

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

JAN 29 2019

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.5. Lease Serial No.
NM-SF-078655

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other8. Well Name and No.
Barnes LS 008A2. Name of Operator
BP America Production Company9. API Well No.
300045224603a. Address
1199 Main Street, Suite 101, Durango CO, 813013b. Phone No. (include area code)
505-330-917910. Field and Pool or Exploratory Area
Blanco Mesaverde4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1,500' FSL, 1150' FEL, Section 26, T32N, R11W11. Country or Parish, State
San Juan County, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Remediation of
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	hydrocarbon impacted
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	soil

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Hydrocarbon impacts were discovered during a site inspection. The impacts were identified during the closure of a below grade tank on December 10, 2018. BP proposes to excavate and implement soil shredding to remediate approximately 300 cubic yards of hydrocarbon impacted soil. The impacted soil will be excavated to determine the final extents of hydrocarbon impacts. The soil shredding consists of processing impacted soil mechanically, followed by the application of hydrogen peroxide to oxidize the hydrocarbons. The soils will be sampled and laboratory analyzed for total petroleum hydrocarbons, benzene, toluene, ethylbenzene and xylenes to determine if contaminant concentrations are at or below the site ranking criteria for use as backfill. Upon meeting or exceeding the site criteria for contaminant concentrations, the treated soil will be placed in the excavation as backfill material. BP currently estimates 2 weeks to complete this process.

A 50' off pad buffer is requested for disturbance.

NMOC

FEB 04 2019

DISTRICT III

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
Steve Moskal

Title Field Environmental Coordinator

Signature

Date 01/29/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Acting NRS

Date

2/1/19

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

FFO

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

NMOC

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	

NMUCD

Release Notification

FEB 04 2019

Responsible Party

DISTRICT III

Responsible Party: BP America Production Co.	OGRID: 778	Initial Report/Remediation Plan
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: 36.953402°

Longitude: -107.954895°

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Barnes LS 008A	Site Type: Natural Gas Production Well Pad
Date Release Discovered: December 10, 2018	API#: 30-045-22460

Unit Letter	Section	Township	Range	County
I	26	T32N	R11W	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 type="checkbox"/> Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls): <u>Est 20 bbls</u>	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:

BGT closure sampling indicated soil impacts. The BGT removed for closure and the impacted area remediated to NMAC 19.15.29 standards. Full delineation of the release has not yet been performed. The well site is operated by BP Production.


State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <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>Steven Moskal</u> Title: <u>Environmental Coordinator</u>
Signature:  Date: <u>January 16, 2019</u>
email: <u>steven.moskal@bpx.com</u> Telephone: <u>(505) 330-9179</u>
<u>OCD Only</u> Received by: _____ Date: _____

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?	<u>127</u> (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.

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: _____

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: Steve Moskal Title: Environmental Coordinator

Signature: 

Date: January 16, 2019

email: steven.moskal@bpx.com

Telephone: (505) 330-9179

OCD Only

Received by: _____ Date: _____

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

Signature: _____

Date: _____

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: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

CLIENT:

BP

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

API #: **30045-22460**TANK ID
(if applicable): **B****FIELD REPORT:**(circle one): **BGT CONFIRMATION** / RELEASE INVESTIGATION / OTHER:PAGE #: **1** of **1****SITE INFORMATION:**SITE NAME: **GARNES LS #8A**QUAD/UNIT: **I** SEC: **26** TWP: **32 N** RING: **11 W** PM: **NM** CNTY: **SJ** ST: **NM**1/4-1/4/FOOTAGE: **1500'S/1150'E** **NE/SE** LEASE TYPE: **FEDERAL** STATE / FEE / INDIANLEASE #: **SF 078655** PROD. FORMATION: **MV** CONTRACTOR: **STRIKE BP - J. GONZALES**DATE STARTED: **12/10/18**

DATE FINISHED:

ENVIRONMENTAL
SPECIALIST(S): **NJV/JCB****REFERENCE POINT:**WELL HEAD (W.H.) GPS COORD.: **36.95311 x 107.95472** GL ELEV.: **6,326**

