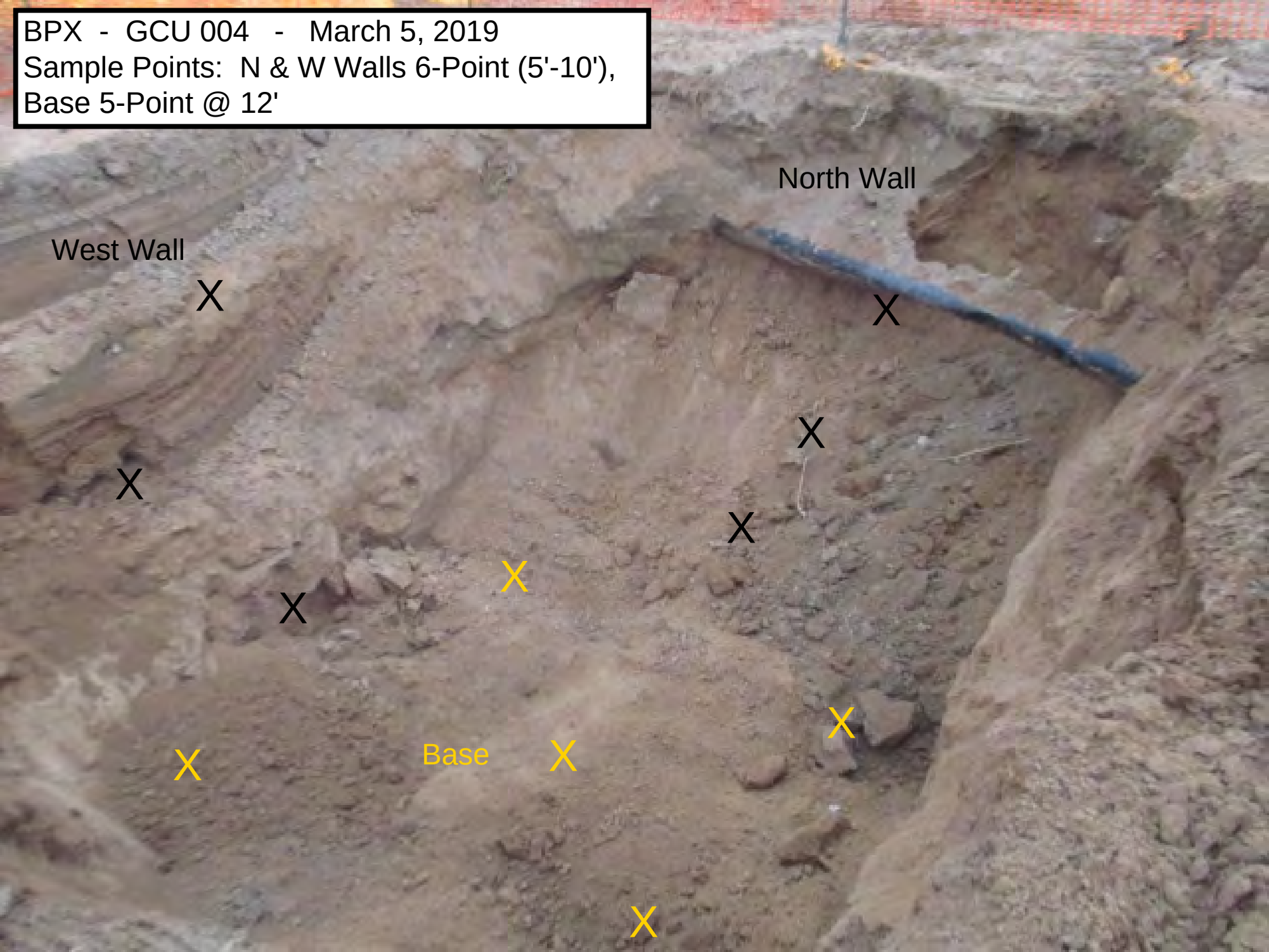
Remedial Excavation
Top Perimeter: 19' x 16'

