

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0135
Expires: January 31, 2004**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.***SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Mewbourne Oil Company 14744

3a. Address

PO Box 5270 Hobbs, NM 88241

3b. Phone No. (include area code)

575-393-5905

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

1580' FNL & 65' FWL, Sec 28-T18S-R30E Unit Letter E

5. Lease Serial No.

NM-27279 NM 033775

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

Bradley 28 Federal Com #2H

9. API Well No.

30-015-38228

10. Field and Pool, or Exploratory Area

Leo Bone Spring South 37920

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			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recompleat 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 recompleat 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 replace the drilling plans in the APD with the attached plans.

If you have any questions please call Charles Martin @ 575-393-5905.

RECEIVED

DEC 27 2010

NMOCD ARTESIA

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVED

DEC 20 2010

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Jackie Lathan

Title Hobbs Regulatory

Signature

Jackie Lathan

Date 12/20/10

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (Signature)

Name
(Printed/Typed)

Title

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

Date

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.

(Continued on next page)

Witness Surface &
Intermediate Casing

Drilling Program
Mewbourne Oil Company
Bradley "28" Federal Com #2H
1580' FNL & 65' FWL (SHL)
Sec 28-T18S-R30E
Eddy County, New Mexico

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1. The estimated tops of geological markers are as follows:

Rustler	425'
Top Salt	500'
Base Salt	860'
Yates	1500'
*Queen	2650'
*Delaware	4000'
*Bone Springs	5100'

2. Estimated depths of anticipated fresh water, oil, or gas:

Water	Fresh water will be protected by setting surface casing at 330' and cementing to surface.
Hydrocarbons	Oil and gas are anticipated in the above (*) formations. These zones will be protected by casing as necessary.

3. Pressure control equipment:

A 2000# WP Annular will be installed after running 13 3/8" casing. A 3000# WP Double Ram BOP and 2000# WP Annular will be installed after running 7" & 9 5/8" casing. Pressure tests will be conducted prior to drilling out under all casing strings. BOP controls will be installed prior to drilling under surface casing and will remain in use until completion of drilling operations. BOPE will be inspected and operated as recommended in Onshore Order #2. A kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the kelly is not in use. Will test the 7" & 9 5/8" BOPE to 3000# and the Annular to 1500# with a third party testing company before drilling below each shoe, but will test again, if needed, in 30 days from the 1st test as per BLM Onshore Oil and Gas Order #2.

4. MOC proposes to drill a vertical wellbore to 7660' & kick off to horizontal @ 8233' TVD. The well will be drilled to 12869' MD (8278' TVD). See attached directional plan.

5. Proposed casing and cementing program:

A. Casing Program:

<u>Hole Size</u>	<u>Casing</u>	<u>Wt/Ft.</u>	<u>Grade</u>	<u>Depth</u>	<u>Jt Type</u>
17 1/2"	13 3/8" (new)	48#	H40	0'-330'	ST&C
12 1/4"	9 5/8" (new)	36#	J55	0'-1600'	LT&C
8 3/4"	7" (new)	26#	P110	0'-7660' MD	LT&C
8 3/4"	7" (new)	26#	P110	7660'-8560' MD	BT&C
6 1/8"	4 1/2" (new)	11.6#	P110	8300'- 12769' MD	LT&C

Minimum casing design factors: Collapse 1.125, Burst 1.0, Tensile strength 1.8.

*Subject to availability of casing.

See *
COA →

12,869.63'

** See COA*
B. Cementing Program:

- i. Surface Casing: 220 sks Class C cement containing 2% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface.
- ii. Intermediate Casing: 200sacks Class C light cement with additives. Yield at 2.12 cuft/sk. 200 sacks Class C cement Containing FLA. Yield at 1.18 cuft/sk Cmt circulated to surface.
- iii. Production Casing: 600 sacks Class H light cement with additives. Yield at 2.12 cuft/sk. 400 sacks Class H cement Containing FLA. Yield at 1.18 cuft/sk Cmt circulated to surface. This casing string will provide lease line isolation.
- iv. Production Liner: This will be a Packer/Port completion from TD up inside 7" casing with packer type liner hanger.

See COA
- *Mewbourne Oil Company reserves the right to change cement designs as hole conditions may warrant.

6. Mud Program:

<u>Interval</u>	<u>Type System</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0'-330'	FW spud mud	8.6-9.0	32-34	NA
330'-1600'	Brine water	10.0-10.2	28-30	NA
1600'- TD	FW w/Polymer	8.5-8.7	32-35	15

** See COA*
7. Evaluation Program:

Samples: 10' samples from surface casing to TD
Logging: GR & Gyro from KOP -100' (7520') to surface. GR from 7520' to TD.

8. Downhole Conditions

Zones of abnormal pressure:	None anticipated
Zones of lost circulation:	Anticipated in surface and intermediate holes
Maximum bottom hole temperature:	120 degree F
Maximum bottom hole pressure:	8.3 lbs/gal gradient or less

9. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 40 days involved in drilling operations and an additional 10 days involved in completion operations on the project.



SEE ATTACHED FOR
CONDITIONS OF APPROVAL
12/20/2010

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
LEASE NO.:	NM033775
WELL NAME & NO.:	BRADLEY 28 FEDERAL COM # 2H
SURFACE HOLE FOOTAGE:	1580' FNL & 0065' FWL (Lease # NM27279)
BOTTOM HOLE FOOTAGE:	1580' FNL & 0330' FEL
LOCATION:	Section 28, T. 18 S., R 30 E., NMPM
COUNTY:	Eddy County, New Mexico

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. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated 500 feet prior to drilling into the **Queen** formation. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations 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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
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 is 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 (horizontal well – vertical portion of hole) will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

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 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. 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

Possible brine flows in the Artesia and Salado Groups.

Possible lost circulation in the Artesia Group.

1. The 13-3/8 inch surface casing shall be set at approximately **330** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **Additional cement will be required as excess calculates to 6%.**
 - 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 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 potash. Additional cement will be required as excess calculates to 22%.**

FOR THE 7 INCH CASING: OPERATOR SHALL SUBMIT SUNDRY FOR A TWO STAGE CEMENT JOB IF HOLE CONDITIONS INDICATE THAT IT WILL NOT BE POSSIBLE TO DO CEMENT JOB IN ONE STAGE.

3. The minimum required fill of cement behind the 7 inch production 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 potash.**
4. The minimum required fill of cement behind the 4-1/2 inch liner is:
- ☒ Cement not required; operator is using the Packer-Port completion system. Liner to tie-back a minimum of **200** feet into the production casing.
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.
 - a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
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 **3000 (3M)** psi.
4. 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) prior to initiating the test.
 - c. The results of the test shall be reported to the appropriate BLM office.
 - d. 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.**
 - e. 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.

D. DRILL STEM TEST

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

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

EGF 122010