Form 3160-3 (March 2012) OCD HOBBS OCD

JUL 2 7 2015

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

6. If Indian, Allotee or Tribe Name

5. Lease Serial No. NMNM 0359292

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. la. Type of work: |√|DRILL REENTER 8. Lease Name and Well No. Gas Well ✓ Single Zone Salado Draw 10 A3PA Fed #2H lb. Type of Well: Name of Operator Mewbourne Oil Company 9. API Well No. 3a. Address PO Box 5270 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 575-393-5905 Hobbs, NM 88241 Red Hills Upper Bone Spring Shale 11. Sec., T. R. M. or Blk. and Survey or Area Location of Well (Report location clearly and in accordance with any State requirements.\*) At surface 185' FSL & 330' FEL, Sec 10 T26S R33E Sec. 10 T26S R33E At proposed prod. zone 330' FNL & 330' FEL, Sec 10 T26S R33E 13. State 12. County or Parish 14. Distance in miles and direction from nearest town or post office\* NM 30 miles west of Jal, NM 15. Distance from proposed\* 16. No. of acres in lease 720 acres 17. Spacing Unit dedicated to this well location to nearest 160 property or lease line, ft. (Also to nearest drig. unit line, if any) 20 BLM/BIA Bond No. on file 18. Distance from proposed location\* 19. Proposed Depth Distance from proposed location\* to nearest well, drilling, completed, and the lease fit. A1PA #1H 10,016' - TVD NM-1693 nationwide, NMB-000919 applied for, on this lease, ft. 14,534' - MD 23. Estimated duration 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 06/01/2015 60 days 3326' - GL 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form: Bond to cover the operations unless covered by an existing bond on file (see 1. Well plat certified by a registered surveyor. Item 20 above). 2. A Drilling Plan. Operator certification 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). Such other site specific information and/or plans as may be required by the Name (Printed/Typed) 25. Signature 04/08/2015 Bradley Bishop Title Approved by (Signature) Steve Caffey Dajul 2 3 2015 Name (Printed/Typed) Office Title CARLSBAD FIELD OFFICE FIELD MANAGER 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.

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

(Continued on page 2)

\*(Instructions on page 2)

Carlsbad Controlled Water Basin

Conditions of approval, if any, are attached

Approval Subject to General Requirements & Special Stipulations Attached

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL FOR TWO YEARS

1/27/15

# Mewbourne Oil Company

PO Box 5270 Hobbs, NM 88241 (575) 393-5905

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 8 day of 470 th, 2015.
Name: Robin Terrell
Signature BR FOR 19
Position Title: <u>Hobbs District Manager</u>
Address: PO Box 5270, Hobbs NM 88241
Telephone: <u>575-393-5905</u>
E-mail: rterrell@mewbourne.com

SL: 185' FSL & 330' FEL BHL: 330' FNL & 330' FEL HOBBS OCD

JUL 27 2015

# 1. Geologic Formations

RECEIVED

TVD of target	10016'	Pilot hole depth	NA
MD at TD:	14534'	Deepest expected fresh water:	150'

### Basin

Formation	Depth (TVD)	Water/Mineral Bearing/	Hazards*
	Cartic Charles and a second con-	Target Zone?	
Quaternary Fill	Surface	Water	
Rustler	926	Water	
Top of Salt	1296	Salt	
Base of Salt/Castile	4791	Barren	
Delaware (Lamar)	5031	Oil/Gas	
Manzanita Marker	6309		
Bone Spring	9201	Oil/Gas	
Lower Avalon	9960	Target Zone	
Wolfcamp		Will Not Penetrate	
Canyon			
Strawn			
Atoka			
Morrow			
Barnett Shale			•
Woodford Shale			
Devonian			
Fusselman			
Ellenburger			
Granite Wash			

<sup>\*</sup>H2S, water flows, loss of circulation, abnormal pressures, etc.

