Form 3160-5 (August 2007)

NM OIL CONSERVATION

UNITED STATES

ARTESIA DISTRICT

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

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

AUG 2 1 2000 Artesia

SUNDRY I Do not use thi abandoned wel	5. Lease Serial No. NMNM132942 6. If Indian, Allottee or	Tribe Name				
SUBMIT IN TRI		7. If Unit or CA/Agreen	ment, Name and/or No.			
Type of Well Gas Well □ Oth	8. Well Name and No. FNR FED COM 17 20 B2JO 1H					
Name of Operator MEWBOURNE OIL COMPAN	9. API Well No. 30-015-43239-00-X1					
3a. Address P O BOX 5270 HOBBS, NM 88241		(include area code 3-5905)	10. Field and Pool, or Exploratory FORTY NINER RIDGE		
4. Location of Well (Footage, Sec., T.	11. County or Parish, and State					
Sec 17 T23S R30E NWSE 26	·	EDDY COUNTY, NM				
12. CHECK APPR	ROPRIATE BOX(ES) TO	INDICATE	NATURE OF	NOTICE, RI	EPORT, OR OTHER	DATA
TYPE OF SUBMISSION			F ACTION		•	
Notice of Intent	☐ Acidize	□ Dee	pen	☐ Product	ion (Start/Resume)	■ Water Shut-Off
_	■ Alter Casing		☐ Fracture Treat		ation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New	Construction		lete	Other
☐ Final Abandonment Notice	☐ Change Plans		☐ Plug and Abandon		☐ Temporarily Abandon	
	Convert to Injection	Plug	Back	☐ Water D	Disposal	
13. Describe Proposed or Completed Ope If the proposal is to deepen directiona Attach the Bond under which the wor following completion of the involved testing has been completed. Final Ab determined that the site is ready for fi	ally or recomplete horizontally, it will be performed or provide operations. If the operation resonandonment Notices shall be file	give subsurface the Bond No. or sults in a multipl	locations and meas a file with BLM/BL e completion or rec	ured and true ve A. Required sub ompletion in a r	rtical depths of all pertine osequent reports shall be face interval, a Form 3160	nt markers and zones. iled within 30 days -4 shall be filed once
Mewbourne Oil Company requestring of 7" & 5 1/2". Surface a	uests changing the produc and intermediate casing w	ction casing s vill not chang	tring from 5 1/2 e.	" casing to a	split ,	
Run casing as follows: 7" 26# HCP110 LTC from 0' 5 1/2" 17# P110 BTC from 885 5 1/2" 17# P110 LTC from 960	SEI CO	SEE ATTACHED FOR CONDITIONS OF APPROVAL				
Cement to surface w/1451 sks See attached csg design.	s Class C (60:40:0) yield 2	2.97cuft/sk @	11.2#/gal.		SD 9/2	Juz Locad
14. I hereby certify that the foregoing is						10
Comm	#Electronic Submission #3 For MEWBOUF nitted to AFMSS for proces	RNE OIL COM	PAÑY. sent to th	ne Carlsbad		
Name (Printed/Typed) JAKE NA\	Title REQUI	LATORY. /		.//		
Signature (Electronic S			Date 08/18/2		DROVED /	
1	THIS SPACE FO	R FEDERA	L OR STATE	OFFICE	SE / /	
Approved By			Title	//AU	G 1/8 201/2	May
Conditions of approval, if any, are attached certify that the applicant holds legal or equivalent to condu- which would entitle the applicant to condu-	Office	BOY AU O	F LAND MANAGEMEN	i /		
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	rson knowingly and ithin its jurisdiction	d vitindity to his	ike to any department or-a	gency of the United

FNR Fed Com 17/20 B2JO #1H API #: 30-015-432239

2. Revised Casing Program

Hole	Casing	Interval 🦖	Csg.	Weight	Grade	Conn.	SF	SF	SF
Size	From	To	Size	(lbs)	Taka Sa		Collapse	Burst	_a Tension =
17.5"	SAME								
12.25"	SAME								
8.75"	0'	8850'	7"	26	HCP110	LTC	1.69	2.16	1.90
8.75"	8850'	9600'	5.5"	17	P110	BTC	1.54	2.19	4.07
8.75"	9600'	16742	5.5"	17	P110	LTC	1.54	2.19	3.66
BLM Minimum Safety Factor 1.125		.125	1	1.6 Dry					
	•				1.8 Wet	**			

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

NM OIL CONSERVATION

ARTESIA DISTRICT

PECOS DISTRICT CONDITIONS OF APPROVAL

AUG 2 1 2015

RECEIVED

OPERATOR'S NAME: | Mewbourne Oil Company

LEASE NO.: | NMNM-132942

WELL NAME & NO.: FNR Fed Com 17 20 B2JO 1H

SURFACE HOLE FOOTAGE: 2630' FSL & 1655' FEL

BOTTOM HOLE FOOTAGE | 0330' FSL & 1980' FEL Sec. 20, T. 23 S., R 30 E.

LOCATION: | Section 17, T. 23 S., R 30 E., NMPM

COUNTY: | **Eddy County, New Mexico**

API: | 30-015-43239

The original COAs still stand with the following drilling modifications:

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 detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, 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 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 or are Non-API. 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.). The initial wellhead installed on the well will remain on the well with spools used as needed.

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

Wait on cement (WOC) for Potash Areas:

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least <u>24 hours</u>. WOC time will be recorded in the driller's log.

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

R-111-P- Potash

High Cave/Karst

Possibility of water flows in the Salado.

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

A MINIMUM OF TWO CASING STRINGS CEMENTED TO SURFACE IS REQUIRED IN HIGH CAVE/KARST AREAS. THE CEMENT MUST BE IN A SOLID SHEATH. THEREFORE, ONE INCH OPERATIONS ARE NOT SUFFICIENT TO PROTECT CAVE KARST RESOURCES. A CASING DESIGN THAT HAS A ONE INCH JOB PERFORMED DOES NOT COUNT AS A SOLID SHEATH. IF THE PRIMARY CEMENT JOB ON THE SURFACE CASING DOES NOT CIRCULATE, THEN THE NEXT TWO CASING STRINGS MUST BE CEMENTED TO SURFACE.

- 1. The 13-3/8 inch surface casing shall be set at approximately 425 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.

Intermediate casing shall be kept fluid filled while running into hole to meet BLM minimum collapse requirements.

- 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 and potash. Excess calculates to 20% Additional cement may be required.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

- 3. The minimum required fill of cement behind the $7 \times 5-1/2$ inch production casing is:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
- 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 53.
- 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. 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 (**Installing 2M annular**).
 - 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.
- 4. 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.
- 5. 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 (8 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. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two 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.

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