Form 3160-5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB No 1004-0135
Expires January 31, 2004

RM

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.

SEP 18 2009

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No
NM 8366

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1 Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No
Crow Flats 27 Federal #2H

2. Name of Operator
Mewbourne Oil Company 14744

9. API Well No
30-015-36853

3a Address
PO Box 5270 Hobbs, NM 88241

3b Phone No. *(include area code)*
575-393-5905

10. Field and Pool, or Exploratory Area
Dog Canyon Wolfcamp

4 Location of Well *(Footage, Sec., T, R., M, or Survey Description)*
1700' FNL & 850' FWL, Sec 27-T16S-R28E Unit Letter E (Surface)
1980' FNL & 330' FEL, Sec 27-T16S-R28E Unit Letter H (BHL)

11 County or Parish, State
Eddy County, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

3. 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)

Please see attached sheet.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
NM Young

Title Hobbs District Manager

Signature

Date 09/10/09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED

Approved by *(Signature)*

Name *(Printed/Typed)*

Title

Office

Date SEP 15 2009

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

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.

WESLEY W. INGRAM
PETROLEUM ENGINEER

(Continued on next page)

Mewbourne Oil Company
Crow Flats 27 Federal #2H
1700' FNL & 850' FWL
Sec 27 T-16S R-28E
Eddy Co., N.M.

After further review, MOC would like make the following changes on the drilling design:

1) 17 ½" x 13 ⅜" hole & casing design as per APD.

2) Drill out w/12 ¼" bit, using brine water & sweeps to 2300'.
Run 2150' new 9 5/8" 36# J & 150' new 40# N80. both LTC
Cement to surface w/300 sks C lite (yd @ 2.71) & tail w/400 Class C (yd @ 1.34).

Drill out w/8 ¾" bit, using FW & sweeps to KOP (planned @ 5900').
Start horizontal operations to original MD & TVD as per APD.

Option one (1): Plans are to run a Packer type completion w/Swell Pkrs for isolation. A FO Cementer (Port Collar) will be placed at KOP. After all casing has been run & hole has been circulated clean, MOC will set slips, ND drilling equipment, NU well head, NU completion BOPE, RD & MO drilling rig. MOC plans to test BOPE to 1000#, install pressure gauges on both the 9 5/8" annulus & 5 ½" casing & install a pressure release value on the annulus plumbed to a tank. MI a completion unit as soon as drilling equipment is off hole. Run tbg with opening tool, cement the casing to surface. Then normal operations will begin. A MOC employee will monitor the well twice daily or more depending on conditions.

Option two (2): If hole conditions do not allow option one to be put in place, the drilling rig will run tbg with opening tool, cement the casing to surface & normal operations will continue.

If you have any questions, please call.

Thank You
Micky Young

5½" P-110 LTC 17# - may use some BTC in curve or
4½" P-110 LTC 11.6# - "
Cement for 5½" -
Lead 800 sxs yld 2.44 Tail 200 sxs yld 1.33
If 4½" is used, cement volume will be recalculated.

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. **Although there are no measured amounts of Hydrogen Sulfide reported, it is always a potential hazard. If Hydrogen Sulfide is encountered, please provide measured values to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the CAL/GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion.**

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

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

Wait on cement (WOC) time 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. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. 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.

High cave/karst.
Possible lost circulation in the Grayburg and San Andres formations.
Possible high pressure gas in the Wolfcamp formation.

1. The **13-3/8** inch surface casing shall be set at **approximately 350** feet 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 a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

    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 minimum required fill of cement behind the **9-5/8** inch 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. Casing to be set in the San Andres below the sandstone stringers at approximately 2300 feet.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Production casing – Option 1 – use completion unit

3. **The BLM (575-361-2822) is to be notified immediately if pressure is detected on the 9-5/8" by 5-1/2"(or 4-1/2") annulus and the 5-1/2" or 4-1/2" casing during the time period while the rig is being moved and the well service unit is installed. Operator to notify BLM when drilling rig is removed and when well service unit is connected to the well.**

4. The minimum required fill of cement behind the **5-1/2" or 4-1/2"** inch production casing is:

   ☒ Cement to surface from ported collar at KOP approximately 5900 feet. If cement does not circulate see B.1.a, c-d above. Casing below the 5900' KOP will not be cemented but will use a swell packer system. **If lost circulation occurred while drilling the intermediate wellbore, the wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst. If 4-1/2" casing is installed, the cement volumes will be recalculated for the additional volume.**

Production casing – Option 2 – use drilling rig.

Operator will use drilling rig if hole conditions do not allow option one to be put in place. These conditions could include such items as lost circulation, pressure problems, etc. Casing will be cemented as shown in item 4 above.

5. 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.

C. 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8"** intermediate casing shoe shall be **5000 (5M)** psi.

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. The tests shall be done by an independent service company.

    b. The results of the test shall be reported to the appropriate BLM office.

    c. 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.**

    d. 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.

    e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation **if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days**. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.