rorm 3100-3 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

| Expires: July 31, 2 |
|---------------------|
| Lease Serial No. |
| NMSF078039 |

| | SUNDRY N | OTICES | AND R | EPORTS | ON W | ELLS | |
|-----|--------------|------------|---------|-------------|-----------|---------|----|
| Do. | not use this | form for p | oroposa | Is to drill | or to re- | enter a | an |
| | ndoned well. | | | | | | |

| If Indian, Allottee or Tribe Name | |
|-----------------------------------|--|

| | <u> </u> | | - | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|-----------------------|----------------------------------------------------------|----------------------|
| SUBMIT IN TRIPLICATE - Other instructions on reverse side. | | | | 7. If Unit or CA/Agre | ement, Name and/or No. | |
| 1. Type of Well | | | | | 8. Well Name and No. BARNES LS 11 | |
| Oil Well Gas Well Other | | | | | O A DI Wall No | |
| Name of Operator Contact: CHERRY HLAVA BP AMERICA PRODUCTION CO. E-Mail: hlavacl@bp.com | | | | | 9. API Well No 30-045-21167-00-S1 | |
| 3a. Address 3b. Phone N 200 ENERGY COURT Ph: 281-3 FARMINGTON, NM 87401 | | | o. (include area code 66-4081 | e) | 10. Field and Pool, or Exploratory AZTEC PICTURED CLIFFS | |
| 4. Location of Well (Footage, Sec., T | ., R., M., or Survey Description |) | | | 11. County or Parish, | and State |
| Sec 27 T32N R11W SENE 15 36.95898 N Lat, 107.97018 W | | | | | SAN JUAN CO | JNTY, NM |
| 12. CHECK APPI | ROPRIATE BOX(ES) TO |) INDICATE | NATURE OF | NOTICE, RE | PORT, OR OTHER | RDATA |
| TYPE OF SUBMISSION | | | ТҮРЕ С | OF ACTION | | |
| Notice of Intent | Acidize | □ Dee | pen | Producti | on (Start/Resume) | Water Shut-Off |
| - | Alter Casing | □ Frac | cture Treat | Reclama | tion | Well Integrity |
| ☐ Subsequent Report | Casing Repair | □ Nev | v Construction | Recomp | lete | Other |
| Final Abandonment Notice | Change Plans | — ⋈ Plu | g and Abandon | ☐ Tempora | rily Abandon | _ |
| Z 4-22 | Convert to Injection | Plu; | g Back | Water D | isposal | |
| Please see the attached P&A | procedure. | | | | RCVD APR OIL CONS DIST. | S. DIV. |
| 14. I hereby certify that the foregoing is Cor Name (Printed/Typed) CHERRY | # Electronic Submission For BP AMERICA nmitted to AFMSS for proc | PRODUCTIO | N ĆO., sent to th EVE MASON on (| ne Farmington | SXM0165SE) | |
| Signature (Electronic S | Submission) | | Date 04/14/2 | 2010 | ** | |
| | THIS SPACE FO | OR FEDERA | AL OR STATE | OFFICE US | SE | |
| Approved By STEPHEN MASON | | | TitlePETROLI | EUM ENGINE | FR | Date 04/19/201 |
| 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 Farming | | | 1 2 m to to Afri |
| Fitle 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s | U.S.C. Section 1212, make it a statements or representations as | crime for any pe to any matter w | erson knowingly an ithin its jurisdiction | d willfully to mal | ce to any department or | agency of the United |
| ** DIM DEV | ICED ## DI M DEVICE | O ** DI M D | EV/ISED ** 2' | M DEVICES | ** 0: 14 051/205 | D ++ |

Barnes LS 11 – PC PxA Procedure (Version 1)

General Information: Plug and Abandon Formation: PC Job Objective: 4/14/2010 Project #: Date: **p.** 281.366.8619 **Engineer:** Anne Hansford **c.** 713-540-3386 **Production Contact:** Rocky Deromedi **p.** 505.326.9471 **c.** 505.486.0942 Optimizer: Mike Mcmahen **p.** 505.326.9231 Backup Engineer:

Well Information:

