

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

OIL CONS. DIV DIST. 3

Form C-141
Revised August 8, 2011

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

MAR 27 2017
Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR Initial Report Subsequent Final Report

Name of Company: BP	Contact: Steve Moskal
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9497
Facility Name: Gallegos Canyon Unit 170	Facility Type: Natural gas well

Surface Owner: Fee	Mineral Owner: Fee	API No. 30-045-07658
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: San Juan
K	35	29N	12W	1,750	South	1,777	West	

Latitude 36.68015° Longitude -108.07149°

NATURE OF RELEASE

Type of Release: Produced water and condensate	Volume of Release: 253 bbl	Volume Recovered: 71.1
Source of Release: Failed well casing	Date and Hour of Occurrence: July 21, 2016; 2:15 PM	Date and Hour of Discovery: July 22, 2016; 8:30 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Landowner Contacted Brandon Powell - NMOCD	
By Whom? Jesus Villalobos – Private Landowner	Date and Hour: 7/22/16; Phone 8:30 AM Email – 5:30 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
Describe Cause of Problem and Remedial Action Taken.* A significant increase in water production of the well is suspected to be associated with a breach in the downhole casing. The produced water triggered an alarm, closing the automated choke valve. The water then filled the separator, above ground tank (pit) and production tank which subsequently became overfilled. The well was shut in and the freestanding liquids were recovered via vac-truck. After further investigation, the production well had an apparent integrity failure and was subsequently P&A'd. The remediation via excavation removed 15,000 cubic yards of soil for offsite disposal. The attached plan details the required groundwater delineation efforts.
Describe Area Affected and Cleanup Action Taken.* The majority of the existing well pad was excavated to remove impacts associated with the production well integrity failure as well as historical impacts. A total of 15,000 cubic yards of soil was removed and transported off site for landfarm treatment. The attached work plan will be implemented to determine the existence and/or extents of groundwater impacts.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Steve Moskal	Approved by Environmental Specialist:	
Title: Field Environmental Coordinator	Approval Date: 4/12/17	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval:	Attached <input checked="" type="checkbox"/>
Date: March 27, 2017	Phone: 505-326-9497	

* Attach Additional Sheets If Necessary

#NCS 1621656998
3 RP-381



Smith, Cory, EMNRD

From: Smith, Cory, EMNRD
Sent: Wednesday, April 12, 2017 2:41 PM
To: 'Moskal, Steven'; Bayliss, Randolph, EMNRD
Cc: 'jeffcblagg@aol.com'; Griswold, Jim, EMNRD; Powell, Brandon, EMNRD; Fields, Vanessa, EMNRD
Subject: RE: GCU 170 - 3RP-422

Steve,

Just got the Hard copy of this work plan, Noticed an error on my part.

The Correct 3RP for this site is 3RP-381, I noticed 3RP-422 appears to be for the same pit, I will get with Santa Fe and see if we can clear up our records.

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: Smith, Cory, EMNRD
Sent: Friday, March 24, 2017 3:04 PM
To: 'Moskal, Steven' <Steven.Moskal@bp.com>; Bayliss, Randolph, EMNRD <Randolph.Bayliss@state.nm.us>
Cc: 'jeffcblagg@aol.com' <jeffcblagg@aol.com>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Subject: RE: GCU 170 - 3RP-422

Steve,

Re: 3RP-422

OCD has reviewed BP Groundwater Delineation Plan submitted on March 21, 2017 for the installation of monitoring wells at the Gallegos Canyon 170 and has approved the plan with the following conditions of approval.

- The monitoring well northwest of the GCU 2 PxA needs to be moved southeast closer (~50 feet) to the area of concern.
- BP will sample each well via EPA Method 8260 as described, and also for General Water Chemistry (pH, TDS, Cation/Anion)
- BP will provide the OCD District III and OCD Environmental Bureau at least 72 hours but no more than one week notice prior to collection of initial ground water samples.

Please update the work plan and submit a hard copy attached to a subsequent C-141 to the District III OCD Office. If you have any additional questions please give me a call.