1) **Z1 BGT (SW/DB) - B** GPS COORD.: **36.953402 x 107.954895** DISTANCE/BEARING FROM W.H.: **112', N25.5W**
 2) GPS COORD.: DISTANCE/BEARING FROM W.H.:
 3) GPS COORD.: DISTANCE/BEARING FROM W.H.:
 4) GPS COORD.: DISTANCE/BEARING FROM W.H.:

SAMPLING DATA:

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

HALL

SAMPLE ID	SAMPLE DATE	SAMPLE TIME	LAB ANALYSIS	OVM READING (ppm)
1) SFC-TB C 7' (21)-B	12/10/18	1315	8015B/8021B/300.0 (CI)	0.2
2) GRAB C 10' (21)-B	12/10/18	1322	" / " / "	2,994
3) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:	
4) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:	
5) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:	

SOIL DESCRIPTION:SOIL TYPE: **SAND SILTY SAND** / SILT / SILTY CLAY / CLAY / GRAVEL / OTHERSOIL COLOR: **MOSTLY DARK YELLOWISH ORANGE**COHESION (ALL OTHERS): **NON COHESIVE** / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVECONSISTENCY (NON COHESIVE SOILS): **LOOSE FIRM** / DENSE / VERY DENSEMOISTURE: DRY / **SLIGHTLY MOIST** / MOIST / WET / SATURATED / SUPER SATURATEDSAMPLE TYPE: **GRAB COMPOSITE** # OF PTS. **5**DISCOLORATION/STAINING OBSERVED: **YES** / NO EXPLANATION: **VARYING GRAY (7.5' - 10')**

PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

DENSITY (COHESIVE CLAYS & SILTS): **SOFT** / FIRM / STIFF / VERY STIFF / HARDHC ODOR DETECTED: **YES** / NO EXPLANATION: **DISCOLORED SOILS ONLY.**ANY AREAS DISPLAYING WETNESS: **YES** / NO EXPLANATION:**SITE OBSERVATIONS:**LOST INTEGRITY OF EQUIPMENT: **YES** / NO EXPLANATION: **UNDETERMINED @ PRESENT TIME.**APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: **YES** / NO EXPLANATION: **DISCOLORED SOIL & HC ODOR.**EQUIPMENT SET OVER RECLAIMED AREA: **YES** / NO EXPLANATION:OTHER: **NMOCD / BLM REP(S) PRESENT** / NOT PRESENT TO WITNESS CONFIRMATION SAMPLING.

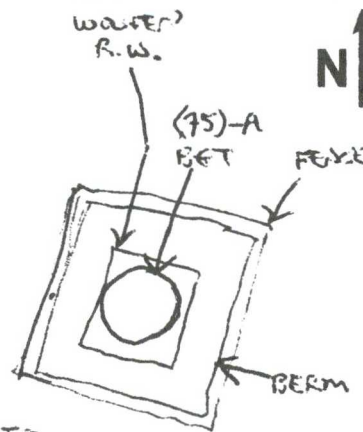
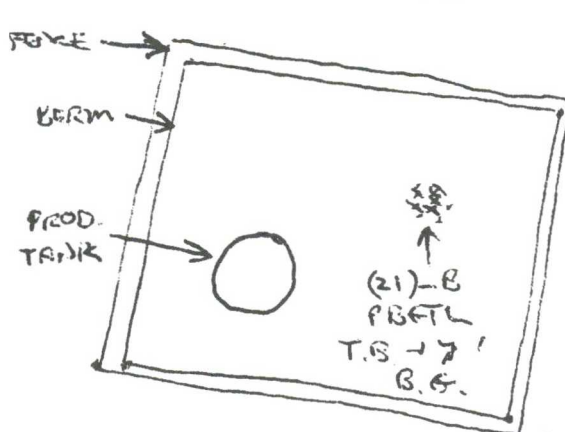
EXCAVATION DIMENSION ESTIMATION:

ft. X

ft. X

ft.

