

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	NCS1935242554
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: BP America Production Co	OGRID: 778	Initial & Final Spill Report
Contact Name: Steve Moskal	Contact Telephone: (505) 330-9179	
Contact email: steven.moskal@bpx.com	Incident # (assigned by OCD)	
Contact mailing address: 1199 Main St., Suite 101, Durango CO, 81301	NCS1935242554	

Location of Release Source

Latitude: 36.907339° Longitude: -107.534222°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Northeast Blanco Unit 605 002H	Site Type: Natural Gas Production Well Pad
Date Release Discovered: November 11, 2019	API#: 30-045-35857

Unit Letter	Section	Township	Range	County
P	11	T31N	R07W	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)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls): 15.8	Volume Recovered (bbls): 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls):	Volume Recovered (bbls): <u>0 bbls</u>
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:

Release of produced water associated internal erosion of dump valve body. The water was release from a small hole on the valve body, only when the hump was opened. The valve body was replaced.

Based on site assessment and sample results, no remedial action is necessary based on the site ranking. No remedial action was performed. Attached are the lab results, sampling photos and site ranking criteria.

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Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> 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: <u>Steve Moskal</u> Title: <u>Environmental Coordinator</u>
Signature:  Date: <u>November 19, 2019</u>
email: <u>steven.moskal@bpx.com</u> Telephone: <u>(505) 330-9179</u>
OCD Only Received by:  Date: <u>11/19/19</u>

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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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.

<p>Characterization Report Checklist: <i>Each of the following items must be included in the report.</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. <input type="checkbox"/> Field data <input type="checkbox"/> Data table of soil contaminant concentration data <input type="checkbox"/> Depth to water determination <input type="checkbox"/> Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release <input type="checkbox"/> Boring or excavation logs <input type="checkbox"/> Photographs including date and GIS information <input type="checkbox"/> Topographic/Aerial maps <input type="checkbox"/> 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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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: Steve Moskal Title: Environmental Coordinator

Signature:  Date: November 19, 2019

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

OCD Only

Received by: _____ Date: _____

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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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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: November 19, 2019

