

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

DEC 19 2018

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.

Partridge Field Office
Bureau of Land Management

SUBMIT IN TRIPLICATE – Other instructions on page 2.		5. Lease Serial No. NM-SF-078416A
1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator BP America Production Company		7. If Unit of CA/Agreement, Name and/or No.
3a. Address 1199 Main Street, Suite 101, Durango CO, 81301		8. Well Name and No. Hardie LS 001A
3b. Phone No. (include area code) 505-330-9179		9. API Well No. 30004522415
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1,600' FNL, 1800' FEL, Section 26, T29N, R08W		10. Field and Pool or Exploratory Area Blanco Mesaverde
		11. 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 impact source was found to be an open ended pipe that had been buried during a previous remediation at the site. 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 excvaton as backfill material. BP currently estimates 2 weeks to complete this process.

NMOCB
FEB 04 2019
DISTRICT III

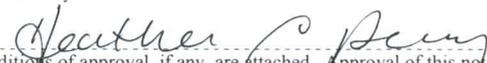
14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
Steve Moskal

Title Field Environmental Coordinator

Signature 

Date 12/19/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by 

Title Acting NRS Supervisor Date 2/1/19

Office FFO

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.

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.

NMOCB

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

NMOC

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: 36.6943469° Longitude: -107.6434987°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Hardie LS 001A	Site Type: Natural Gas Production Well Pad
Date Release Discovered: December 17, 2018	API#: 30-045-22415

Unit Letter	Section	Township	Range	County
J	26	T29N	R08W	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:

Impacts were identified at the location on November 20, 2018 during a site inspection. A small stained area of soil was noted, but appeared to be isolated. The source was unknown. Upon further investigation, it was discovered an open ended flow line from the separator had been buried during the remedial activities of the BGT in March of 2018. On December 17, 2018, it was confirmed that the release had migrated at least 17 vertical feet from the surface. Full delineation of the release has not yet been performed. The well site is operated by BP Production.

Incident ID	
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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>December 19, 2018</u>
email: <u>steven.moskal@bpx.com</u> Telephone: <u>(505) 330-9179</u>
<u>OCD Only</u> Received by: _____ Date: _____

Incident ID	
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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?	>400 (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 1/2-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	
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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: Steve Moskal Title: Environmental Coordinator

Signature:  Date: December 19, 2018

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

OCD Only

Received by: _____ Date: _____

Incident ID	
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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: Steve Moskal Title: Environmental Coordinator

Signature:  Date: December 19, 2018

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: _____



NMOCD Site Ranking Estimate:

Depth to water >400'

Nearest Water Course = 345'

Nearest Water Well = 2,480'

Ranking: TPH (GRO+DRO) = 1,000 ppm

TPH (GRO+DRO+MRO) = 2,500 ppm



Release as found on Nov 21, 2018

Flow line shut in.

Volume estimated at < 1 bbl



Hand auger to 2' depth. Impacts present. Field OVM = 3,840 ppm @ 2'