EXCAVATION ESTIMATION (Cubic Yards):

DEPTH TO GROUNDWATER: **>100'** NEAREST WATER SOURCE: **>1,000'** NEAREST SURFACE WATER: **330' x 1,000'** NMOCD TPH CLOSURE STD: **2,500** ppm**SITE SKETCH**BGT Located: off / **on** sitePLOT PLAN circle: **attached****N****X - S.P.D.**

OVM CALIB. READ. = **106.6** ppm RF=1.00
 OVM CALIB. GAS = **100** ppm
 TIME: **1:40** am/pm DATE: **12/10/18**

MISCELL. NOTESSITE#: **19040003402**

REF #:

VID: **VHIXONEV11**

PJ #:

Permit date(s):

OCD Appr. date(s):

Tank ID: **B** OVM = Organic Vapor Meter ppm = parts per millionBGT Sidewalls Visible: **Y** / **N**BGT Sidewalls Visible: **Y** / **N**BGT Sidewalls Visible: **Y** / **N**Magnetic declination: **10° E**

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

NOTES: **GOOGLE EARTH IMAGERY DATE: 3/15/2015** . ONSITE: **12/10/18**

100 ft. radius
from 21 bgt center

21 bbl BGT
GPS Coordinates:
36.953402, -107.954895
Ground Level Elevation: 6,326 ft.

Surface gradient
direction: So.

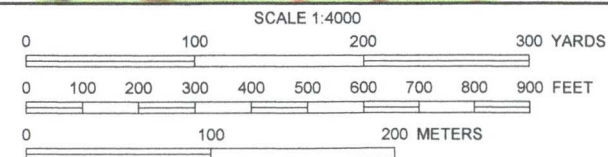
Proximity to Watercourses

BP - Barnes LS 008A

API #: 3004522460

Tank ID: 3004522460B

(I) Section 26, Township 32.0N, Range 11W, P.M. NM 23



BP - Barnes LS 008A

(I) Section 26, T32N, R11W

API #: 3004522460

Imagery date: 3/15/2015

WH GPS Coord.: 36.953124,-107.954729

21 BGT GPS Coord.: 36.953402,-107.954895

300 foot radius
from 21 bgt center

21 bbl bgt

WH

Google Earth

© 2018 Google




300 ft

N

Barnes LS 008A Depth to Water

(I) Sec 26, T32N, R11W
BGT Loc: 36.953124, -107.954729

Legend

-  Barnes LS 008A BGT (Elev. 6340)
-  Line Measure (7,880')
-  SJ 01327 (Elev. 6263; DTW 50')

SJ 01327 (Elev 6263, DTW 50') SJ 01327

Rd 2300

Barnes LS 008A BGT (Elev. 6340)

Google Earth

© 2018 Google



1 mi



New Mexico Office of the State Engineer

Wells with Well Log Information

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

POD Number	POD	Sub-Code	basin	County	Source	q	q	q	6416	4	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
SJ 00021		SJ	SJ	Shallow		3	23	32N	11W					236177	4095304*	1714	10/16/1953	10/24/1953	12/03/1953	585		CONLEY COX	
SJ 01327		SJ	SJ	Shallow		3	2	2	23	32N	11W			237092	4096187*	2441	01/20/1981	02/02/1981	02/13/1981	90	50	HARGIS, JOHN C.	724
SJ 00017		SJ	SJ	Shallow		2	24	32N	11W					238546	4096052*	2824	04/10/1953	04/10/1953	11/17/1953	105		CONLEY COX	
SJ 01356		SJAR	SJ	Shallow		3	3	31	32N	10W				239013	4091829*	2853	02/16/1981	02/20/1981	03/02/1981	65	50	TERRY HOOD	717

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 236906

Northing (Y): 4093752.66

Radius: 3000

*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.