Production Data:

| API Number: | 30-045-21167 | Tubing Pressure: | 120 psi | | |
|--------------------|---------------------|-----------------------|-----------------|--|--|
| BP WI: | | Casing Pressure: | N/A | | |
| Run #: | | Line Pressure: | 135 psi | | |
| Surface Location: | Sec. 27, T32N, R11W | Pre-rig Gas Rate: | 0 MCFD | | |
| Meter Number: | 87731 | Anticipated Uplift: | None | | |
| Well FLAC: | | Water Rate: | | | |
| Cost Center: | | CO2 (%): | 1% to 2% | | |
| Lease FLAC: | | H2S (PPM): | N/A | | |
| Restrictions: | N/A | Gas BTU: | 1170 | | |
| Regulatory Agency: | BLM | Artificial Lift Type: | 1" or 1-1/4" CT | | |
| Compressed (Y/N): | N | | | | |
| | | | | | |

Basic Job Procedure:

Coil Tubing unit

- 1. POOH 1" OR 1-1/4", coil tubing @ unknown depth (~3210 to 3240')'
- 2. Set CIBP @ 3160'
- 3. Pressure test 2-7/8" casing. Run CBL
- 4. Cement 3160' to 2550' (This will be based on CBL results) inside.
- 5. Based on CBL results, Perf @ 1395'. Set retainer @ 1345' and cement 1395' to 1218' inside and outside to cover the Kirtland and Ojo formations.
- **6.** Perf @ **177'** and pump a **177'** cement surface plug from 177' to surface inside and outside.

Safety and Operational Details:

ALL work shall comply with DWOP E&P Defined Operating Practice.

Well History:

The Barnes Ls 11- PC was completed as a 2-7/8" slimhole completion in 1972. A Wireline was attempted in 2005. Could not get through hanger.

Standard Location Work:

 Perform pre-rig site inspection, size of location, gas taps, other wells, other operators, running equipment, wetlands, wash, H2S barriers if needed for equipment. Landowner issues, buried lines in pits, raptor nesting, critical location, check anchors. Check ID wellhead, determine if equipment is acceptable or obsolete and replace if necessary, if digging is required have One Call made 48 hours. Follow ground disturbance policy.

- 2. Perform second site visit, checking anchors and barriers if needed. Ensure lines are marked so that they clearly designate pit locations. Discuss and turnover handover sheet with someone from operations team and wells team. LOTO all necessary equipment including but not limited to: meter run, automation, separator, and water line.
- 3. Notify BLM and NMOCD 24 hours prior to performing the work.
- 4. Hold pre-job safety meeting and discuss JSA with everyone on location. JSA should cover: heavy lifts, pinch points, location hazards, pressure hazards, proper PPE and 8 golden rules of safety/IFF. Make sure everyone has preformed their LOTO and knows they have the right to stop the job.
- 5. Check and record casing pressure, intermediate, and Bradenhead pressures. Record all pressures into DIMS. <u>Notify engineer if Bradenhead pressures exist</u>. Check gas H2S content and treat if the concentration is > or equal to 10 ppm.
- 6. Insure double casing valves are installed. Spot and lay 3" line and tank to blow down well, record pressures while blowing well down if possible.
- 7. Blow down backside to flow back tank. Record the amount of time that it takes to blow down well.
- 8. RU pump truck and perform temporary kill.
 - a. 1" CT TUBULAR VOLUME = 0.00107 bbl/ft
 - i. Tubing depth =3240'
 - ii. 4 bbls down tubing
 - b. 1-1/4" CT TUBULAR VOLUME = 0.00185 bbl/ft
 - i. Tubing depth = 3240'
 - ii. 6 bbls down tubing.
 - c. CASING VOLUME 2-7/8" = 0.00579 bbl/ft
 - i. Depth = 3330' (perf at 3210')
 - ii. 19.2 bbls
 - d. TOTAL = 26 bbls (this is based on 1-1/4" b/c worse case)
- Ensure well has gone on vacuum. Test that the well remains on vacuum for the amount of time that will be needed to ND wellhead and NU BOP (1 hour). Ensure extra kill fluid on location for ND of wellhead operation. The operations of removal of wellhead and installation of BOPS will be preformed under a dispensation SINCE NO MECHINCAL BARRIERS, ONLY KILL FLUID.
- 10. If well did not go on vacuum contact engineer for review of temporary kill step and permenant kill step.
- 11. Conduct a JSA and discuss the operation of ND wellhead and NU BOP with only kill fluid to ensure operation is as efficient as possible and exposure time is minimized during operation.
- 12. If well went on vacuum, perform permant kill.
 - a. 1" CT TUBULAR VOLUME = 0.00107 bbl/ft
 - i. Tubing depth =3240'
 - ii. 4 bbls down tubing
 - b. 1-1/4" CT TUBULAR VOLUME = 0.00185 bbl/ft
 - i. Tubing depth = 3240'
 - ii. 6 bbls down tubing.
 - CASING \/OLLIME 2_7/8" = 0 00579 khl/#