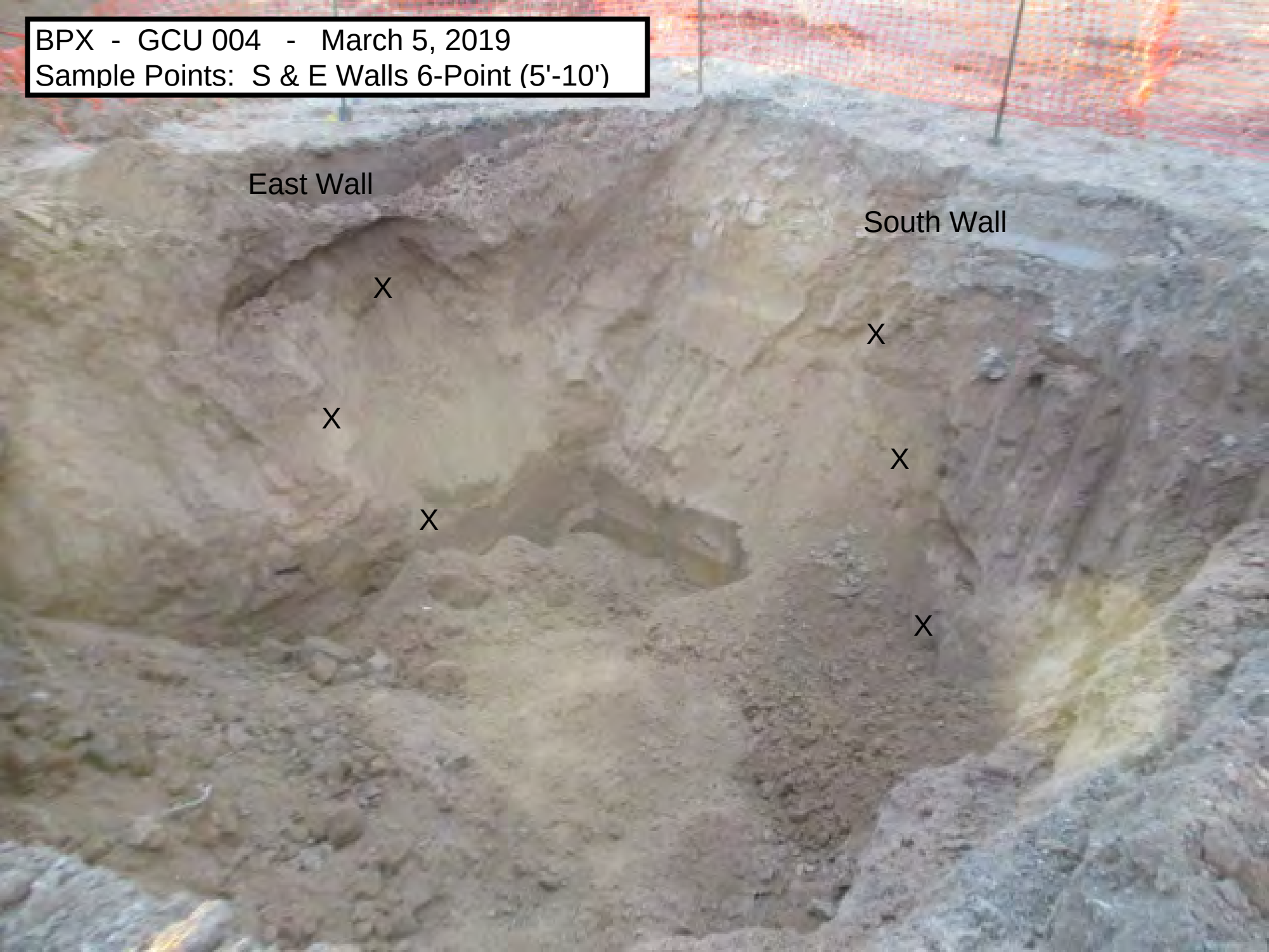
Remedial
Excavation
Base Perimeter:
12' x 12' x 12' Deep