New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag	POD Number	Q64 Q16 Q4 Sec Tws Rng	X	Y
	SJ 01327	3 2 2 23 32N 11W	237092	4096187* 

Driller License: 724

Driller Company: HARGIS, JOHN C.

Driller Name: HARGIS, JOHN C.

Drill Start Date: 01/20/1981

Drill Finish Date: 02/02/1981

Plug Date:

Log File Date: 02/13/1981

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield: 4 GPM

Casing Size: 8.00

Depth Well: 90 feet

Depth Water: 50 feet

Water Bearing Stratifications:

Top	Bottom	Description
-----	--------	-------------

80	90	Sandstone/Gravel/Conglomerate
----	----	-------------------------------

Casing Perforations:

Top	Bottom
-----	--------

20	60
----	----

80	90
----	----

*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.



New Mexico Office of the State Engineer

Wells Without Well Log Information

No wells found.

UTMNAD83 Radius Search (in meters):

Easting (X): 236906

Northing (Y): 4093752.66

Radius: 3000



New Mexico Office of the State Engineer **Point of Diversion with Meter Attached**

No PODs found.

UTMNAD83 Radius Search (in meters):

Easting (X): 236906

Northing (Y): 4093752.66

Radius: 3000

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.

BP Remediation Plan

To: Cory Smith, Vanessa Fields(NMOCD), Whitney Thomas (BLM)
From: Steve Moskal (BP)
CC: Jeff Blagg (Blagg Engineering), Emmanuel Adeloje (BLM)
Date: 1/16/2019
Re: Barnes LS 008A - Ex-situ Soil Remediation – Soil Shredding
(I) S-26, T32N, R11W; API #30-045-22460; Serial No.:NM-SF-078655

Dear Mr. Smith, Mrs. Fields and Mrs. Thomas,

The Barnes LS 008A site is an active natural gas production well location within the San Juan Basin Gas Field in San Juan County, New Mexico. The site is located on land managed by the Bureau of Land Management Farmington Field Office (BLM-FFO) and is in an area primarily used for oil and gas production and recreation.

Background

Impacts were identified at the location on December 10, 2018 during a below grade tank closure. Full delineation of the release has not yet been performed. The well site is operated by BP Production.

Site Ranking

Following the NMOCD site ranking criteria, the site closure standard is 1,000 ppm GRO&DRO and up to 2,500 ppm including MRO hydrocarbons, 50 ppm BTEX and 10 ppm benzene:

- Depth to groundwater >100' (0 points)
- Nearest surface water source >1,000' (0 points)
- Distance to nearest surface water body or coarse >300' <1,000' (10 points)

Proposed Remediation – Soil Shredding

BP proposes to employ soil shredding on site. The previous remediation of the site was performed using soil shredding and was proven successful. Soil shredding involves the excavation of the impacted soil which is then placed in processing equipment, such as a hammer mill or pug mill, to mechanically process and break-up the soil. The soil becomes more uniform and is aerated during the mechanical processing. The soil is then ejected from the processing equipment and a chemical oxidizer is applied, in this case, a 35% solution of hydrogen peroxide and water. The applied concentration of hydrogen peroxide typically ranges from 3-8%. The hydrogen peroxide quickly oxidizes the hydrocarbon impacts (reagents), resulting in soil, water and carbon dioxide (products). Once the soil is processed, it is stockpiled and allowed to sit for approximately 2-5 days of residence time. A composite soil sample is collected from each segregated stockpile and submitted for laboratory analysis to determine the effectiveness of the ex-situ remediation process. If the laboratory results are of acceptable levels, the soil will be used as backfill to the excavation; if results are unsatisfactory, the soil is passed through the process once more and a subsequent laboratory sample will be collected for laboratory confirmation as described before. Typically, 24 hours of notice is provided to the regulatory agencies for the opportunity to observe and witness the stockpile sampling.