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

OCD Only

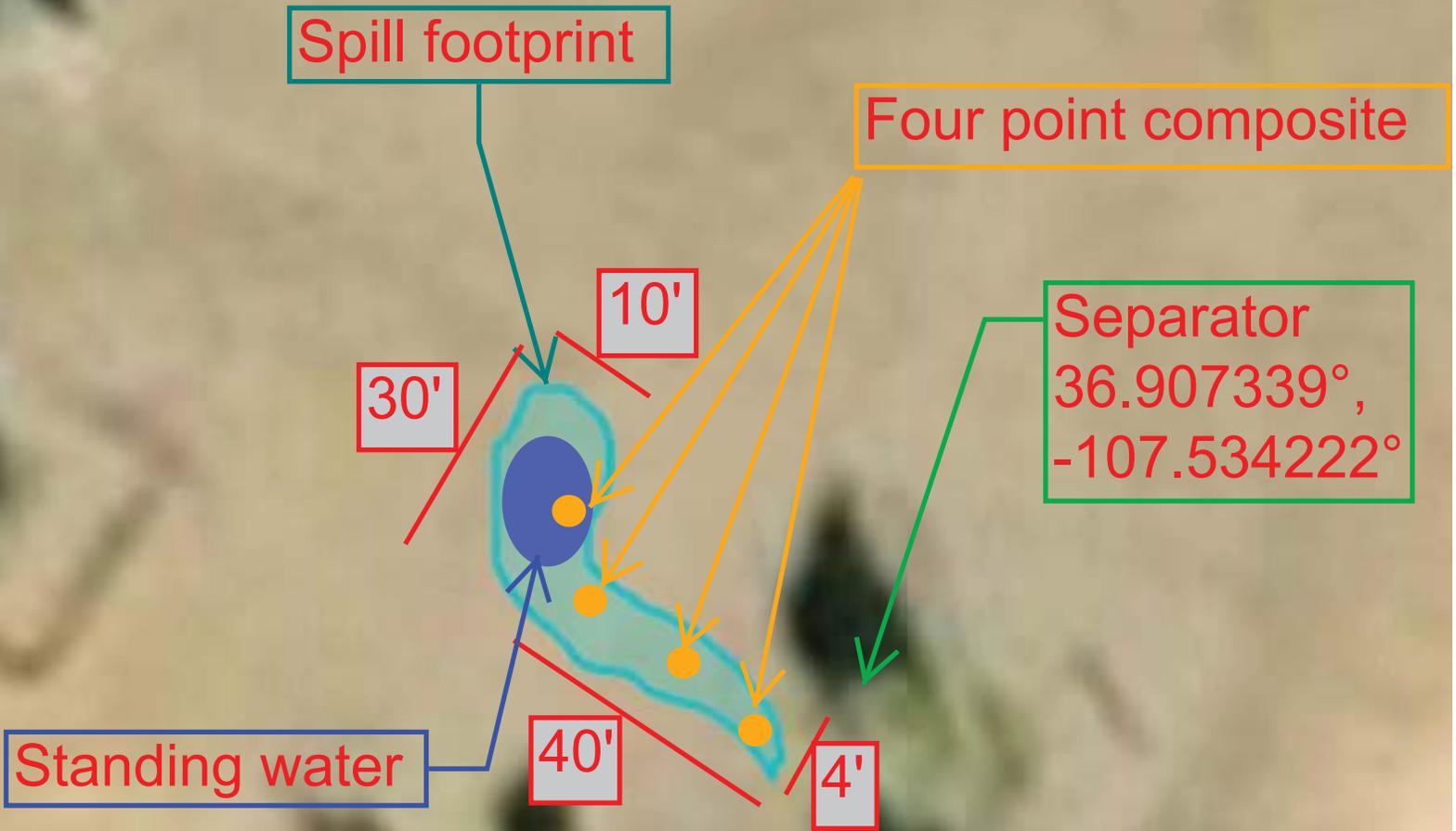
Received by: OCD Date: 11/19/19

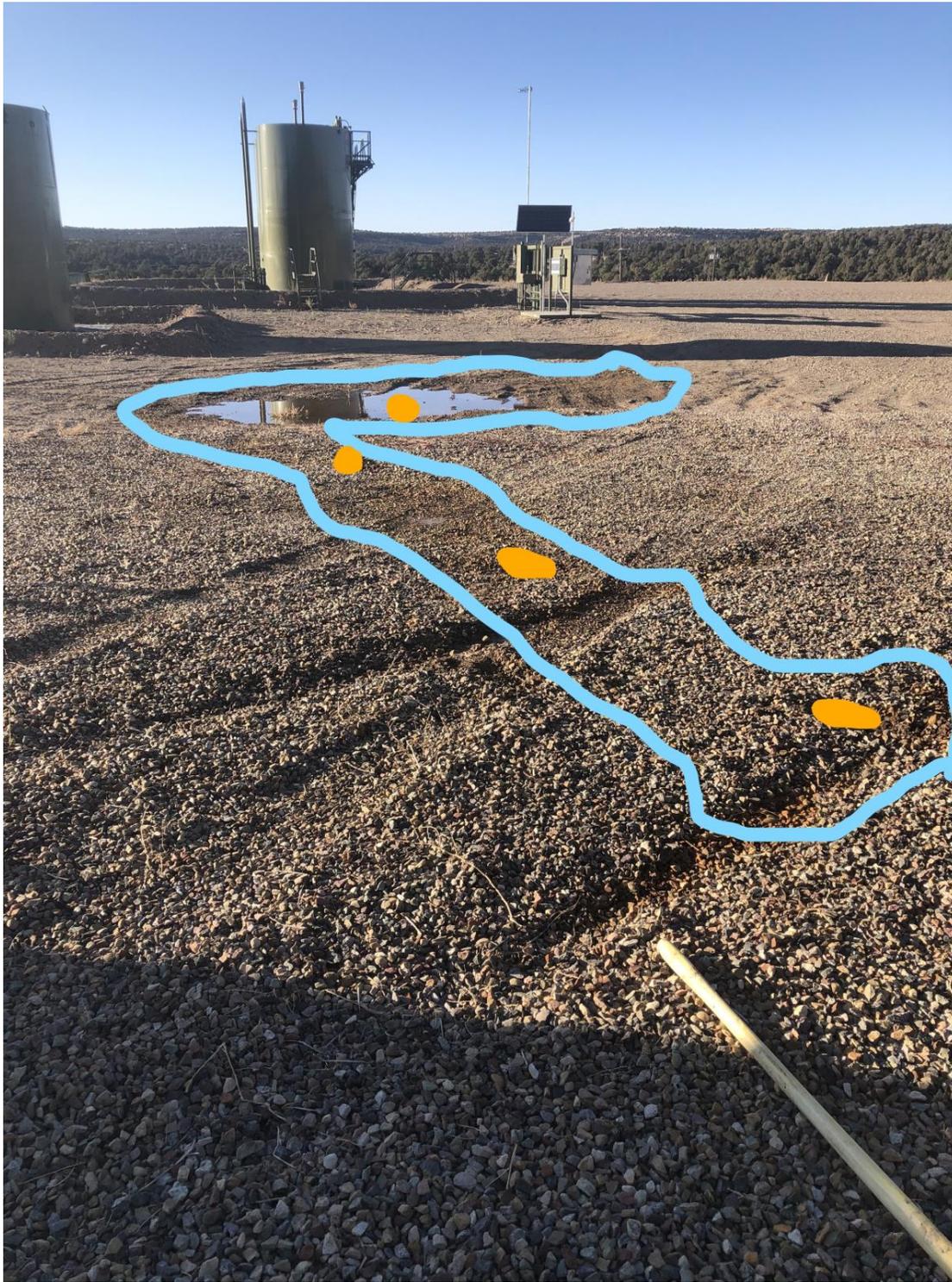
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance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

Closure Approved by:  Date: 12/18/19

Printed Name: Cory Title: Environmental Specialist

NEBU 605 2H
Water Release
11/11/2019
API#30-045-35857
P-11-31N-7W







OSE POD Locations Points of Diversion visible at 1:19,000 with 1,000 features per view

Water Rights Look Up

Find address or place

Measurement

Feet (US)

Measurement Result

2,428.9 Feet (US)

Clear

Press CTRL to enable snapping

Road 4018

Road 4019

103426

1:9027

-107.547 36.901 Degrees

USDA FSA | Esri, HERE, iPC | Esri, HERE, Garmin, iPC

esri

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OSE POD Locations Points of Diversion visible at 1:19,000 with 1,000 features per view **Water Rights Look Up**

Find address or place

Measurement

Feet (US)

Measurement Result

988.7 Feet (US)

Clear

Press CTRL to enable snapping

1:4513

-107.541 36.909 Degrees

USDA FSA | Esri, HERE, iPC | Esri, HERE, Garmin, iPC **esri**

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New Mexico Office of the State Engineer

Point of Diversion Summary

		<small>(quarters are 1=NW 2=NE 3=SW 4=SE)</small>						
Well Tag	POD Number	<small>(quarters are smallest to largest)</small>	<small>(NAD83 UTM in meters)</small>					
		Q64 Q16 Q4 Sec Tws Rng	X	Y				
	SJ 03426	4 2 1 14 31N 07W	273560	4087251*				

Driller License: 1479	Driller Company: THREE 3-D DRILLING	
Driller Name: DEE GILES		
Drill Start Date: 12/15/2003	Drill Finish Date: 12/17/2003	Plug Date:
Log File Date: 12/19/2003	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield: 1 GPM
Casing Size: 5.00	Depth Well: 540 feet	Depth Water: 420 feet