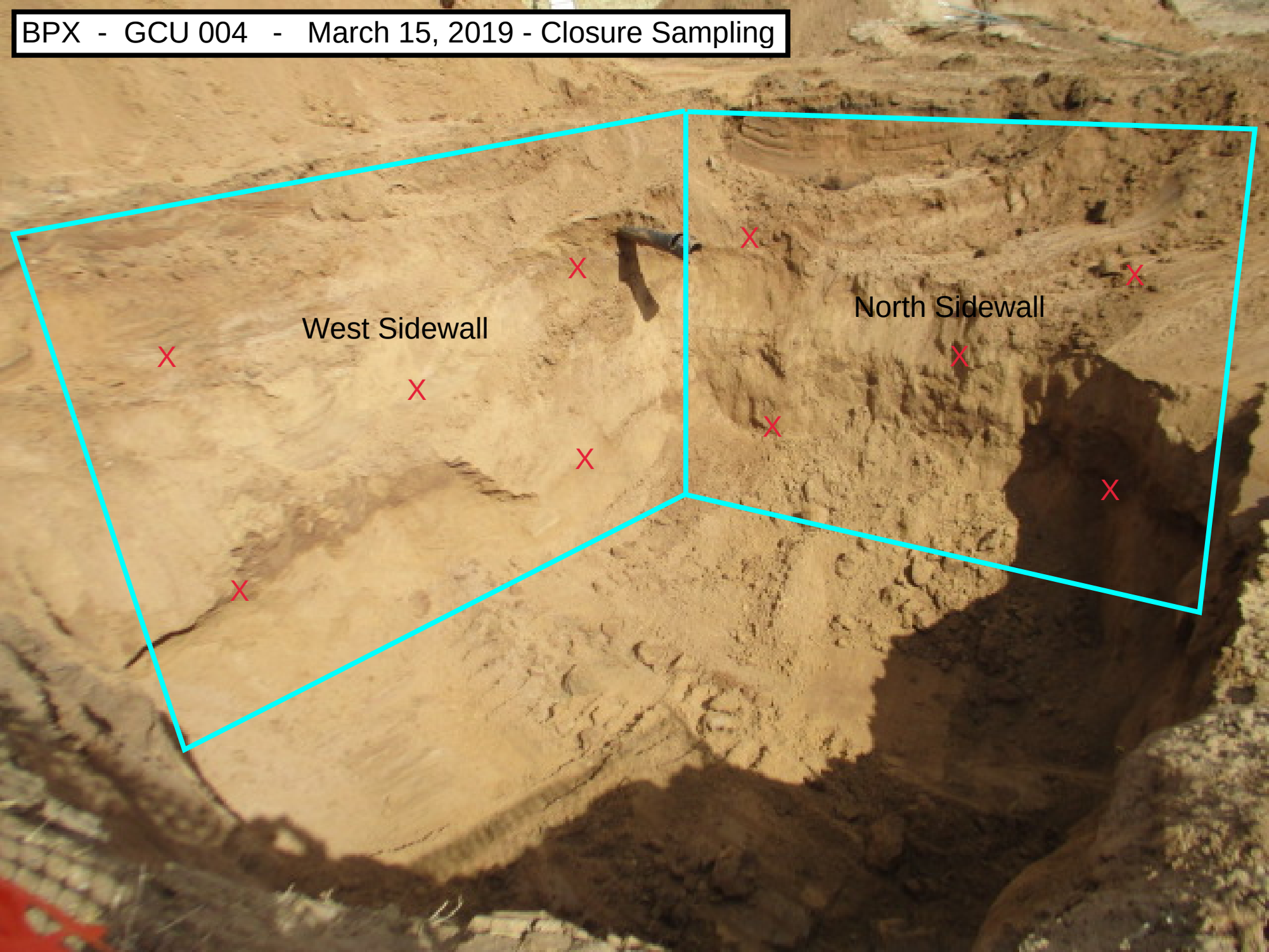
Google Earth

N

60 ft


BPX - GCU 004 - March 5, 2019
Sample Points: N & W Walls 6-Point (5'-10'),
Base 5-Point @ 12'
North Wall
West Wall
X
X
X
X
X
X
X
X
X
X
Base


BPX - GCU 004 - March 5, 2019
Sample Points: S & E Walls 6-Point (5'-10')
East Wall
South Wall
X
X
X
X
X
X