BP proposes to perform the remediation of hydrocarbon impacts by the means of soil shredding. A conservative estimate of approximately 400 cubic yards of soil will be treated through the soil shredding process. BP proposes to treat the impacted soil and segregate windrow stockpiles broken into 100 cubic

yard increments. A single, five-point composite, soil sample will be collected to represent each 100 cubic yard stockpile. If necessary, once a baseline of approximately 1,000 cubic yards of soil is consistently and successfully treated, BP will propose to decrease the sampling frequency to 500 cubic yard stockpile segments. The 500 cubic yard sampling modification will be discussed with the NMOCD and BLM for approval and input prior to implementation. BP would expect to have a sampling modification approval from the agencies within 48 working hours from the time of request. The remediation will then continue until complete and sampling will be based on the regulatory agencies approved sampling plan.

Excavation sampling will be in accordance with a typical dig and haul. The sidewalls and base of the excavation will be sampled in a frequency based on the size and progress of the excavation. Agency notification of excavation sampling will also be issued in advanced, 24-48 hours if possible.

BP is currently anticipates mobilizing to the location in February 2019, pending the approval of this plan by all regulatory agencies. BP plans to shut the well in and remove all necessary surface equipment. BP requests a 50' off pad buffer be included in the approval of this plan, in case additional room is needed or if impacts migrate to the edge of the well pad surface.

It is understood, that if soil remediation is not successful via the soil shredding, an alternative method such as a dig and haul or soil vapor extraction will be necessary. BP will be in close communications with the agencies in the event an alternative remediation method is required.

Site Closure and Reporting

Once the soil shredding process is complete, the excavated area will be fully backfilled and compacted, and surface equipment will be re-set. Collection of vadose zone samples will be performed to ensure no residual impacts remain following the remedial activities. A minimum of 24-hour notice will be provided to the agencies prior to the collection of these samples. Any necessary interim reclamation will be performed. Final reclamation of the well pad will occur at a later date, once the natural gas production well is plugged and abandoned.

A final remediation report will be delivered to NMOCD and BLM for approval of final site closure regarding the excavation and soil shredding activities within 60 days of the receipt of the final laboratory report.

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Farmington Field Office

REQUEST FOR THREATENED AND ENDANGERED (T&E) / SPECIAL STATUS SPECIES SPECIES PROPOSAL EVALUATION

Accomplishment Number

Instructions: Double Form: 1) the upper portion - a request for and 2) the lower portion - evaluation of need for Formal Consultation

TO: Resource Area Special Status Species, T & E Species, Migratory Birds

Please evaluate this proposed action relative to possible affects on any Federally listed T&E, proposed Federal T&E, State listed T&E, or Special Status Species which may occur in the proposed location.

Description of the proposed Action and Case Reference Number:3004522460/Barnes LS 008A: BP will like to utilize soil shredding to remediate hydrocarbon contaminated soil at above reference loaction. The activities will remain entirely on the previously disturbed well pad.

However, BP is requesting a 50' buffer from the pad disturbance in anticipation of any offsite activities, should it be necessary.

LOCATION

Sec 26, T32N, R11W

PROPOSEE

Abiodun Adeloye (Emmanuel) NRS
Signature of Initiating Official & Title

01/29/2019
Date

This proposal and relative data have been analyzed concerning the following species:BLM Sensitive spp

The analysis indicates that there would be a ☒No- ☐May- affect situation as a result of approving this described proposed action and Formal Consultation ☐ is ☒is not necessary.

This proposal is a ☒ minor construction ☐major construction.

Method of Analysis: ☐ Field Examination ☒ Data bank/GIS ☐ Other (explain)

COMMENTSStay within permitted area

Evaluated by

Level 1 Biologist

/s/ John Kendall

(Signature)

1/31/18

(Date)

Level 2 Biologist

(Signature)

(Date)

Reviewed by

070-6843-01
(Sept. 2000)

(Signature and Title)

IN-HOUSE ARCHEOLOGICAL SURVEY DETERMINATION
FARMINGTON FIELD OFFICE

NM-210-2019-010

Case No./Name: Barnes LS 008A/3004522460 Date Submitted: 01/29/2019
Company: BP America Production Company
Type of Case: Soil Shredding

IS A CULTURAL RESOURCE INVENTORY REQUIRED?