Smith, Cory, EMNRD

From: Smith, Cory, EMNRD
Sent: Friday, March 24, 2017 3:04 PM
To: 'Moskal, Steven'; Bayliss, Randolph, EMNRD
Cc: 'jeffcblagg@aol.com'; Griswold, Jim, EMNRD; Powell, Brandon, EMNRD; Fields, Vanessa, EMNRD
Subject: RE: GCU 170 - 3RP-422

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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: Smith, Cory, EMNRD
Sent: Tuesday, March 21, 2017 4:02 PM
To: 'Moskal, Steven' <Steven.Moskal@bp.com>; Bayliss, Randolph, EMNRD <Randolph.Bayliss@state.nm.us>
Cc: jeffcblagg@aol.com; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Subject: RE: GCU 170 - 3RP-422

All,

Steve, Please see the online file for the Mudge LS 006 3RP-469, I approved an subsequent initial C-141 on 1/27/17 After discussing the site with Jim we did approve BP to continue to monitor the wells as described in

the updated plan. I am pretty sure we discussed the approval while out at the Florance Gas Com J16A, I do apologize for not following up with an email.

Also please don't forget to include Vanessa in the Email's thanks.

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: Moskal, Steven [<mailto:Steven.Moskal@bp.com>]
Sent: Tuesday, March 21, 2017 10:15 AM
To: Bayliss, Randolph, EMNRD <Randolph.Bayliss@state.nm.us>
Cc: jeffcblagg@aol.com; blagg_njv@yahoo.com; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: RE: GCU 170 - 3RP-422

Randy,

Please find the attached groundwater delineation plan for the subject site. We are currently working with the landowner on monitoring well placement, but they shouldn't change too much. Please review and provide any feedback.

Also, as discussed, I plan to move back to the Mudge LS 006 (3RP-469) to perform offsite soil remediation that remains from our 2014 excavation. Currently I am awaiting BLM approval to move offsite, but expect to get going in within 60 days or so. I submitted a report, also attached, and have not received a response.

Thank you,

Steve Moskal
BP Lower 48 – San Juan – Farmington
Field Environmental Coordinator
Office: (505) 326-9497
Cell: (505) 330-9179



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From: Moskal, Steven
Sent: Monday, March 20, 2017 8:34 AM
To: 'Bayliss, Randolph, EMNRD'
Cc: jeffcblagg@aol.com; blagg_njv@yahoo.com
Subject: RE: GCU 170

Randy - We are looking to begin the GW monitoring well installations in the coming weeks. We are currently tied up on the Florance GC J 16A. I would like to get ahead of that before starting another project. I would estimate in the next 4-6 weeks, if not earlier.

We have a lot of people out on spring break at the moment. I would say you could expect a plan late this week or mid-next week.

Thanks,

Steve Moskal

BP Lower 48 – San Juan – Farmington

Field Environmental Coordinator

Office: (505) 326-9497

Cell: (505) 330-9179



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From: Bayliss, Randolph, EMNRD [<mailto:Randolph.Bayliss@state.nm.us>]

Sent: Monday, March 20, 2017 8:22 AM

To: Moskal, Steven

Subject: GCU 170

Good morning Steve

JeffB wrote that GW sampling would be done at GCU 170. What's your schedule on that?

Thanks

A handwritten signature in cursive script that reads "Randolph Bayliss".

Randolph Bayliss, P.E.

Hydrologist, Districts III and IV

NMOCD Environmental Bureau

1220 S St Francis St, Santa Fe, NM 87505

505-476-3084, Cell 575-840-5961



BP Remediation Management Plan

To: Randy Bayliss & Cory Smith (CC) (NMOCD)
From: Steve Moskal (BP)
CC: Jeff Blagg (Blagg Engineering)
Date: 3/21/2017
Re: Gallegos Canyon Unit 170 – Groundwater Delineation Plan
3RP-422; API#30-045-0765 (K) S35, T29N, R12W

Dear Mr. Bayliss and Mr. Smith,

The Gallegos Canyon Unit (GCU) 170 site is an abandoned natural gas production pad within the San Juan Basin Gas Field in San Juan County, New Mexico. The site is located on private land with a spud date of October 9, 1964 drilled by Pan American Petroleum Company. The ownership of the land has changed several times since the natural gas well was drilled. The well pad is located on agricultural land with a groundwater table with an average depth of 8-12 feet below ground surface (bgs).

BACKGROUND

A historical release of natural gas liquids from production and process equipment was identified during the closure sampling of an earthen pit in 1995. The area of impacts were remediated at the time of discovery, up to the fence lines of the nearby cultivated field and surround underground pipelines. The remaining impacts beyond these boundaries were left in place per the instruction of the landowner at the time. Groundwater monitoring wells were installed and sampled periodically since completion.