Water Bearing Stratifications:	Top	Bottom	Description
	500	540	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	460	480
	500	540

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/19/19 9:23 AM

POINT OF DIVERSION SUMMARY

Steven Moskal

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Tuesday, November 12, 2019 1:42 PM
To: Steven Moskal
Subject: RE: NEBU 605 2H Water Release 11/11/2019

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Steve,

Per our conversation OCD approves the sampling. Please include this approval in your Final report.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Steven Moskal <Steven.Moskal@BPX.COM>
Sent: Tuesday, November 12, 2019 1:36 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: [EXT] Re: NEBU 605 2H Water Release 11/11/2019

It's all included in the Map.

Steve Moskal
Environmental Coordinator
BP San Juan
(505) 330-9179
steven.moskal@bpx.com

Sent from my mobile device

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Tuesday, November 12, 2019 1:34:31 PM
To: Steven Moskal <Steven.Moskal@BPX.COM>
Subject: RE: NEBU 605 2H Water Release 11/11/2019

Steve,

Do you have the API# / Lat/long of the release?

Cory Smith
Environmental Specialist
Oil Conservation Division

Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Steven Moskal <Steven.Moskal@BPX.COM>
Sent: Tuesday, November 12, 2019 12:36 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: [EXT] RE: NEBU 605 2H Water Release 11/11/2019

From: Steven Moskal
Sent: Tuesday, November 12, 2019 12:32 PM
To: Cory Smith - NMOCD (Cory.Smith@state.nm.us) <Cory.Smith@state.nm.us>
Subject: FW: NEBU 605 2H Water Release 11/11/2019

This bounced back, it was too large. I will send another as well with the additional photos.
See my original email below.

Steve Moskal

Environmental Coordinator
BP America Production Co.
bpX energy - WBU
1199 Main Ave. | Suite 101
Durango | CO | 81301

Direct: 505.330.9179
steven.moskal@bpx.com



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From: Steven Moskal
Sent: Tuesday, November 12, 2019 12:16 PM
To: Cory Smith - NMOCD (Cory.Smith@state.nm.us) <Cory.Smith@state.nm.us>
Subject: NEBU 605 2H Water Release 11/11/2019

Cory,

As discussed over the phone this morning, BP discovered a spill due to a hole in a separator dump valve yesterday, 11/11/2019. I was notified of the release and conducted a site visit/assessment. I was able to collect a 4-point composite from the impacted area. The area measured 10'x30' in pooling segment and 40'x4' along the flow path, totaling about 380 sq. ft., but more likely less as the 40' section and 10' section overlapped a bit. Total release volume is estimated to be 15.8 bbls. All water released remained well within the footprint of the pad.

I have attached several photos and a map. The map is a little wonky because this well pad does not yet show up on Google Earth, so I had to use another app.

I did not attempt to notify the NMOCD of the sampling due to the sampling time (3:40 PM) and being on Veteran's Day. I hope this detail and discussion can suffice. I will submit the sample to the lab for analysis today.

Let me know if you have any questions.

Thank you,

Steve Moskal

Environmental Coordinator

BP America Production Co.

bpx energy - WBU

1199 Main Ave. | Suite 101

Durango | CO | 81301

Direct: 505.330.9179

steven.moskal@bpx.com



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Analytical Report

Report Summary

Client: BP America Production Co.

Samples Received: 11/12/2019

Job Number: 03143-0424

Work Order: P911048

Project Name/Location: NEBU 605 2H

Report Reviewed By:

A handwritten signature in black ink that reads 'Walter Hinchman'.

Date: 11/18/19

Walter Hinchman, Laboratory Director



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.



BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: NEBU 605 2H
Project Number: 03143-0424
Project Manager: Steve Moskal

Reported:
11/18/19 16:10

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
4pt comp	P911048-01A	Soil	11/11/19	11/12/19	Glass Jar, 4 oz.

