Form 3160-5 (August 2007)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD Artesia	
	Expires: July 31, 201

SUNDRY Do not use the abandoned we		Lease Serial No.     NMNM27277      If Indian, Allottee or Tribe Name ,					
SUBMIT IN TRI		7. If Unit or CA/Agreement, Name and/or No.					
Type of Well     Gas Well □ Oth		8. Well Name and No. DORADO 34 EH FED COM 1H					
Name of Operator     MEWBOURNE OIL COMPAN	Contact:	JACKIE LATH ewbourne.com	IAN		9. API Well No. 30-015-41896-00-X1		
3a. Address HOBBS, NM 88241	3b. Phone No. Ph: 575-393 Fx: 575-397		:)	10. Field and Pool, or Exploratory LEO			
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description				11. County or Parish,	and State	
Sec 33 T18S R30E SENE 220 32.421801 N Lat, 103.580490		·		EDDY COUNTY	Y, NM		
12. СНЕСК АРРІ	ROPRIATE BOX(ES) TO	INDICATE	NATURE OF	NOTICE, RE	PORT, OR OTHE	R DATA	
TYPE OF SUBMISSION			ТҮРЕ О	F ACTION			
Notice of Intent	. □ Acidize	□ Deep	en	☐ Production	on (Start/Resume)	☐ Water Shut-O	ff
<del>-</del>	Alter Casing	☐ Fract	ure Treat	□ Reclama	tion	☐ Well Integrity	
☐ Subsequent Report	□ Casing Repair	. 🗖 New	Construction	☐ Recompl	ete	☐ Other	•
☐ Final Abandonment Notice	Change Plans	☐ Plug	and Abandon	Tempora	emporarily Abandon		
	Convert to Injection	Plug	Back	Water Di	isposal '		
If the proposal is to deepen directions Attach the Bond under which the wolf following completion of the involved testing has been completed. Final Attach the site is ready for final formula that the site is ready for final final formula that the site is ready for final	rk will be performed or provide operations. If the operation respondenment Notices shall be file inal inspection.)  an approved APD for the	the Bond No. on sults in a multiple ed only after all read only after all read only above well &	file with BLM/BL completion or rec equirements, inclu- would like to m	A. Required subsompletion in a not ding reclamation hake changes	sequent reports shall be ew interval, a Form 316, have been completed,	filed within 30 days 0-4 shall be filed once	eco 16
Bonds on file: NM1693 nation	wide & NMB000919					RECEIVE	1-13-
		SEI CO	E ATTACH NDITIONS	IED FOR S OF APPI	ROVAL	JAN 13 2014	1
14. I hereby certify that the foregoing is  Commit	Electronic Submission #2	RNE OIL COME	ANY. sent to the	e Carlsbad	•		
Name(Printed/Typed) JACKIE L.			RESENTATIVE				
Signature (Electronic S	Submission)		Date 01/06/2	2014			_
2.5. (Escendia C	THIS SPACE FO	R FEDERA	<del></del>		E APPI	ROVED	干
							_
Approved By			Title .		JAN	8 2014	$\dashv$
Conditions of approval, if any, are attached ertify that the applicant holds legal or equal which would entitle the applicant to condu	itable title to those rights in the ct operations thereon.	súbject lease	Office		/s/ Chi	ris Walls	
itle 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s				I willfully to mak	ce to an labentment or	agency of the United	

# MEWBOURNE OIL COMPANY

701 S. CECIL PO BOX 5270 HOBBS, NM 88240 (575) 393-5905 (575) 397-6252 FAX

Mewbourne Oil Company has an approved APD for the Dorado 34 EH Fed Com #1H

Mud & casing to remain as approved for 17 ½" & 12 ¼" hole.

Currently MOC is approved to drill 8 3/4" hole through the curve and run 7" casing. Then drill 6 1/8" lateral section and run 4 1/2" liner w/packer & port system.

MOC is requesting to change the following:

Change BOPE from 5M system to 3M system after running 9 1/8" csg.

A 2000# WP annular will be installed after running 13 1/8" casing. A 3000# WP double ram BOP and 3000# WP Annular will be installed after running 9 1/8" 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. BOPs 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 13 %" annular to 1500# and the 9 %" BOPE to 3000# and 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 1<sup>st</sup> test as per BLM Onshore Oil and Gas Order #2.

Drill 8 3/4" curve and lateral section.

KOP will remain the same.

5 ½" 17# HCP110 LTC & BTC casing will be ran from surface to TD.

Hole Size	<u>Casing</u>	Wt/Ft.	<u>Grade</u> <u>I</u>	<u>Depth</u>	<u>Jt Type</u>
8 ¾″	5 ½" (new)	17#	P110	0-7911' MD	LT&C
8 3/4"	5 ½" (new)	17#	P110	7911'-8650' MI	D BT&C
8 3/4"	5 ½" (new)	17#	P110	8650'-13181'	LT&C

Cmt will consist of:

700 sacks Class H light cement with fluid loss, LCM, & salt additives. Yield at 2.63 cuft/sk. Mix water @ 14.95 gal/sk. Tail w/ 1200 sacks Class H cmt. Yield at 1.21 cuft/sk. Mix water @ 5.3 gal/sk. Calculated to tie back 200' into 9 %" casing set at 1730' w/25% excess.

Cased hole logs will be ran in 5 ½" casing during completion process.

# CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** | Mewbourne Oil Company

LEASE NO.: | NMNM-27277

WELL NAME & NO.: Dorado 34 EH Fed Com 1H SURFACE HOLE FOOTAGE: 2206' FNL & 0047' FEL

BOTTOM HOLE FOOTAGE | 2150' FNL & 0330' FEL Sec. 34, T. 18 S., R 30 E.

LOCATION: | Section 33, T. 18 S., R 30 E., NMPM

COUNTY: | Eddy County, New Mexico

# I. DRILLING

# A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)

b. Setting and/or Cementing of all casing strings (minimum of 4 hours)

c. BOPE tests (minimum of 4 hours)

# **Eddy County**

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

- 1. Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is encountered in quantities greater than 10 PPM the well shall be shut in and H2S equipment shall be installed and flare line must be extended pursuant to Onshore Oil and Gas Order #6. After detection, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items.
- 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 GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall 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 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 and brine flows in the Artesia Group and Salado. Possibility of lost circulation in the Rustler, Artesia Group, Capitan Reef (if present), and Delaware.

- 1. The 13-3/8 inch surface casing shall be set at approximately 355 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 feet above the salt.
  - 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. Excess calculates to 20% Additional cement may be required.

Centralizers required through the curve and a minimum of one every other joint.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification. Excess calculates to 9% Additional cement may be required.
- 4. 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) 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.

# 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.

CRW 011814