Form 3160-5 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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FORM APPROVED OM B No. 1004-0137 Expires: March 31, 2007

BUREAU OF LAND MANAGEMENT

NMOCD ARTIESTILEASE Serial No.

NML C069705 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals. 7. If Unit or CA/Agreement, Name and/or No. SUBMIT IN TRIPLICATE- Other instructions on reverse side. Big Eddy Unit 682 1. Type of Well Öil Well□□ **]** Gas Well □□ Other 8. Well Name and No. Big Eddy Unit DI2 #1H 2. Name of Operator BOPCO, L. P. API Well No. 30-015-41820 3a Address 3b. Phone No. (include area code) P. O. Box 2760, Midland, TX 79702 432-683-2277 10. Field and Pool, or Exploratory Area WC William Sink (Bone Spring) 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 11 County or Parish, State SHL: 660' FNL & 1255' FEL, Sec 34, T19S-R31E, Lat: N32.622281, Long: W103.852000 BHL: 350' FNL & 2290' FEL, Sec 33, T19S-R31E, Lat: N32.623080, Long: W103.872556 Eddy County, New Mexico 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE. REPORT. OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Acidize Deepen Production (Start/Resume) Water Shut-Off Notice of Intent Alter Casing Well Integrity Fracture Treat Reclamation Casing Repair New Construction Recomplete Other Subsequent Report ✓ Change Plans Plug and Abandon Temporarily Abandon Final Abandonment Notice Convert to Injection Plug Back Water Disposal 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.) Accepted for record BOPCO L.P. requests to change the following: Change plans for BOP testing due to the utilization of a Cameron MBS wellhead for the 7" intermediate casing. We request to nipple up and test BOPE on the 9-5/8" intermediate casing to 250 psi low and 3,000 psi high, which will cover the testing requirements for the remainder of the well. The 7" casing string will be tested as per Onshore Order #2 prior to drilling out the shoe. The Cameron wellhead diagram is attached for reference. 1200 See COA Change the 16", 84#, J-55, BTC surface casing point to 1,285" MD which is 10' above the top of the Salt. This is due to the geological interpretation and recent offset well data. This will provide a competent casing shoe for continuing operations. Updated cement volumes are as follows: Lead - 465 sks of Class "C" + additives (12.9 ppg, 1.90 cu ft/sk), Tail - 155 sks Class "C" + additives (14.8 ppg, 1.35 cu ft/sk). Change the 9-5/8", 40#, N-80, LTC intermediate casing point to 4,221' MD which is 100' into the Delaware Mnt. Group. This is due to geological interpretation and recent offset well data. This will provide a competent casing shoe for continuing operations. Updated cement volumes are as follows: Primary - 675 sks of Class "C" + additives (13.5 ppg, 1.74 cu ft/sk) during first stage. Lead - 850 sks Class "C" + additives (12.9 ppg, 1.85 cu ft/sk), Tail - 275 sks Class "C" neat (14.8 ppg, 1.33 cu ft/sk) during 2nd stage. SEE ATTACHED FOR 14. I hereby certify that the foregoing is true and correct CONDITIONS OF APPROVAL Name (Printed/Typed) Christopher Giese Title Drilling Engineer 12/09/2013 Signature Date THIS SPACE FOR FEDERAL OR STATE OFFICE USE Approved by Title

CARLSBAD FIELD 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

Office

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.

Note: Dimensional information reflected on this drawing are estimated measurements only. 7-1/16" 10,000# 25" 11" 5,000# **E** 26.24" 13-5/8" 5,000# 毗 28.38" 16-3/4" 3,000# 28.5" -16" -13.375" -9.625" BOPBO, L.P. **CAMERON** J-8968 Casing Design: 16" x 13.375" x 9.625" x 7" Jeanette 3-26-13

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Big Eddy Unit DI2 #1H Conditions of Approval

A. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Secretary's Potash

Possibility of water flows in the Salado, Castile, and Delaware.

Possibility of lost circulation in the Rustler, Capitan Reef, Delaware, and Bone Spring.

- 1. The 16 inch surface casing shall be set at approximately 1200 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

d.	If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The m	ninimum required fill of cement behind the 13-3/8 inch 1st intermediate casing is:
×	Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst and potash.
	ninimum required fill of cement behind the 9-5/8 inch 2 nd intermediate casing, which be set at 4221 feet (set casing in the base of the Capitan Reef), is:
moved. I	has proposed DV tool at depth of 2764', but will adjust cement proportionately if DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' rrent shoe. Operator shall submit sundry if DV tool depth cannot be set in this
a.	First stage to DV tool:
×	Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve approved top of cement on the next stage.
b.	Second stage above DV tool:
	Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Capitan Reef and potash. Additional cement may be required – excess calculates to 17%.
	ers required on horizontal leg, must be type for horizontal service and a minimum ery other joint.
4. The m	ninimum required fill of cement behind the 7 inch production casing is:
moved. I	has proposed DV tool at depth of 5000', but will adjust cement proportionately if DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' rrent shoe. Operator shall submit sundry if DV tool depth cannot be set in this
a. Fi	rst stage to DV tool:
\boxtimes	Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve approved top of cement on the next stage.
b. Se	cond stage above DV tool:
	cond stage above by tool.
	cond stage above by tool.

4.4

- Cement should tie-back at least 50 feet above the Capitan Reef (Top of Capitan Reef estimated at 2736'). Operator shall provide method of verification. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash.
- 5. Cement not required on the 4-1/2" casing. Packer system being used.
- 6. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
- 3. A variance is granted for the use of a diverter on the 16" surface casing.
- 4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 13-3/8 inch 1st intermediate casing shoe shall be **3000** (**3M**) psi.
- 5. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the 9-5/8 inch 2nd intermediate casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.

- d. Operator shall perform the 7" casing integrity tests to 70% of the casing burst. This will test the multi-bowl seals.
- e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 6. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
 - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock.
 - d. The results of the test shall be reported to the appropriate BLM office.
 - e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

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