- ☐ Proposal involves non-Federal lands.
- ☐ Proposal is within an existing right-of-way.
- ☐ Proposal is along an existing road.
- ☐ Proposal is within an existing disturbed area.
- ☐ The well pad is to be expanded 50 feet to the edge of the disturbance.
- ☐ Other: BP will like to utilize soil shredding to remediate hydrocarbon contaminated soil at above reference location. The activities will remain entirely on the previously disturbed well pad. However, BP is requesting a 50' buffer from the pad disturbance in anticipation of any offsite activities, should it be necessary.

NOTE: Attach map (e.g., USGS map, survey plat, GIS) and other supporting information as needed. If you are proposing to use a previously culturally surveyed area, identify by BLM cultural case number if known.

Submitted by: Abiodun Adeloje (Emmanuel)

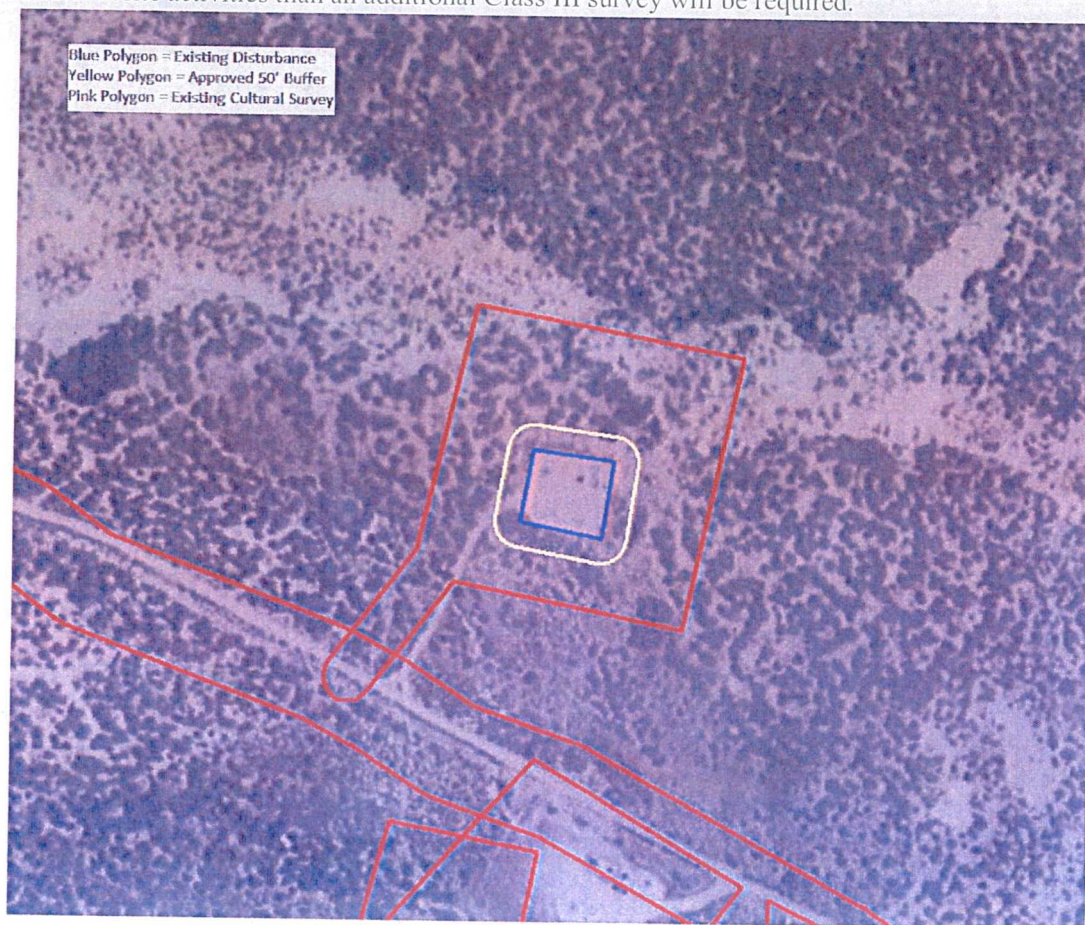
CULTURAL RESOURCE SPECIALIST RECOMMENDATIONS