- i. Depth = 3330' (perf at 3210')
- ii. 19.2 bbls
- d. TOTAL = 26 bbls (this is based on 1-1/4" b/c worse case)
- 13. RU CTU. If threaded tree flanges perform proper risk assessment for threaded connections. Use dual choke manifold or production choke for flow back. Fully function and pressure test BOP's to 250-psi low-pressure test, 1000-psi high-pressure test. If Shear Rams are not used in BOP stack, refer to local standard operating practice. Lubricator should be of adequate length to cover BHA. Dual flapper check valves should be run above BHA. If dual flapper check valves are not used a detailed and current assessment of risks, mitigations and contingency responses should be refer to, or a local standard operating practice.
- 14. RIH with coil-tubing to 3160' and set CIBP.
- 15. Load hole with fluid and pressure test 2-7/8" casing. If no fluid or pressure loss is apparent, run CBL.
- 16. RU E-Line, pressure test lubricator. Pressure test lubricator and BOP to 250psi for 5 min and 700psi full test. Chart results and record passing test in DIMS.
- 17. Run CBL from 3160' to surface inside the 2-7/8" casing. Based on results, contact engineer for remedial work.
- 18. RIH with coil and spot **610**' (19.83 cu ft) of G-Class cement inside 2-7/8" casing from **3160**' to **2550**'. This will cover the Picture Cliff and Fruitland Coal Formations.
- 19. POOH to 1960'. Based on CBL results determine if remedial work needs to be completed.

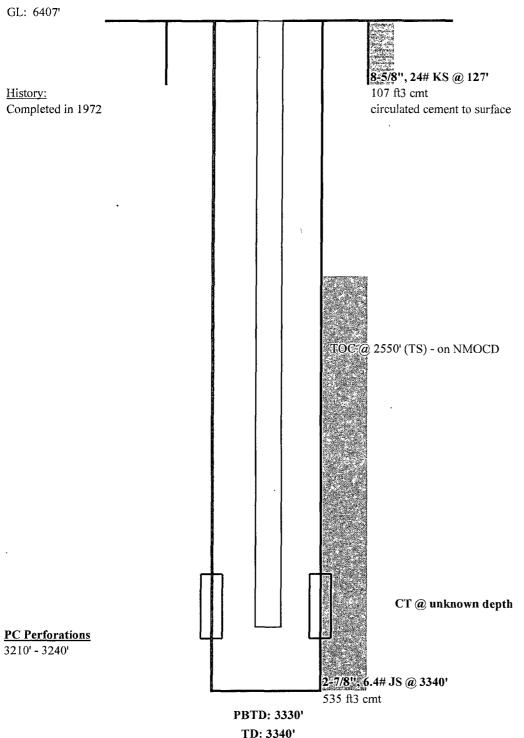
 Pump a 200' (6.5 cu ft- inside; 40.68 cu ft outside) of G-Class cement from 1448'—1248' I446-1346' on the inside and outside of the 2-7/8" casing. This will isolate the Kirtland and Ojo Alamo formation. POOH
- 20. Rig down coil unit.
- 21. Move in Wireline unit, equipment and crew. Be sure to fill out necessary work orders. Wireline must perform LOTO and JSA. RU unit with a lubricator with pump in sub that can accommodate CBL and BOP. Since well is not an HCO no Pressure testing of lubricator is required.
- 22. RIH with perforating gun and shoot holes @ 177'. RD wireline.
- 23. RU pump truck. Establish circulation. Once circulation is established, pump and circulate **55.3 cu ft** cement from **177**' to surface behind 2-7/8" casing. Pump 5.7 cu ft cement from 177' to surface inside of casing. This will put cement around the bottom of the 8-5/8" surface casing shoe to surface and both inside and behind the 2-7/8" casing. POOH.
- 24. Perform underground disturbance and hot work permits. Cut off tree.
- 25. If cement cannot be seen on all annulus and casing strings remedial cementing will be required from surface.
- 26. Release coil tubing unit.
- 27. Install well marker and identification plate per regulatory requirements. Dry hole marker should contain the following:

