

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

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.

SF - 078194

6. If Indian, Allottee or tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well



Oil Well



Gas Well



Other

2. Name of Operator

BP America Production Company Attn: Cherry Hlava

8. Well Name and No.

Ludwick LS 20M

9. API Well No.

30-045-32920

3a. Address

P.O. Box 3092 Houston, TX 77253

3b. Phone No. (include area code)

281-366-4081

10. Field and Pool, or Exploratory Area

Basin Dakota/Blanco Mesaverde

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SWNW 1640' FNL & 1200' FWL Sec. 29 T30N, R10W

11. County or Parish, State

San Juan County, New Mexico

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

TYPE OF SUBMISSION



Notice of Intent



Subsequent Report



Final Abandonment Notice

TYPE OF ACTION



Acidize



Alter Casing



Casing Repair



Change Plans



Convert to Injection



Deepen



Fracture Treat



New Construction



Plug and Abandon



Plug Back



Production (Start/Resume)



Reclamation



Recomplete



Water Disposal



Water shut-Off



Well Integrity



Other Cement
Remediation &

MV Pay Add

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 recomplete 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 shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

On 8/15/06 BP requested permission to defer cement remediation & the addition of the Mesaverde. Approval was granted 8/28/06.

BP respectfully request permission to run a new CBL to determine whether there really is a cement isolation issue. Based upon the results of the log, the procedure will be revised as necessary. Work is scheduled to begin in the 1st quarter 2007.

Please see attached procedure.

14. I hereby certify that the foregoing is true and correct

Name (Printed/typed)

Cherry Hlava

Title **Regulatory Analyst**

Signature

Cherry Hlava

Date **12/11/2006**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Original Signed: Stephen Mason

Title

Date

DEC 11 2006

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

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.

NMOCD

Mesa Verde/Dakota Infill Drilling Well Completion Procedure

Well Name: Ludwick LS 20M
Version: 2.0
Date: Dec. 11, 2006

Summary of Objectives to add MV and commingle w/DK

1. RU SU. Blow well down. POOH and LD completion string.
2. Set bridge plug to isolate DK formation.
3. Run CBL to confirm zonal isolation. If cement remediation is required, supplemental procedure will be provided.
4. RD SU. Prepare for rigless frac.
5. Perforate and frac (two-stage N2 Foam) the Mesaverde Point Lookout and Mesaverde Menefee.
6. RU SU.
7. Clean out MV frac, perform flow test for production allocation.
8. Drill out isolation plug, commingle MV/DK and clean out wellbore to PBTD.
9. Run completion string. RDSU
10. Turn well back to production.

Pertinent Information

Location	Sec.29,30N-10W	Horizon	Basin Dakota/Mesaverde
County	San Juan	Engineer	John Papageorge
State	New Mexico	Phone #s	281-366-5721 wk. 713-822-5053 cell
API Number	30-045-32920	Geologist	Jim Perkins
		Phone #	281-366-0713

Note: BTU content of the produced gas will exceed 1100. Therefore, adhere to requirements as detailed in Venting and Flaring document.

HSE: Perform well work per Drilling and Well Operations Policy; Issue 5 and applicable dispensations. Conduct JHA safety meetings and apply the 8 Golden Rules of Safety to all aspects of this work.

Completion Procedure

Note: As applicable within the following completion program, reference the following BP DWOP documents and dispensations for detailed procedures:

Applicable Normal Operating Procedures:

NOP 7803-01; Revision #5: Procedure for At Risk Well Locations

NOP 7812; Revision #1: Under balanced Well Control Tripping Procedure

NOP 7814; Revision #2: Procedure for Flowback Operations

NOP 7804; Revision #2: Wellbore Air Purge

Applicable Dispensations:

DWOP 9.4.1; Issue 5 – Document K5500000267

“Stripping rubber to be used instead of Hydril / annular preventer”

DWOP 24.2; Issue 5 – Document K5500000261

“No dual mechanical barriers in annulus during all well servicing”

1. Review Preliminary Well Work Checklist Parts I, II, and III. Perform pre-rig site inspection and complete Preliminary Well Work Checklist Part IV. Coordinate with Planning & Scheduling for One Call if ground disturbance is required. Check rig anchors and ID wellhead. Review DIMS drilling / completion reports and casing / tubing records.
2. RU slickline equipment. RIH and set two barriers for isolation.
3. MI RU service unit and equipment. Ensure well and production equipment is LO/TO (energy isolation) including meter run, automation, separators, water lines, etc.
4. Read and record casing and bradenhead pressures. Ensure production casing has double casing valves. Blow down well and all annuli.
5. ND tree and NU BOPE per DWOP 24.2 Dispensation. Equip BOP stack with diversion spool with two double-valved 3” outlets and 3” pipe to the blow tank or flare pit per NOP 7812. Pressure test BOPE low at 250 psi and high at 2000 psi. POH and stand back tubing.
6. Pull tubing hanger, shut pipe rams and install stripping rubber.
7. PU extra tubing joints as necessary to RIH and tag for fill. Tubing currently set at xxxx’. POOH and LD tubing. ND mud cross.
8. Rig up electric line equipment and set 4-1/2” composite bridge plug at xxxx’ to isolate Dakota. Make sure well is static and all valves are closed when running in the hole with plug and setting tool. Load hole with 2% KCL. Pressure test plug and casing to 1500 psi using rig pump.