- ☐ Inventory for cultural resources is required.
- ☒ Inventory for cultural resources is **not** required for the reason(s) indicated below.
 - ☐ Previous natural ground disturbance has modified the surface so extensively that the likelihood of finding cultural properties is negligible (e.g., within a floodplain), or
 - ☒ Human activity has created a new land surface to such an extent as to eradicate traces of cultural properties, or
 - ☐ Existing Class II or equivalent inventory or environmental data are sufficient to indicate that there is no likelihood of finding a National Register or eligible property, or
 - ☒ Inventory at the Class III level of intensity has previously been performed and records adequately documenting the location, methods, and results of the inventory are available in report no. NMCRIS No. 91763, or
 - ☐ Natural environmental characteristics are unfavorable to the presence of cultural properties (such as recent landslide or rock falls), or
 - ☐ The nature of the proposed action is such that no impact can be expected on significant cultural resources (e.g. land use will not require any surface disturbing action, e.g., aerial spraying, hand application of chemicals, travel on existing roads, etc.), or
 - ☐ Other:

Recommended by: Xim Adams Date: 1/31/2019
Archaeologist

Cultural Notes (if any, e.g., conditions, stipulations, etc.): Existing cultural survey in this location is sufficient to allow for a 50' buffer of additional disturbance surrounding this well pad. However, if any more than 50' is needed to

accommodate offsite activities than an additional Class III survey will be required.



Operator: BP America Production Company
Well Name: Barnes LS 008A/3004522460
Legal Description: Sec 26, T32N, R11W

Conditions of Approval

Disclaimers: BLM's approval of this remediation plan does not relieve the lessee and operator from obtaining any other authorizations that may be required by other jurisdictional entities.

1. This location has a ranking score of 10 due to being >100 feet depth to groundwater, <1,000 horizontal feet from Surface Water body and >1,000 within a Wellhead protection area in accordance with NMOCD's Guidelines for Remediation of Leaks, Spills and Releases and BLM-FFO NTL 94-1. This release will need to be cleaned to this regulatory standard; therefore, TPH needs to be <1,000 ppm, BTEX <50 ppm, and benzene <10 ppm.
2. BP will notify the BLM at least 24 hours prior to any conformation soil sampling event.
3. Any disturbance of the Interim Reclaimed area will be reclaimed back to pre-project Interim Reclamation. Any new disturbance outside of the original approved area in the permit will be reclaimed to the Interim Reclamation size.
4. This approval is for the use of the Soil Shredding technique on the pre-disturbed well pad location only. Offsite access is not approved, if offsite access is found to be required an additional sundry will have to be submitted with any new details of the project.
5. Construction, construction maintenance or any other activity outside the approved areas will require additional approval and may require a new cultural survey and clearance.
6. All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles and company equipment. This includes all personnel associated with construction, use, maintenance and abandonment of the well pad, well facilities, access and pipeline. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16U.S.C. 470aa-mm).
7. If, in its operations, operator/holder discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to BLM Field Manager. The BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by a BLM or permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is

completed. Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).

8. If monitoring confirms the presence of previously unidentified cultural resources, then work in the vicinity of the discovery will be suspended and the monitor will promptly report the discovery to the BLM Field Manager. The BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. A Bureau of Land Management or permitted cultural resources consultant may perform minor recordation, stabilization, or data recovery. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed.
9. If, in its operations, operator/holder damages, or is found to have damaged any previously documented or undocumented historic or prehistoric cultural resources, excluding "discoveries" as noted above, the operator/holder agrees at his/her expense to have a permitted cultural resources consultant prepare and have executed a BLM approved data recovery plan. Damage to cultural resources may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).