BP American Production Co. Barnes LS 11 API 30-045-21167 Unit letter H, Sec 27, T32N, R11W 1500' FNL, 850 FEL San Juan, NM Picture Cliffs Formation Federal Lease number: SF 078095 P&A date - TBD

- 28. RD and release all equipment. Remove all LOTO equipment.
- 29. Ensure all reports are loaded into DIMS. Print out summary of work and place in Well file. Notify Sherri Bradshaw (326-9260) of completed P&A and Cherry Hlava.

Barnes LS 11 - PC

Sec 27, T32N, R11W Unit H API # 30-045-21167



Formation tops:

Ojo 1318'

Kirtland 1395'

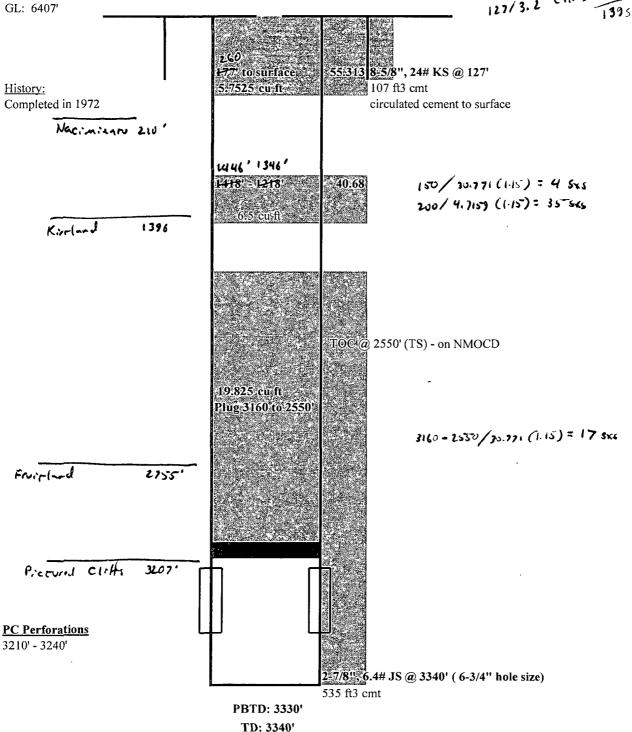
updated: 6/3/09 AH

FC 2755' PC 3208'

Barnes LS 11 - PC

Sec 27, T32N, R11W Unit H API#30-045-21167

260/30.771 (1.15) = 7 845 133/4.715 9 (1.15) = 24 445 127/3.2 (1.15)=108565



Formation tops:

Ojo 1318'

Kirtland 1395'

updated: 6/3/09 AH

FC 27551 PC 32081

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT FARMINGTON DISTRICT OFFICE

1235 LA PLATA HIGHWAY FARMINGTON, NEW MEXICO 87401

Attachment to notice of Intention to Abandon:

Re: Permanent Abandonment

Well: 11 Barnes LS

CONDITIONS OF APPROVAL

- 1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
- 2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 599-8907.
- 3. The following modifications to your plugging program are to be made:
- a) Place the Kirtland plug from 1446' 1346' inside and outside the 2 7/8" casing.
- b) Place the Nacimiento/Surface plug from 260' to surface inside and outside the 2 7/8" casing.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.