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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: NEBU 605 2H Project Number: 03143-0424 Project Manager: Steve Moskal	Reported: 11/18/19 16:10
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**4pt comp
P911048-01 (Solid)**

Analyte	Result	Reporting				Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution						
Volatile Organics by EPA 8021										
Benzene	ND	0.0250	mg/kg	1	1946029	11/14/19	11/14/19	EPA 8021B		
Toluene	ND	0.0250	mg/kg	1	1946029	11/14/19	11/14/19	EPA 8021B		
Ethylbenzene	ND	0.0250	mg/kg	1	1946029	11/14/19	11/14/19	EPA 8021B		
p,m-Xylene	ND	0.0500	mg/kg	1	1946029	11/14/19	11/14/19	EPA 8021B		
o-Xylene	ND	0.0250	mg/kg	1	1946029	11/14/19	11/14/19	EPA 8021B		
Total Xylenes	ND	0.0250	mg/kg	1	1946029	11/14/19	11/14/19	EPA 8021B		
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		100 %		50-150	1946029	11/14/19	11/14/19	EPA 8021B		
Nonhalogenated Organics by 8015 - DRO/ORO										
Diesel Range Organics (C10-C28)	110	25.0	mg/kg	1	1946033	11/14/19	11/17/19	EPA 8015D		
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1946033	11/14/19	11/17/19	EPA 8015D		
<i>Surrogate: n-Nonane</i>		109 %		50-200	1946033	11/14/19	11/17/19	EPA 8015D		
Nonhalogenated Organics by 8015 - GRO										
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1946029	11/14/19	11/14/19	EPA 8015D		
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		84.8 %		50-150	1946029	11/14/19	11/14/19	EPA 8015D		
Anions by 300.0/9056A										
Chloride	347	20.0	mg/kg	1	1946040	11/15/19	11/15/19	EPA 300.0/9056A		

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: NEBU 605 2H
Project Number: 03143-0424
Project Manager: Steve Moskal

Reported:
11/18/19 16:10

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
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Batch 1946029 - Purge and Trap EPA 5030A

Blank (1946029-BLK1)

Prepared: 11/14/19 0 Analyzed: 11/14/19 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	7.78		"	8.00		97.2	50-150			

LCS (1946029-BS1)

Prepared: 11/14/19 0 Analyzed: 11/14/19 1

Benzene	4.74	0.0250	mg/kg	5.00		94.8	70-130			
Toluene	4.88	0.0250	"	5.00		97.5	70-130			
Ethylbenzene	4.77	0.0250	"	5.00		95.4	70-130			
p,m-Xylene	9.50	0.0500	"	10.0		95.0	70-130			
o-Xylene	4.72	0.0250	"	5.00		94.4	70-130			
Total Xylenes	14.2	0.0250	"	15.0		94.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.89		"	8.00		98.6	50-150			

Matrix Spike (1946029-MS1)

Source: P911044-01

Prepared: 11/14/19 0 Analyzed: 11/14/19 1

Benzene	5.03	0.0250	mg/kg	5.00	ND	101	54.3-133			
Toluene	5.13	0.0250	"	5.00	ND	103	61.4-130			
Ethylbenzene	5.07	0.0250	"	5.00	ND	101	61.4-133			
p,m-Xylene	10.1	0.0500	"	10.0	ND	101	63.3-131			
o-Xylene	5.03	0.0250	"	5.00	ND	101	63.3-131			
Total Xylenes	15.1	0.0250	"	15.0	ND	101	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	7.95		"	8.00		99.4	50-150			

Matrix Spike Dup (1946029-MSD1)

Source: P911044-01

Prepared: 11/14/19 0 Analyzed: 11/14/19 1

Benzene	4.99	0.0250	mg/kg	5.00	ND	99.7	54.3-133	0.757	20	
Toluene	5.13	0.0250	"	5.00	ND	103	61.4-130	0.0214	20	
Ethylbenzene	5.05	0.0250	"	5.00	ND	101	61.4-133	0.345	20	
p,m-Xylene	10.1	0.0500	"	10.0	ND	101	63.3-131	0.303	20	
o-Xylene	5.02	0.0250	"	5.00	ND	100	63.3-131	0.251	20	
Total Xylenes	15.1	0.0250	"	15.0	ND	101	63.3-131	0.286	20	
Surrogate: 4-Bromochlorobenzene-PID	7.86		"	8.00		98.3	50-150			

