

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-045-07910
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Gallegos Canyon Unit
8. Well Number 173
9. OGRID Number 778
10. Pool name or Wildcat Basin DK Blanco MV & Otero Chacra

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other ☐

2. Name of Operator
BP America Production Company Attn: Cherry Hlava

3. Address of Operator
P.O. Box 3092 Houston, TX 77253

4. Well Location
Unit Letter **A** : **1025** feet from the **North** line and **905** feet from the **East** line
Section **29** Township **29N** Range **12W** NMPM **San Juan** County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5330' GR

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____
Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls: Construction Material _____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: **Bradenhead Repair** ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103 For Multiple Completions Attach wellbore diagram of proposed completion or recompletion

RCVD OCT 27 2008
OIL CONS. DIV.
DIST. 3

BP America Production Company request permission to do Bradenhead Repair on the above mentioned well.

If possible, please expedite your approval. Attached please find BH repair procedure.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Cherry Hlava TITLE Regulatory Analyst DATE 10/23/2008

Type or print name Cherry Hlava E-mail address: hlavacl@bp.com Telephone No. 281-366-4081

For State Use Only

APPROVED BY: Kelly G. Rault TITLE Deputy Oil & Gas Inspector, District #3 DATE NOV 12 2008

Conditions of Approval (if any): ATTACHED IS AMENDED PROCEDURE. FR

Handwritten initials

SJ Basin Well Work Procedure

API #: 30-045-07910

Well Name: GCU 173
Version: 2.0
Date: November 4, 2008
Repair Type: Bradenhead Repair
Location: T29N-R12W-Sec29
County: San Juan
State: New Mexico
Horizon: FT
Meter #: 281-
Engr: Nona Morgan

Objective: Bradenhead Repair, Tubing & Pump Replacements

Summary of Steps:

1. TOH w/ rods and Pump.
2. Verify tubing integrity. TOH with completion string, if necessary.
3. Tag Fill and clean out wellbore.
4. Set RBP & test
5. Circulate fluids & pressure test casing
6. Locate& isolate leak source
7. Set composite BP
8. Perform cement squeeze
9. Pressure test & notify NMOCD/BLM
10. POOH
11. Complete procedures to replace tubing and return well to production

Pertinent Information: Gas BTU content for this well is 1016; Sp gr. is 0.577; H2S is 0 (06/14/06). Venting and Flaring document needs to be followed with the assumption that BTU content is above 950. BH pressure was 12 psi; Bradenhead down to nothing in 2 seconds (10/31/03). Bradenhead pressure reading 70 psi (5/10/2005) bleeds off immediately. Bradenhead pressure reading 90 psi (2/25/2008)

Normal Operating Procedures:

- ADM 5102 Preliminary Well Work Checklist
- INS 8908-00 Power Down Automation
- NOP 8601-00 Procedure for Lockout / Tagout
- NOP 7801-00 Operating Policy for Simultaneous Operations
- NOP 7803-01 Procedure For At Risk Well Locations
- NOP 7804-01 Wellbore Air Purge
- NOP 7809-00 Spill Reduction Procedure for Wells Team
- NOP 7811 Site Security for Well Operations
- NOP 7812 Under Balanced Well Control Tripping
- NOP 7813 San Juan Asset Rig Anchor Safety Plan
- NOP 7814 Procedure for Flowback Operations
- DWOP Drilling and Well Operation Policy
- Dispensations SJPU and SJS DWOP Dispensations
- Rig Schedule SJS Workover / Completion Tentative Rig Schedule NOP-7803-01

Dispensations:

- Section 9.4.1 (Issue #5, May 2003) – Document #K5500000267
Stripping rubber to be used instead of Hydril / Annual Preventer.
 - Section 24.2 (Issue #5, May 2003) – Document #K5500000261
No dual mechanical barriers in annulus during all well servicing
-

Procedure:

Preparations

1. Perform pre-rig site inspection. Check for size of location, gas taps, other wells, other operators, running equipment, wetlands, wash (dikes required), H₂S, barriers needed for equipment, landowner issues, location of pits (buried lines in pits), raptor nesting, critical location.
2. Check ID wellhead, if earth pit is required have One Call made 48 hours prior to digging.
3. Have P&S strip location and set barriers as necessary. Lock out/tag out any remaining production equipment.
4. Notify the following Inspectors 48 hrs before working on the well:
 - Charlie Perrin 505-334-6178 ext. 11
 - Steve Mason 505-599-6364