BPX - GCU 004 - March 15, 2019 - Closure Sampling
West Sidewall
North Sidewall

BP America Production Co.	Project Name:	GCU 004	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/06/19 14:20

BASE 5-pt @12'

P903006-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*		*50-150*	*1910012*	*03/05/19*	*03/06/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1910014	03/05/19	03/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1910014	03/05/19	03/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.2 %*		*50-150*	*1910012*	*03/05/19*	*03/06/19*	*EPA 8015D*	
Surrogate: n-Nonane		*107 %*		*50-200*	*1910014*	*03/05/19*	*03/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	1910013	03/05/19	03/05/19	EPA 300.0/9056A	

BP America Production Co.	Project Name:	GCU 004	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/06/19 14:20

N & W Walls 6-pt (5'-10')

P903006-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*		*50-150*	*1910012*	*03/05/19*	*03/06/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8015D	
Diesel Range Organics (C10-C28)	**180**	25.0	mg/kg	1	1910014	03/05/19	03/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	**255**	50.0	mg/kg	1	1910014	03/05/19	03/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.8 %*		*50-150*	*1910012*	*03/05/19*	*03/06/19*	*EPA 8015D*	
Surrogate: n-Nonane		*113 %*		*50-200*	*1910014*	*03/05/19*	*03/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	1910013	03/05/19	03/05/19	EPA 300.0/9056A	

BP America Production Co.	Project Name:	GCU 004	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/06/19 14:20

S & E Walls 6-pt (5'-10')

P903006-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*		*50-150*	*1910012*	*03/05/19*	*03/06/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1910012	03/05/19	03/06/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1910014	03/05/19	03/05/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1910014	03/05/19	03/05/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.9 %*		*50-150*	*1910012*	*03/05/19*	*03/06/19*	*EPA 8015D*	
Surrogate: n-Nonane		*112 %*		*50-200*	*1910014*	*03/05/19*	*03/05/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	1910013	03/05/19	03/05/19	EPA 300.0/9056A	

BP America Production Co.	Project Name:	GCU 4	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/18/19 15:56

West Wall 5-pt (5'-12')

P903026-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1911032	03/15/19	03/18/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1911033	03/15/19	03/15/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1911033	03/15/19	03/15/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.3 %*		*50-150*	*1911032*	*03/15/19*	*03/18/19*	*EPA 8015D*	
Surrogate: n-Nonane		*96.6 %*		*50-200*	*1911033*	*03/15/19*	*03/15/19*	*EPA 8015D*	

BP America Production Co.	Project Name:	GCU 4	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/18/19 15:56

North Wall 5-pt (5'-12')

P903026-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1911032	03/15/19	03/18/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1911033	03/15/19	03/15/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1911033	03/15/19	03/15/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.8 %*		*50-150*	*1911032*	*03/15/19*	*03/18/19*	*EPA 8015D*	
Surrogate: n-Nonane		*93.6 %*		*50-200*	*1911033*	*03/15/19*	*03/15/19*	*EPA 8015D*	

Project Information | Chain of Custody | Page 1 of 1

Client:	BPX ENERGY
Project:	GCU 004
Project Manager:	SABRE BEEBE
Address:	
City, State, Zip	
Phone:	970-779-9398
Email:	SABRE.BEEBE@BPX.COM

Report Attention

Report due by:	3/6/2019
Attention:	STEVE MOSKAL/SABRE BEEBE/ JEFF BLAGG
Address:	
City, State, Zip	
Phone:	
Email:	

Lab Use Only

Lab WO#	Job Number
P903006	03143-0424

TAT

1D	3D
X	

EPA Program

RCRA	CWA	SDWA

State

NM	CO	UT	AZ
X			

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	TPH 418.1	Remarks
1354	3/5/2019	SOIL	1	BASE 5-pt @ 12'	1	X	X	X			X		
1402	"	"	1	N + W Walls 6-pt (5'-10')	2	X	X	X			X		
1410	"	"	1	S + E Walls 6-pt (5'-10')	3	X	X	X			X		

Analysis and Method

Additional Instructions: Bill BPX - PO to be Generated contact: SABRE BEEBE Vis ice in cooler - ty