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: NEBU 605 2H
Project Number: 03143-0424
Project Manager: Steve Moskal

Reported:
11/18/19 16:10

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
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Batch 1946033 - DRO Extraction EPA 3570

Blank (1946033-BLK1)

Prepared: 11/14/19 1 Analyzed: 11/15/19 1

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	49.8		"	50.0		99.5	50-200			

LCS (1946033-BS1)

Prepared: 11/14/19 1 Analyzed: 11/15/19 1

Diesel Range Organics (C10-C28)	472	25.0	mg/kg	500		94.4	38-132			
Surrogate: n-Nonane	49.1		"	50.0		98.1	50-200			

Matrix Spike (1946033-MS1)

Source: P911044-01

Prepared: 11/14/19 1 Analyzed: 11/15/19 1

Diesel Range Organics (C10-C28)	625	25.0	mg/kg	500	ND	125	38-132			
Surrogate: n-Nonane	60.3		"	50.0		121	50-200			

Matrix Spike Dup (1946033-MSD1)

Source: P911044-01

Prepared: 11/14/19 1 Analyzed: 11/15/19 1

Diesel Range Organics (C10-C28)	629	25.0	mg/kg	500	ND	126	38-132	0.629	20	
Surrogate: n-Nonane	59.9		"	50.0		120	50-200			

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: NEBU 605 2H
Project Number: 03143-0424
Project Manager: Steve Moskal

Reported:
11/18/19 16:10

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
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Batch 1946029 - Purge and Trap EPA 5030A

Blank (1946029-BLK1)

Prepared: 11/14/19 0 Analyzed: 11/14/19 1

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.91		"	8.00		86.4	50-150			

LCS (1946029-BS2)

Prepared: 11/14/19 0 Analyzed: 11/14/19 1

Gasoline Range Organics (C6-C10)	48.0	20.0	mg/kg	50.0		96.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.88		"	8.00		86.0	50-150			

Matrix Spike (1946029-MS2)

Source: P911044-01

Prepared: 11/14/19 0 Analyzed: 11/14/19 1

Gasoline Range Organics (C6-C10)	52.0	20.0	mg/kg	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.95		"	8.00		86.9	50-150			

Matrix Spike Dup (1946029-MSD2)

Source: P911044-01

Prepared: 11/14/19 0 Analyzed: 11/14/19 1

Gasoline Range Organics (C6-C10)	51.5	20.0	mg/kg	50.0	ND	103	70-130	0.929	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.05		"	8.00		88.1	50-150			

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BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: NEBU 605 2H
Project Number: 03143-0424
Project Manager: Steve Moskal

Reported:
11/18/19 16:10

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 1946040 - Anion Extraction EPA 300.0/9056A										
Blank (1946040-BLK1)				Prepared & Analyzed: 11/15/19 1						
Chloride	ND	20.0	mg/kg							
LCS (1946040-BS1)				Prepared & Analyzed: 11/15/19 1						
Chloride	252	20.0	mg/kg	250		101	90-110			
Matrix Spike (1946040-MS1)				Source: P911044-01 Prepared & Analyzed: 11/15/19 1						
Chloride	432	20.0	mg/kg	250	188	97.6	80-120			
Matrix Spike Dup (1946040-MSD1)				Source: P911044-01 Prepared & Analyzed: 11/15/19 1						
Chloride	436	20.0	mg/kg	250	188	99.5	80-120	1.09	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 may differ slightly.

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BP America Production Co.	Project Name:	NEBU 605 2H	
PO Box 22024	Project Number:	03143-0424	Reported:
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	11/18/19 16:10

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.

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