

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**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.***Carlsbad Field Office**
OCD Artesia5. Lease Serial No.
NMNM11038
6. Lessee or Tribe Name

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

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. FULLER 14/23 B2LM FEDERAL COM 1H
2. Name of Operator MEWBOURNE OIL COMPANY Contact: JACKIE LATHAN E-Mail: jlathan@mewbourne.com		9. API Well No. 30-015-43858
3a. Address PO BOX 5270 HOBBS, NM 88241	3b. Phone No. (include area code) Ph: 575-393-5905	10. Field and Pool or Exploratory Area CORRAL CANYON BONE SPRING
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 14 T22S R34E Mer NMP NENE 2450FNL 330FWL		11. County or Parish, State EDDY COUNTY, NM

12. CHECK THE 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 checked="" type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<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 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	

13. 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

MOC would like to change the 7" x 5 1/2" production casing to 7" production casing with a 4 1/2" liner.

Please see attachment for casing specs and cementing details.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL****NM OIL CONSERVATION
ARTESIA DISTRICT****JAN 20 2017****RECEIVED**

14. I hereby certify that the foregoing is true and correct. Electronic Submission #363671 verified by the BLM Well Information System For MEWBOURNE OIL COMPANY, sent to the Carlsbad	
Name (Printed/Typed) ANDY TAYLOR	Title ENGINEER
Signature (Electronic Submission)	Date 01/12/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE APPROVAL

Approved By Teungku Muchlis Krueng	Title PETROLEUM ENGINEER	Date JAN 12 2017
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		

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 provide false information to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Mewbourne Oil Company, Fuller 14/23 B2LM Fed Com #1H

Sec 14, T26S, R29E

SL: 2450' FNL & 330' FWL, Sec 14

BHL: 330' FSL & 330' FWL, Sec 23

1. Geologic Formations

TVD of target	8776'	Pilot hole depth	NA
MD at TD:	16545'	Deepest expected fresh water:	200'

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface		
Rustler	550	Water	
Top of Salt	2400	Salt	
Castile/Base Salt	2820		
Lamar	3015	Oil	
Bell Canyon			
Cherry Canyon			
Manzanita Marker	4095		
Brushy Canyon			
Bone Spring	6885	Oil/Gas	
1 st Bone Spring Sand			
2 nd Bone Spring Sand	8395	Target Zone	
3 rd Bone Spring Sand			
Abo			
Wolfcamp		Will Not Penetrate	
Devonian			
Fusselman			
Ellenburger			
Granite Wash			

*H2S, water flows, loss of circulation, abnormal pressures, etc.

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2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0'	575'	13.375"	48	H40	STC	2.47	5.79	11.67
12.25"	0'	2950'	9.625"	36	J55	LTC	1.32	2.29	4.27
8.75"	0'	9051'	7"	26	HCP110	LTC	1.81	2.31	2.72
6.125"	8300'	16545'	4.5"	13.5	P110	LTC	2.34	2.72	3.04
BLM Minimum Safety Factor							1.125	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

Must 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 rd 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 nd 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?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

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3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	250	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	5	Tail: Class C + Retarder
Inter.	445	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	5	Tail: Class C + Retarder
Prod. Stg 1	220	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
ECP/DV Tool @ 4095'						
Per Any Prod. Stg 2	65	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Liner	335	11.2	2.97	17	16	Class C + Salt + Gel + Fluid Loss + Retarder + Dispersant + Defoamer + Anti-Settling Agent

DV tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	25%
Production	2750'	25%
Liner	8300'	25%

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4. Pressure Control Equipment

Variance: None

BOP installed and tested before drilling which hole?	Size?	System Rated WP	Type	✓	Tested to:
12-1/4"	13-5/8"	3M	Annular	X	1250#
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other*		
8-3/4"	13-5/8"	3M	Annular	X	1500#
			Blind Ram	X	3000#
			Pipe Ram	X	
			Double Ram		
			Other*		
6-1/8"	13-5/8"	3M	Annular	X	1500#
			Blind Ram	X	3000#
			Pipe Ram	X	
			Double Ram		
			Other*		