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	3/5/2019	1502	Irene Zabb	3/5/19	3:02
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only

Received on ice: (Y) / N

T1 ____ T2 ____ T3 ____

AVG Temp °C 4.0

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 ...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) 632-0615 Fx (505) 632-1865
Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fx (800) 362-1879
envirotech-inc.com laboratory@envirotech-inc.com

Project Information | Chain of Custody | Page 1 of 1

Client:	BPX ENERGY
Project:	GCU 4
Project Manager:	SABRE BEEBE
Address:	
City, State, Zip	
Phone:	
Email:	

Report Attention

Report due by:	MONDAY, 3/18/2019
Attention:	SABRE Beebe/Steve Moskal/ Jeff Blagg
Address:	
City, State, Zip	
Phone:	(505) 320-1183
Email:	

Lab Use Only

Lab WO#	Job Number
P903026	03143-0424

TAT: 1D [X] 3D [ ]

EPA Program: RCRA [ ] CWA [ ] SDWA [ ]

State: NM [X] CO [ ] UT [ ] AZ [ ]

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	TPH 418.1	Remarks
1130	3/15/2019	SOIL	1	West Wall 5-pt (5'-12')	1	X	X						
1138	"	"	1	North Wall 5-pt (5'-12')	2	X	X						

Analysis and Method

Additional Instructions: Bill BPX P.O. Contact: SABRE BEEBE vis. ice in cooler - mg

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	3/15/2019	1224	Irene Zazzi	03-15-19	12:25p
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only

Received on ice: (Y) / N

T1 _____ T2 _____ T3 _____

AVG Temp °C 4.0

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) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 | Ph (970) 259-0615 Fx (800) 362-1879
envirotech-inc.com laboratory@envirotech-inc.com

LABORATORY

QUALITY CONTROL /

QUALITY ASSURANCE

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1901862**

29-Jan-19

Client: Blagg Engineering

Project: GCU 4

Sample ID	**MB-42827**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**42827**		RunNo:	**57281**				
Prep Date:	**1/26/2019**	Analysis Date:	**1/26/2019**		SeqNo:	**1915988**	Units:	**mg/Kg**		

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

Sample ID	**LCS-42827**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**42827**		RunNo:	**57281**				
Prep Date:	**1/26/2019**	Analysis Date:	**1/26/2019**		SeqNo:	**1915989**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.0	90	110			

Sample ID	**MB-42842**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**42842**		RunNo:	**57302**				
Prep Date:	**1/28/2019**	Analysis Date:	**1/28/2019**		SeqNo:	**1917392**	Units:	**mg/Kg**		

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

Sample ID	**LCS-42842**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**42842**		RunNo:	**57302**				
Prep Date:	**1/28/2019**	Analysis Date:	**1/28/2019**		SeqNo:	**1917393**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1901862**

29-Jan-19

Client: Blagg Engineering

Project: GCU 4

Sample ID	**LCS-42785**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID: **42785**			RunNo: **57248**					
Prep Date:	**1/24/2019**	Analysis Date: **1/25/2019**			SeqNo: **1915016**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	63.9	124			
Surr: DNOP	4.0		5.000		80.6	50.6	138			

Sample ID	**MB-42785**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **42785**			RunNo: **57248**					
Prep Date:	**1/24/2019**	Analysis Date: **1/25/2019**			SeqNo: **1915017**		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	12		10.00		117	50.6	138			

Sample ID	**LCS-42818**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID: **42818**			RunNo: **57295**					
Prep Date:	**1/25/2019**	Analysis Date: **1/28/2019**			SeqNo: **1917277**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.3	50.6	138			

Sample ID	**MB-42818**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **42818**			RunNo: **57295**					
Prep Date:	**1/25/2019**	Analysis Date: **1/28/2019**			SeqNo: **1917278**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		90.6	50.6	138			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1901862**

29-Jan-19

Client: Blagg Engineering

Project: GCU 4

Sample ID	**MB-42770**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **42770**			RunNo: **57224**					
Prep Date:	**1/23/2019**	Analysis Date: **1/24/2019**			SeqNo: **1914524**		Units: **%Rec**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		970		1000		96.5	73.8	119			