On July 21, 2016, the GCU 170 wellbore experienced an integrity failure resulting in the production of an abnormal amount of produced water. The water filled the surface equipment, resulting in the discharge of water and natural gas condensate to the ground surface. Remediation began immediately via removal of fluids and excavation. Once the integrity failure of the well was identified, the remediation was placed on hold while the natural gas production well was plugged and abandoned. The plugging and abandonment was completed on September 15, 2016. Remediation efforts resumed.

The site soils consist of loose tan-brown sands and gravel with an intermingled silty-clay layers. The thickness of the soil ranges from 8 to 12 feet above the surface of the groundwater table where the soils become a higher concentration of clay.

After the majority of impacted soil from the wellbore integrity failure was removed, on October 24, 2016 a significant change in contamination was noted. After an extensive record search documents regarding the 1995 excavation determined the residual impacts remained on site. The residual impacts had migrated through the historical backfill material.

During excavation along the western fence line, elevated chloride levels were detected in soil samples submitted for laboratory analysis. Chloride levels remained low in all the other portions of the excavation. It is suspected that the elevated chloride levels may be associated with the historic GCU 002 well drilled by Benson & Montin on August 28, 1951.

A total of approximately 15,000 cubic yards of soil was excavated and removed from the site with backfill material imparted from a landowner approved borrow area. A solution of potable water and hydrogen peroxide was applied to the groundwater interface during excavation of the 2016 impacts. No hydrogen peroxide was applied to the groundwater interface of the 1995 impacts.

All of the final soil samples collected during excavation were observed by a representative of the New Mexico Oil Conservation Division. The excavation was extended to final lateral extents based on laboratory analysis to meet the following closure standards: 100 ppm total petroleum hydrocarbons, 50 ppm BTEX, 10 ppm benzene and 620 ppm chlorides, with the exception of the chlorides located along the western fence line. This plan will further delineate and characterize the chloride impacts.

GROUNDWATER DELINEATION PLAN

BP proposes to advance 6 soil boring to below the groundwater surface or when refusal is encountered (15-20 fbgs). The borings will be advanced using a 4" (ID) hollow stem auger or direct push geoprobe. In each boring, 2-inch PVC well screen will be placed in the lower portion of each soil boring, approximately 10 feet long, with an attached riser to just above the surface. Sand pack will be added to the boring annulus to 1' above the 10' screened interval. Hydrated bentonite will be placed in the remainder of the boring to 1' bgs where cement will be used to seal the surface completion and install a well protector. The well protectors will be lockable. The wells will be permitted through the New Mexico Office of the State Engineer Aztec Office.

One well will be placed upgradient of the recent and historical contamination zones. Two wells will be placed in the known release areas of the recent and historic contamination. Two wells will be placed mid-down gradient of the contamination zones and an additional two wells down gradient and outside of the contamination zones. One of the two wells will be placed far downgradient to further delineate and characterize the impacts suspected from the GCU 002 well. Placement of the wells will involve the landowner.

During advancement of the well borings, soil samples will be collected for confirmation. A soil samples will be collected every 5' or more frequent if possible. The soil samples will be field screened using a calibrated photoionization detector via an approved field headspace method. Two soil samples will be submitted for laboratory analysis, following handling and chain of custody protocols, for analysis of EPA Methods 8015 TPH (GRO, DRO and MRO), 8021 BTEX and 6010 chlorides. The soil samples with the highest PID from each boring along with the soil sample at the groundwater interface will be submitted for analysis.

Once the well installation is complete and allowed to sit for a minimum of 24 hours, the wells will be developed via a bailing and purging with a new, disposable bailer used in each well. The wells will be purged for a minimum of 3 well volumes and where field screening for temperature, conductivity and pH become stable for a minimum of three consecutive readings (within 10%) The purged water will be contained and disposed of in the nearby GCU 170E below grade tank.

The wells will then be allowed to sit for approximately 24 hours then purged of approximately three well volumes prior to sampling for EPA Method 8260 VOCs and General Water Chemistry via API General Chemistry methods (including pH, TDS, cations/anions), all following sample handling and chain of custody protocols.

Reporting

Once laboratory results are received for soil and groundwater samples, BP will furnish a report to the NMOCD detailing drilling activities, well construction, laboratory results and groundwater gradient data based on local survey information. All these activities will be performed by a third party contractor. The report will be delivered to the NMOCD within 60 days of the final laboratory report.

Regards,



Steve Moskal
BP America Production Co.