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
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Sec 14, T26S, R29E

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Variance: None	
Y / N	Are anchors required by manufacturer?
N	<p>A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.</p> <ul style="list-style-type: none"> • Provide description here <p>See attached schematic.</p>

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	575	FW Gel	8.6-8.8	28-34	N/C
575	2950	Saturated Brine	10.0	28-34	N/C
2950	8300	Cut Brine	8.5-9.5	28-34	N/C
8300	16545	FW w/Polymer	8.5-9.5	30-40	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	Visual Monitoring
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6. Logging and Testing Procedures

Logging, Coring and Testing.	
X	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
	No Logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain
	Coring? If yes, explain

Additional logs planned		Interval
X	Gamma Ray	8300' (KOP) to TD
	Density	
	CBL	
	Mud log	
	PEX	

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7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	3774 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers in surface hole.

Hydrogen Sulfide (H₂S) monitors will be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

	H ₂ S is present
X	H ₂ S Plan attached

8. Other facets of operation

Is this a walking operation? If yes, describe.

Will be pre-setting casing? If yes, describe.

Attachments

___ Directional Plan

___ Other, describe

High Cave Karst: two casing strings, both to circulate cement to surface.

13 3/8 surface csg in a 17 1/2 inch hole. Design Factors								SURFACE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	48.00	H 40	ST&C	14.91	3.83	1.13	450	21,600	
"B"							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,015								Totals:	450 21,600
Comparison of Proposed to Minimum Required Cement Volumes									
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0.6946	450	798	367	117	8.60	883	2M	1.56

9 5/8 sing inside the 13 3/8 Design Factors								INTERMEDIATE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	36.00	J 55	LT&C	4.27	1.32	0.91	2,950	106,200	
"B"							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,177								Totals:	2,950 106,200
The cement volume(s) are intended to achieve a top of 0 ft from surface or a 450 overlap.									
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	645	1211	971	25	10.00	1944	2M	0.81

7 sing inside the 9 5/8 Design Factors								PRODUCTION	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	26.00	HCP 110	LT&C	3.10	2.13	2.15	8,300	215,800	
"B"	17.00	p 110	BUTT	5.56	1.69	2.29	751	12,767	
"C"							0	0	
"D"							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,826								Totals:	9,051 228,567
B would be:								if it were a vertical wellbore.	
#REF!		MTD	Max VTD	Csg VD	Curve KOP	Dogleg°	Severity°	MEOC	
		9051	8776	8776	8300	90	12	9050.9	
The cement volume(s) are intended to achieve a top of 2750 ft from surface or a 200 overlap.									
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 3/4	0.1503	look	0	956		8.50	2327	3M	0.55
Setting Depths for D V Tool(s): 4095								sum of sx	Σ CuFt Σ%excess
% excess cmt by stage: 25 32								785	1210 27

Tail cmt 4 1/2 er w/top @ 8300 Design Factors								LINER	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	13.50	P 110	LT&C	4.46	2.01	2.68	8,245	111,308	
"B"							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,311								Totals:	8,245 111,308
A Segment Design Factors would be:								if it were a vertical wellbore.	
#REF!		MTD	Max VTD	Csg VD	Curve KOP	Dogleg°	Severity°	MEOC	
		16545	10504	10504	8300	90	12	9050.9	
The cement volume(s) are intended to achieve a top of 8300 ft from surface or a 751 overlap.									
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
6 1/8	0.0942	335	995	782	27	8.50			0.56
Capitan Reef est top XXXX.									

All previous COA still apply except the following:

The 7 inch production casing must be kept liquid filled while running into hole to meet minimum BLM requirements for collapse.

1. The minimum required fill of cement behind the 7 inch production casing is:
Operator has proposed DV tool at depth of 4095'. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range.

a. First stage to DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

b. Second stage above DV tool:

☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification

Formation below the 7" 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.

2. The minimum required fill of cement behind the 4-1/2 inch production liner is:

☒ Cement should tie-back to the top of the liner. Operator shall provide method of verification.