Sample ID	**LCS-42770**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **42770**			RunNo: **57224**					
Prep Date:	**1/23/2019**	Analysis Date: **1/24/2019**			SeqNo: **1914525**		Units: **%Rec**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1100		1000		110	73.8	119			

Sample ID	**MB-42756**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **42756**			RunNo: **57224**					
Prep Date:	**1/23/2019**	Analysis Date: **1/24/2019**			SeqNo: **1914546**		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		950		1000		95.3	73.8	119			

Sample ID	**LCS-42756**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **42756**			RunNo: **57224**					
Prep Date:	**1/23/2019**	Analysis Date: **1/24/2019**			SeqNo: **1914547**		Units: **mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		28	5.0	25.00	0	114	80.1	123			
Surr: BFB		1100		1000		107	73.8	119			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1901862**

29-Jan-19

Client: Blagg Engineering

Project: GCU 4

Sample ID	**MB-42770**	SampType: **MBLK**			TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID: **42770**			RunNo: **57224**					
Prep Date:	**1/23/2019**	Analysis Date: **1/24/2019**			SeqNo: **1914566**	Units: **%Rec**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene		0.96		1.000		95.6	80	120			

Sample ID	**LCS-42770**	SampType: **LCS**			TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID: **42770**			RunNo: **57224**					
Prep Date:	**1/23/2019**	Analysis Date: **1/24/2019**			SeqNo: **1914567**	Units: **%Rec**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene		0.99		1.000		98.9	80	120			

Sample ID	**MB-42756**	SampType: **MBLK**			TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID: **42756**			RunNo: **57224**					
Prep Date:	**1/23/2019**	Analysis Date: **1/24/2019**			SeqNo: **1914588**	Units: **mg/Kg**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Bromofluorobenzene		0.95		1.000		95.4	80	120			

Sample ID	**LCS-42756**	SampType: **LCS**			TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID: **42756**			RunNo: **57224**					
Prep Date:	**1/23/2019**	Analysis Date: **1/24/2019**			SeqNo: **1914589**	Units: **mg/Kg**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.94	0.025	1.000	0	93.6	80	120			
Toluene		0.96	0.050	1.000	0	96.4	80	120			
Ethylbenzene		0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total		2.9	0.10	3.000	0	98.0	80	120			
Surr: 4-Bromofluorobenzene		0.97		1.000		97.2	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG | Work Order Number: 1901862 | RcptNo: 1

Received By: Victoria Zellar 1/23/2019 8:10:00 AM Victoria Zellar

Completed By: Erin Melendrez 1/23/2019 8:52:33 AM

Reviewed By: DAD 1/23/19
LB. JG 1/23/19

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 ☑	# of preserved bottles checked for pH: 10 1/23/19 (<2 or >12 unless noted)
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 ☐	Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

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

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

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			
2	2.3	Good	Yes			

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	GCU 004	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/06/19 14:20

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BASE 5-pt @12'	P903006-01A	Soil	03/05/19	03/05/19	Glass Jar, 4 oz.
N & W Walls 6-pt (5'-10')	P903006-02A	Soil	03/05/19	03/05/19	Glass Jar, 4 oz.
S & E Walls 6-pt (5'-10')	P903006-03A	Soil	03/05/19	03/05/19	Glass Jar, 4 oz.

BP America Production Co.	Project Name:	GCU 004	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/06/19 14:20

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1910014 - DRO Extraction EPA 3570										
Blank (1910014-BLK1)				Prepared: 03/05/19 1 Analyzed: 03/05/19 2						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*53.3*		*"*	*50.0*		*107*	*50-200*			
LCS (1910014-BS1)				Prepared: 03/05/19 1 Analyzed: 03/05/19 2						
Diesel Range Organics (C10-C28)	437	25.0	mg/kg	500		87.4	38-132			
Surrogate: n-Nonane	*53.1*		*"*	*50.0*		*106*	*50-200*			
Matrix Spike (1910014-MS1)	**Source: P903006-01**			Prepared: 03/05/19 1 Analyzed: 03/05/19 2						
Diesel Range Organics (C10-C28)	478	25.0	mg/kg	500	ND	95.6	38-132			
Surrogate: n-Nonane	*55.8*		*"*	*50.0*		*112*	*50-200*			
Matrix Spike Dup (1910014-MSD1)	**Source: P903006-01**			Prepared: 03/05/19 1 Analyzed: 03/05/19 2						
Diesel Range Organics (C10-C28)	479	25.0	mg/kg	500	ND	95.7	38-132	0.178	20	
Surrogate: n-Nonane	*56.2*		*"*	*50.0*		*112*	*50-200*			