9. RU Schlumberger lubricator and cased-hole logging equipment. Run CBL (under pressure) from bridge plug to base of intermediate casing at 4554' to confirm zonal isolation. NOTE: If remedial cement work is required, separate procedure will be provided.
10. ND BOP. NU frac valve and frac "Y". Pressure test to 4500 psi.
11. RD SU. Prepare for rigless frac.
12. Conduct risk assessment (JHA) prior to perf and frac operations. **NOTE:** Follow Schlumberger Explosive SOP. Any electronic device that transmits a signal should be shut off or prohibited from within 300' of location. Also, ensure all vehicle data recorder (VDR) systems are disabled prior to driving on location. Contact control center at (505) 326-9475 for verification.

FIRST STAGE MESAVERDE (Pt. Lookout)

13. Perforate the lower Mesa Verde (*Point Lookout*) with **120°** phasing as follows:

xxxxx @ 3spf (xx holes)

xxxx @ 2spf (xx holes)

14. POOH with plug/gun assembly and check firing rate of guns.
15. RU wellhead isolation tool and Schlumberger equipment. Pressure test all lines and equipment. Frac the lower Mesa Verde interval as per Schlumberger schedule.

SECOND STAGE MESAVERDE (Menefee)

16. Rig-up electric line equipment. RIH with plug/gun assembly. Set flow-through frac plug at **xxxx'**. Perforate the Mesaverde (Menefee) using **120°** phasing as follows:

xxxx @ 4spf (xx holes)

17. POOH with guns. RD perforating equipment.
18. Rig-up Schlumberger equipment and pressure test all lines and equipment. Frac the Upper MV per Schlumberger pump schedule.
19. Rig down stinger and frac equipment. Open well up on $\frac{1}{4}$ " choke and flowback overnight to clean up MV frac. After initial 8 hour flowback, open on $\frac{1}{2}$ " choke for 8 hours and then $\frac{3}{4}$ " choke until stabilized.

20. RU service unit. ND frac "Y". (Compliant w/ DWOP 2.5 in regard to barriers). Install BOP on top of frac valve. Pressure test mud cross and pipe rams w/ FMC. Blow well down (follow under-balanced tripping procedure).
21. TIH w/ 2-3/8" tubing. Land tubing heavy. ND BOP. ND frac valve. NU BOP and pressure test. TIH to top of fill. Clean out sand to top of frac plug. Knock out frac plug and continue in hole to top of bridge plug at 5100'. Clean out as necessary.
22. When Mesaverde has been cleaned sufficiently, perform the 12-hour governmental flow test.
23. After flow test, proceed with drilling out plug at xxxx'. Pick up additional tubing and RIH to PBTD. Clean out fill as necessary. Flow back MV/Dakota to clean up. When well has cleaned up sufficiently, POOH with tubing and bit.
24. Pick up and run BHA on 2 3/8" production tubing. Bottom hole assembly made up of: 2-3/8" mule shoe sub, "F" landing nipple with pump-thru plug, 2-3/8" x 4' sub, "X" landing nipple with pump-thru plug.
25. Land tubing in lower section of Dakota formation at approximately xxxx'. Install tubing hanger, land in wellhead and set lock down pins. Continue to flow casing on 3/4" choke to flare pit via 2" production casing valves.
26. ND BOP and mud cross. Install production tree. RU slickline unit. RIH and retrieve "X" & "F" plugs.
27. Send appropriate information to Cherry Hlava (281-366-4081) to file the C-104.
28. Check pressures on all casing strings.
29. RDMO Service rig
30. Return well to production.

Ludwick LS 20M

Sec. 29, T30N R 10W

API: 30-045-32920

GL: 6100'
KB: 6114'

13-3/8" 48# H-40 @ 105'

9-5/8" 32#, H-40 ST&C @ 274'
cmt to surf

Directional Plan:

Kick-off at 300'
3deg build to 613'
9 deg hole angle
Begin drop at 4536'
Vertical at 4690'

7" 20#, J55&N80, ST&C @
4554'

DV tool @ 2083'
Cmt to surf

Mesa Verde Menefee
tbd
60 holes

Mesa Verde Pt. Lookout
tbd
60 holes

Tubing: 2-3/8"
4.7#, J55 @
~7050'

Dakota Completion
7055-7200'
60 holes

4-1/2" 11.6# P-110
LT&C @ 7233'
marker jts @ 3863' & 7233'

Log TD @ 7204'
PBTD @ 7231'
TD @ 7241'

Updated: 6/7/06 JLP/JMP