BPX Energy
Hardie LS 1A
(J) Sec 26 - T29N - R8W
API: 30-045-22415

Load Line Release Point

Hardie LS 1A

1,028 Feet

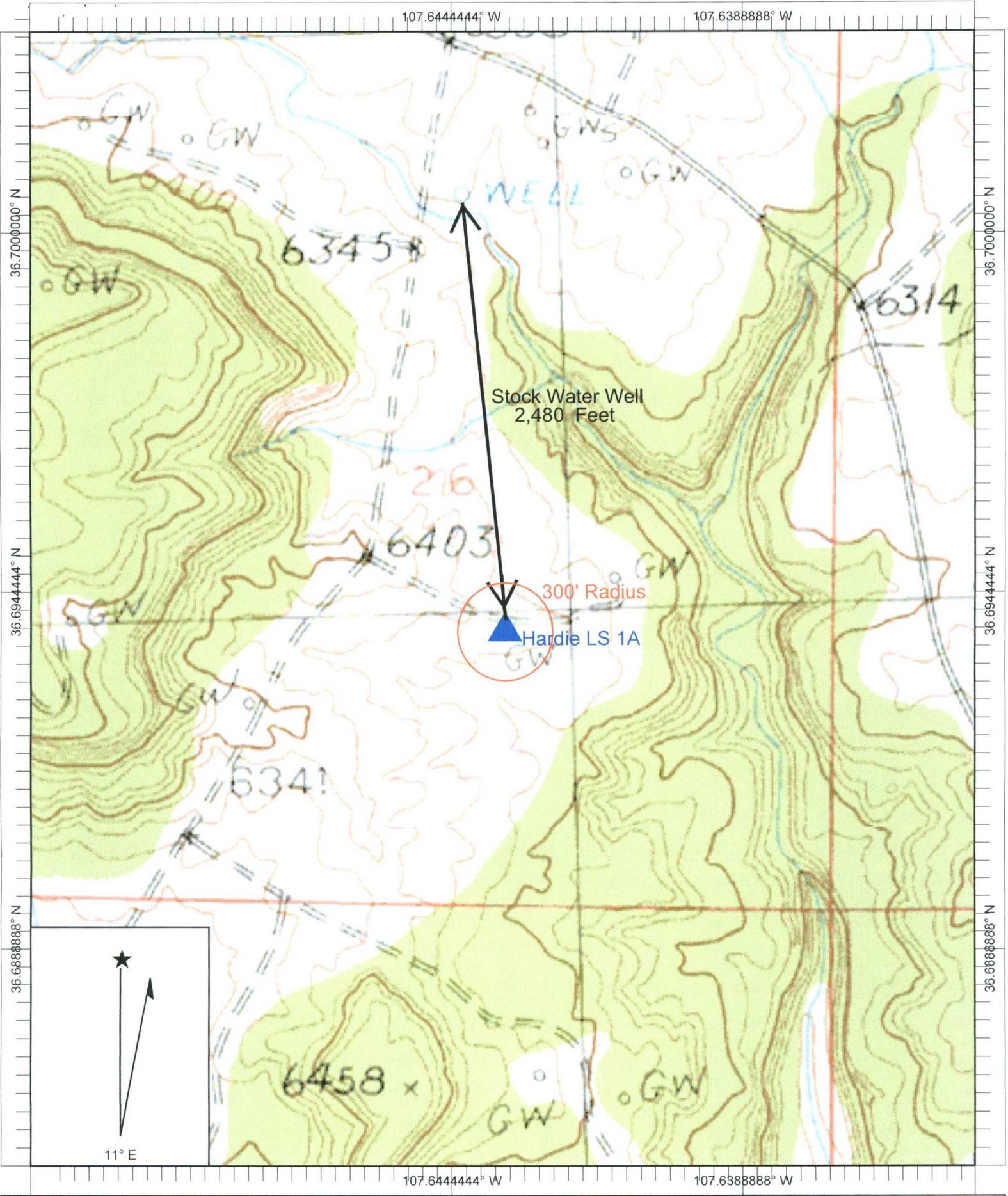
345 Feet

Google earth

© 2018 Google



600 ft



Name: CUTTER CANYON
 Date: 11/21/2018
 Scale: 1 inch equals 666 feet

Location: 036.6943469° N 107.6434987° W
 Caption: BPX Energy
 Hardie LS 1A

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: 12/19/2018
Re: Hardie LS 001A - Ex-situ Soil Remediation – Soil Shredding
(J) S-26, T29N, R08W; API #30-045-22415; Serial No.:NM-SF-078416A

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

The Hardie LS 001A 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 November 20, 2018 during a site inspection. A small stained area of soil was noted, but appeared to be isolated. The source was unknown. Upon further investigation, it was discovered an open ended flow line from the separator had been buried during the remedial activities of the BGT in March of 2018. On December 17, 2018, it was confirmed that the release had migrated at least 17 vertical feet from the surface. 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 hydrocarbons, 2,500 ppm TPH, 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 <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 January 2019, pending the approval of this plan by all regulatory agencies. BP plans to shut the well in and remove all necessary surface equipment.

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:3004522415/Hardie LS 001A: 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 area

LOCATION

Sec 26, T29N, R8W

PROPOSEE

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

01/28/2019
Date

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

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)

COMMENTSNo known issues

Level 1 Biologist	Evaluated by	Level 2 Biologist
/s/ John Kendall	1/31/19	
(Signature)	(Date)	(Signature) (Date)

Reviewed by

Case No./Name: 3004522415/Hardie LS 001A Date Submitted: 01/28/2019
Company: BP America Production
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 _____ feet to the _____.
- 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 area.

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. _____, 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: Kim Adams Date: 1/29/2019
Archaeologist

Cultural Notes (if any, e.g., conditions, stipulations, etc.): An In-House Archaeological Survey Determination Form was completed for an earlier soil shredding project on this well pad back in 2018. At this time, a determination was made that, while the area lacked inventory coverage, the likelihood of discovering historic properties in areas adjacent to

Operator: PB Amreica Production Company
Well Name: Hardie LS 001A/3004522415
Legal Description: Sec 26, T29N, R8W

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 <2,500 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