BP America Production Co.	Project Name:	GCU 004	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/06/19 14:20

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 1910013 - Anion Extraction EPA 300.0/9056A										
Blank (1910013-BLK1)				Prepared & Analyzed: 03/05/19 1						
Chloride	ND	20.0	mg/kg							
LCS (1910013-BS1)				Prepared & Analyzed: 03/05/19 1						
Chloride	257	20.0	mg/kg	250		103	90-110			
Matrix Spike (1910013-MS1)	**Source: P903006-01**			Prepared & Analyzed: 03/05/19 1						
Chloride	259	20.0	mg/kg	250	ND	104	80-120			
Matrix Spike Dup (1910013-MSD1)	**Source: P903006-01**			Prepared & Analyzed: 03/05/19 1						
Chloride	258	20.0	mg/kg	250	ND	103	80-120	0.545	20	

BP America Production Co.	Project Name:	GCU 004	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/06/19 14:20

Notes and Definitions

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

envirotech
Analytical Laboratory

BP America Production Co.	Project Name:	GCU 4	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/18/19 15:56

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
West Wall 5-pt (5'-12')	P903026-01A	Soil	03/15/19	03/15/19	Glass Jar, 4 oz.
North Wall 5-pt (5'-12')	P903026-02A	Soil	03/15/19	03/15/19	Glass Jar, 4 oz.

BP America Production Co.	Project Name:	GCU 4	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/18/19 15:56

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1911032 - Purge and Trap EPA 5030A										
Blank (1911032-BLK1)				Prepared: 03/15/19 1 Analyzed: 03/18/19 1						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.22*		*"*	*8.00*		*90.2*	*50-150*			
LCS (1911032-BS1)				Prepared: 03/15/19 1 Analyzed: 03/18/19 1						
Gasoline Range Organics (C6-C10)	52.6	20.0	mg/kg	50.0		105	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.16*		*"*	*8.00*		*89.5*	*50-150*			
Matrix Spike (1911032-MS1)		**Source: P903026-01**		Prepared: 03/15/19 1 Analyzed: 03/18/19 1						
Gasoline Range Organics (C6-C10)	52.0	20.0	mg/kg	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.17*		*"*	*8.00*		*89.6*	*50-150*			

BP America Production Co.	Project Name:	GCU 4	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/18/19 15:56

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1911033 - DRO Extraction EPA 3570										
Blank (1911033-BLK1)				Prepared & Analyzed: 03/15/19 1						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*56.6*		*"*	*50.0*		*113*	*50-200*			
LCS (1911033-BS1)				Prepared & Analyzed: 03/15/19 1						
Diesel Range Organics (C10-C28)	483	25.0	mg/kg	500		96.6	38-132			
Surrogate: n-Nonane	*50.8*		*"*	*50.0*		*102*	*50-200*			
Matrix Spike (1911033-MS1)	**Source: P903026-01**			Prepared & Analyzed: 03/15/19 1						
Diesel Range Organics (C10-C28)	447	25.0	mg/kg	500	ND	89.4	38-132			
Surrogate: n-Nonane	*44.4*		*"*	*50.0*		*88.8*	*50-200*			
Matrix Spike Dup (1911033-MSD1)	**Source: P903026-01**			Prepared & Analyzed: 03/15/19 1						
Diesel Range Organics (C10-C28)	470	25.0	mg/kg	500	ND	94.1	38-132	5.12	20	
Surrogate: n-Nonane	*46.3*		*"*	*50.0*		*92.7*	*50-200*			

BP America Production Co.	Project Name:	GCU 4	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Sabre Beebe	03/18/19 15:56

Notes and Definitions

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