TOH w/ Pump & Rods using Service Rig

5. MIRU workover rig and equipment.
6. Conduct lifting JHA, fill out permit for man lift if pump jack does not have a ladder. Complete necessary paperwork and risk assessment. Lift employee to walking beam. For smaller Pumping units, move ladder to pad and locate employee near horses head and attach chain on hydraulic wench to hoses.
7. Check and record tubing, casing, and bradenhead pressures daily. Ensure production casing and bradenhead valves are double valved. Check hold down pins on hanger.
8. Check all casing strings to ensure no pressure exists on any annulus. The operations of removal of wellhead and installation of BOP will be performed per the DWOP dispensation for a single mechanical barrier in the annulus
9. ND wellhead. NU BOPs and diversion spool with 3" outlets and 3" pipe to the pit or vent tank as required. Pressure test BOPs to low of 250 psi and high of 1500 psi. Monitor flowing casing pressure with gauge (with casing flowing to blow tank), if available, throughout workover.
10. Kill with 2% KCL water or fresh water, as necessary.
11. Hang off polish rod on stuffing box, lift and unhang horse's head.
12. Pump tubing capacity with 2% KCl water to load tubing. Test stroke pump to 500 psi if tubing will load. ***Note:*** *If tubing will not load or goes on vacuum after loading, then hole in tubing or pump shoe problem is indicated.*
13. Unseat pump. TOH Rods/Pump, inspect rods and pump for scale or wear. ***Watch lower rods (near EOT) closely for signs of wear on guides and rods. After inspection evaluate adding more guides for the rods.
14. RU slickline. Set mechanical barrier plugs in tubing. Blowdown and kill tubing and casing strings.

TOH w/ Completion & Cleanout

15. Hold JHA and fill out permit for BOP critical lift. ND wellhead. Install TIW valve on lifting pup in hanger. Strip on and NU BOP. Test BOP.
16. Set on and NU diversion spool, stripper head and other under balanced well control equipment.

17. PU and TIH tubing until tag fill. Tally out of hole, calculate depth of tag and/or hole, check tubing for hole, wear, or scale. Tubing currently landed at 1260'. If tubing leak is found, lay down bad joint and consider laying down joints around the hole (decision to be made by wellsite leader).
***Discuss with Engineer solution for continued tubing wear problem.
18. TIH w/ bit & scraper to top of perforations (1190'-1235') and clean out to PBTD at 1311' as necessary. LD tubing if needed replacement.

Squeeze Work:

19. RIH w/ 2-3/8" tubing with combination RBP & mechanical set retrievable packer and set them approximately 1 jt or 30' below the bottom FC perforations. TOC at 1311. Pressure test zone down to CIBP set @ 1350'.
 - a. *If the pressure does not hold below the packer, then proceed to isolate leak by moving packer down the hole in half intervals and repeating the pressure test of the packer until the leak is found.*
 - b. *Attempt to isolate leak as close as possible. Report pressure testing results and bleed details to the BLM, NMOCD and Engineer.*
 - c. *RIH w/ 2-3/8" workstring and 4-1/2" cement retainer and set retainer 10' above squeeze holes making sure to avoid any casing collars. Stab into retainer and pump sufficient cement to attempt to circulate to surface behind 4-1/2" casing. WOC. Consult with engineer during squeeze work and before attempting the next steps. POOH,*
20. Proceed with moving up the wellbore once the interval between the perfs and top of cement have been tested and found to be ok.
21. RIH w/ 2-3/8" tubing with combination packer (4-1/2" RBP on end and mechanical set retrievable packer approximately 1 jt or 30' above the FC perforations @ 1190'). Set the RBP @ 1160'. TOH 1 jt and set packer. Pressure test RBP to 500 psi.
22. Load hole and circulate out any produced fluids. Pressure test 4-1/2" casing above the packer to 500 psi for 15 minutes. Monitor pressure loss and bradenhead for any indication of communication during testing.
23. If the pressure does not hold above the packer, then proceed to isolate leak by moving packer up the hole in half intervals and repeating the pressure test of the packer until the leak is found.
24. Attempt to isolate leak as close as possible. Report pressure testing results and bradenhead pressure and bleed details to the BLM, NMOCD and Engineer.
25. Once the leak has been located, pull RBP/packer assembly and TOH w/ workstring. RIH with composite bridge plug on wireline and set at 100'. TOH.
26. RIH w/ 2-3/8" workstring and 4-1/2" cement retainer and set retainer 10' above squeeze holes making sure to avoid any casing collars. Stab into retainer and pump sufficient cement to attempt to circulate to surface behind 4-1/2" casing. If and when cement to surface is established, shut bradenhead valve and attempt to walk squeeze to a 200 psi squeeze pressure. WOC. Consult with engineer during squeeze work and before attempting the next step.
27. RIH w/ 2-3/8" workstring w/ 4-1/2" cement retainer and set @ 469'.

28. Stab into retainer and squeeze **42.6 cu ft.** of G-Class cement to cover the 8-5/8" casing shoe and fill the 4-1/2" x 8-5/8" annulus. Circulate clean cement from the 4-1/2" x 8-5/8" annulus.
29. Pressure test squeeze. If squeeze does not test, contact engineer. Engineer will work with NMOCD/BLM on repairing the leak. Procedures may have to be modified per the NMOCD/BLM.
30. Unstab from cement retainer and POOH w/ workstring. Drill out retainer, cement in 4-1/2" casing and composite plug @ 100'.
30. Clean out wellbore as necessary.

-- Return to procedures to replace tubing and reinstall pump & Rods. These steps are outlined in a separate set of procedures being issued--.



Gallegos Canyon Unit 173

Fruitland Coal
API # 30-045-07910
T-29N, R-12-W, Sec 29
San Juan County, New Mexico

G.L. 5317'
K.B. 5330'

