

Fom 3160-3  
(March 2012)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**HOBBS OCD**

MAY 05 2016

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

**RECEIVED**

FORM APPROVED  
OMB No. 1004-0137  
Expires October 31, 2014

5. Lease Serial No.  
NMNM128929 & NMNM120910

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.  
Paduca 7/6 B2ED Fed Com #2H (316194)

9. API Well No.

30-025-43216 (97899)  
WC-025 G-06 5253206M; B3

10. Field and Pool, or Exploratory

11. Sec., T. R. M. or Blk. and Survey or Area  
Sec 7 T26S R32E

12. County or Parish  
Lea

13. State  
NM

1a. Type of work:  DRILL  REENTER

1b. Type of Well:  Oil Well  Gas Well  Other  Single Zone  Multiple Zone

2. Name of Operator Mewbourne Oil Company (14744)

3a. Address PO Box 5270  
Hobbs, NM 88241

3b. Phone No. (include area code)  
575-390-6838

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*  
At surface 2455' FNL & 660' FWL, Sec 7 T26S R32E  
At proposed prod. zone 330' FNL & 660' FWL, Sec 6 T26S R32E

14. Distance in miles and direction from nearest town or post office\*  
31 miles SW of Jal, NM

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  
330

16. No. of acres in lease  
NMNM128929-760.71  
NMNM120910-80

17. Spacing Unit dedicated to this well  
240

18. Distance from proposed location\* to nearest well, drilling, completed, #1H applied for, on this lease, ft.  
330' - Paduca 7/6 A2ED

19. Proposed Depth  
10,376' - TVD  
17,620 - MD

20. BLM/BIA Bond No. on file  
NM1693 nationwide, NMB-000919

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
3247' - GL

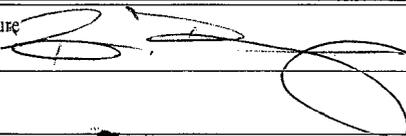
22. Approximate date work will start\*  
03/22/2016

23. Estimated duration  
60 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- 5. Operator certification
- 6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature 

Name (Printed/Typed)  
Bradley Bishop

Date  
1-22-16

Approved by (Signature) /s/George MacDonell  
Title FIELD MANAGER

Name (Printed/Typed)  
Office CARLSBAD FIELD OFFICE

Date MAY 3 2016

Application approval 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.  
Conditions of approval, if any, are attached.

**APPROVAL FOR TWO YEARS**

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 page 2)

\*(Instructions on page 2)

Carlsbad Controlled Water Basin

KZ  
05/06/16

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

MAY 10 2016

Mewbourne Oil Company, Paduca 7/6 B2ED Fed Com #2H

Sec 7, T26S, R32E

SL: 2455' FNL & 660' FWL, Sec 7

BHL: 330' FNL & 660' FWL, Sec 6

1. Geologic Formations

TVD of target	10376'	Pilot hole depth	NA
MD at TD:	17620'	Deepest expected fresh water:	275'

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface		
Rustler	1056		
Top of Salt	1408		
Base of Salt	4167		
Delaware (Lamar)	4369	Oil/Gas	
Bell Canyon	4446		
Cherry Canyon	5401		
Manzanita Marker	5547		
Brushy Canyon	6894		
Bone Spring	8356	Oil/Gas	
1 <sup>st</sup> Bone Spring Sand	9331		
2 <sup>nd</sup> Bone Spring Sand	9990	Target Zone	
3 <sup>rd</sup> 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

See  
CoA

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0'	1085' 1210'	13.375"	48	H40	STC	1.31	3.07	6.18
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.87
12.25"	3453'	4295'	9.625"	40	J55	LTC	1.15	1.77	15.44
8.75"	0'	3110'	5.5"	17	P110	BTC	4.62	4.62	1.82
8.75"	3110'	9884'	5.5"	17	P110	LTC	1.46	2.07	1.80
8.75"	9884'	10633'	5.5"	17	P110	BTC	1.39	1.97	4.15
8.75"	10633'	17620'	5.5"	17	P110	LTC	1.39	1.97	3.74
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 <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?	
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 ft <sup>3</sup> /sack	H <sub>2</sub> O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	590	14.8	2.12	6.3	8	Class C + 0.005pps Static Free + 1% CaCl <sub>2</sub> + 0.25 pps CelloFlake + 0.005 gps FP-6L
	200	14.8	1.34	6.3	8	Tail: Class C + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
Inter.	665	12.5	2.12	11	10	Lead: Class C (35:65:4) + 5% Sodium Chloride + 5#/sk LCM + 0.25lb/sk Cello-Flake
	200	14.8	1.34	6.3	8	Tail: Class C + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
Prod.	1440	11.2	2.97	18	16	Class C (60:40:0)+4% MPA5+1.2% BA10A+10#/sk BA90+5%A10+0.65%ASA301+1.5%SMS+1.2%R21

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

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	25%
Production	4095'	25%

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4. Pressure Control Equipment

Variance: None
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BOP installed and tested before drilling which hole?	Size?	System Rated WP	Type	✓	Tested to:
12-1/4"	13-5/8"	3M	Annular	X	1500#
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other*		
8-3/4"	13-5/8"	5M	Annular	X	2500#
			Blind Ram	X	
			Pipe Ram	X	5000#
			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.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
N	Are anchors required by manufacturer?

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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"> <li>• Provide description here</li> </ul> <p>See attached schematic.</p>
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**5. Mud Program**

See  
COR

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	<del>1085</del> 1210	FW Gel	8.6-8.8	28-34	N/C
<del>1085</del>	4295	Saturated Brine	10.0	28-34	N/C
4295	9884	Cut Brine	8.6-9.5	28-34	N/C
9884	17620	FW w/ Polymer	8.6-9.5	30-40	<20cc

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 KOP (9884') 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	9884'(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	5126 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.

	H2S is present
X	H2S 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

# Paduca 7/6 B2ED Fed Com #2H

