O UNDOV I	JREAU OF LAND MANAG		tesia 5. Lease Serial No.	January 31, 2018		
Do not use thi	NOTICES AND REPOR s form for proposals to ( I. Use form 3160-3 (APL	drill or to re-enter an	NMNM11038 6. If Indian, Allottee	or Tribe Name		
	RIPLICATE - Other inst		-	reement, Name and/or No.		
. Type of Well Oil Well S Gas Well Oth	FULLER 14/11	8. Well Name and No. FULLER 14/11 W2HA FED 3H				
Name of Operator MEWBOURNE OIL COMPAN	Y E-Mail: jlathan@me			15-44601		
a. Address P O BOX 5270 HOBBS, NM 88241		3b. Phone No. (include area code) Ph: 575-393-5905		10. Field and Pool or Exploratory Area PURPLE SAGE-WOLFCAMP (GAS)		
Location of Well (Footage, Sec., T	., R., M., or Survey Description)	)	11. County or Parisl	unty or Parish, State		
Sec 14 T26S R29E SENE 250 32.042423 N Lat, 103.946953			EDDY COUN	TY, NM		
12. CHECK THE AI	PPROPRIATE BOX(ES)	TO INDICATE NATURE O	F NOTICE, REPORT, OR O	THER DATA		
TYPE OF SUBMISSION		TYPE OF	FACTION			
Notice of Intent	🗖 Acidize	Deepen	Production (Start/Resume)	UWater Shut-Off		
	Alter Casing	Hydraulic Fracturing	Reclamation	U Well Integrity		
Subsequent Report	Casing Repair	New Construction	□ Recomplete	Other		
Final Abandonment Notice	Change Plans	Plug and Abandon Plug Back	Temporarily Abandon Water Disposal			
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#### Mewbourne Oil Company, Fuller 14/11 W2HA Fed #3H Sec 14, T26S, R29E SL: 2500' FNL & 435' FEL, Sec 14 BHL: 330' FNL & 440' FEL, Sec 11

#### **Casing Program**

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Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	640'	13.375"	48	H40	STC	2.57	5.78	10.48	17.61
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.95	4.54
12.25"	3453'	4180'	9.625"	40	J55	LTC	1.18	1.82	17.88	21.66
8.75"	0'	11450'	7"	26	HCP110	LTC	1.40	1.78	2.19	2.79
6.125"	10739'	18650'	4.5"	13.5	P110	LTC	1.39	1.62	3.16	3.95
В	LM Mini	mum Safet	y 1.125	1	1.6 Dr	y 1.6 E	Dry			
Factor				1.8 We	et 1.8 V	Vet				

Factor1.8 Wet1.8 WetAll casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.hMust have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	<u> </u>
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

#### Mewbourne Oil Company, Fuller 14/11 W2HA Fed #3H Sec 14, T26S, R29E SL: 2500' FNL & 435' FEL, Sec 14 BHL: 330' FNL & 440' FEL, Sec 11

#### **Cementing Program**

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Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H20 gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	300	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Inter.	90	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
Stg 1	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
					ECP/DV T	'ool @ 3025'
Inter.	525	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
Stg 2	100	14.8	1.34	6.3	8	Tail: Class C + Retarder
Prod.	445	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
	400	15.6	1.18	5.2	10	Tail: Class H + Retarder + Fluid Loss + Defoamer
Liner	320	11.2	2.97	17	16	Class C + Salt + Gel + Fluid Loss + Retarder + Dispersant + Defoamer + Anti-Settling Agent

A copy of cement test will be available on location at time of cement job providing pump times, compressive strengths, etc.

Casing String	TOC	% Excess	
Surface	0'	100%	
Intermediate	0'	25%	
Production	3980'	25%	
Liner	10739'	25%	

## PECOS DISTRICT DRILING OPERATIONS CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
LEASE NO.:	NMNM11038
WELL NAME & NO.:	3H –Fuller 14 11 W2HA Federal
SURFACE HOLE FOOTAGE:	2500'/S & 435'/E
BOTTOM HOLE FOOTAGE	330'/N & 440'/E
LOCATION:	Section 14 T.26 S., R.29 E., NMP
COUNTY:	EDDY County, New Mexico

## I. SPECIAL REQUIREMENT(S)

#### **Communitization Agreement**

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

#### Waste Minimization Plan (WMP)

In the interest of resource development, submission of additional well gas capture development plan information is deferred but may be required by the BLM Authorized Officer at a later date.

#### **II. 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

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- 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.
- 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.

#### III. 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 Water Basin:

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 at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the

driller's log. 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.

#### Medium Cave/Karst

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Possibility of water flows in the Salado and Castile. Possibility of lost circulation in the Red Beds, Rustler, and Delaware.

- 1. The 13-3/8 inch surface casing shall be set at approximately 660 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.

# Medium Cave/Karst: If cement does not circulate to surface on the intermediate casing, the cement on the production casing must come to surface.

- 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. Excess calculates to 25% 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 7 inch production casing is:

- Cement to surface. If cement does not circulate, contact the appropriate BLM office.
- 4. The minimum required fill of cement behind the 4-1/2 inch production Liner is:
  - Cement as proposed by operator. Operator shall provide method of verification.
- 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.

#### **IV. 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).
- 1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be
- 5M 10,000 (10M) psi. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
  - 3.
  - 4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
    - a. In a water basin, 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. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before

cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- 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. 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.

#### V. 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.

## VI. DRILL STEM TEST

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

## VII. 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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