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2. Casing Program

Hole	Casing	g Interval	Csg.	Weight	Grade	Conn.	· SF	SF	SF
Size	From	To	Size	(lbs)			Collapse	Burst	Tension.
17.5"	0'	955 1030'	13.375"	48	H40	STC	1.49	3.48	7.02
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.46
12.25"	3453'	4393'	9.625"	40	J55	LTC	1.13	1.73	8.68
12.25"	4393'	4950'	9.625"	40	N80	LTC	1.20	2.23	33.09
8.75"	0'	9443'	7"	26	HCP110	LTC	1.59	2.03	2.58
8.75"	9443'	10346'	7"	26	HCP110	BTC	1.50	1.91	35.35
6.125"	9443'	14534'	4.5"	13.5	P110	LTC	2.05	2.38	4.90
	•	,		BLM Min	imum Safet	y 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
Does casing meet API specifications? 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	Y
justification (loading assumptions, casing design criteria).	
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching	Y
the collapse pressure rating of the casing?	
La wall laggeted within Coniton Doof?	N
Is well located within Capitan Reef?	IN
If yes, does production casing cement tie back a minimum of 50' above the Reef?	-
Is well within the designated 4 string boundary.	and the second
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?	1 7
Is 2 <sup>nd</sup> string set 1002-to-6002 below the base of salt?	
18.2 String Set 100 to 000 below the base of sait:	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(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?	

SL: 185' FSL & 330' FEL BHL: 330' FNL & 330' FEL

## 3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3// sack	H <sub>2</sub> 0 gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf	500	12.5	2.12	11	10	Lead: Class C + 4.0% Bentonite + 0.6% CD-32 + 5% Sodium Chloride +0.25lb/sk Cello-Flake
	200	14.8	1.34	6.3	8	Class C + 0.005pps Static Free + 1% CaCl2 + 0.25 pps CelloFlake + 0.005 gps FP-6L
Inter.	790	12.5	2.12	11	10	Lead: Class C (35:65:4) + 5% Sodium Chloride +5#/sk LCM +0.25lb/sk Cello-Flake
con	200	14.8	1.34	6.3	8	Tail: Class C + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
Prod.	275	12	2.12	11	10	Lead: Class C (60:40:0)+3% Sodium Chloride+5#/sk LCM+0.7% Sodium Metasillicate+0.3% FL52A+6%MPA5
_	400	15.6	1.18	5.2	12	Tail: Class H+0.1%R3+0.3%FL52A
Liner See COA	205	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

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	4750'	25%
Liner	9443'	25%

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## 4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min, Required WP	Type			Tested to:
			Ar	ınular	X	-1250# See COA
			Blin	d Ram		Security
12-1/4"	13-5/8"	2M	Pip	e Ram		
			Doul	ole Ram		
			Other*			
				nular	X	1500#
					Blin	ıd Ram
8-3/4"	11"	3M	Pip	e Ram	X	
0-3/4	11	5171	Doul	ole Ram		3000#
			Other *	٠		
	·		An	mular	X	1500#
	11" 3M			Blind Ram		
6-1/8"		3M	Pip	e Ram	X	
0-1/8	11	JIVI	Double Ram			3000#
			Other *			

<sup>\*</sup>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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	A variance is requested for the use of a flexible choke line from the BOP to Choke							
N	Manifold. See attached for specs and hydrostatic test chart.							
	Y /N Are anchors required by manufacturer?							
N	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.							
	Provide description here							
	See attached schematic.							



# 5. Mud Program

Erom	oth	Type	Weight (ppg)	Viscosity	Water Loss
0	955-1030'	FW Gel	8.6-8.8	28-34	N/C
 955	4950	Saturated Brine	10.0-10.2	28-34	N/C
4950	9443	Cut Brine	8.5-9.3	28-34	N/C
9443	14534	FW/Polymer	8.5-9.3	28-34	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	Visual Monitoring
of fluid?	

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### 6. Logging and Testing Procedures

Logg	ging; Coring and Testing.
X	Will run GR/CNL from KOP (9443) to surface. 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

Add	litional logs planne	d a Interval
X	Gamma	From KOP(9443) to TD
	Density	
	CBL	
	Mud log	
	PEX	

### 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4307 psi
Abnormal Temperature	No

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

Sel

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

✓ H2S Plan attached

## 8. Other facets of operation

Is this a walking operation? If yes, describe. No Will be pre-setting casing? If yes, describe.

Attachments

Directional Plan
Other, describe

## United States Department of the Interior **Bureau of Land Management** Carlsbad Field Office

### 620 E Greene Street

#### Carlsbad, New Mexico 88201-1287

## Statement Accepting Responsibility for Operations

Operator Name:

Mewbourne Oil Company

Street or Box:

P.O. Box 5270

City, State:

Hobbs, New Mexico

Zip Code:

88241

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted of the leased land or portion thereof, as described below.

Lease Number:

NMNM 0359292

Legal Description of Land:

Section 10, T-26S, R-33E Lea County, New Mexico.

Location @ 185' FSL & 330' FEL.

Formation (if applicable):

Bone Spring

Bond Coverage:

\$150,000

BLM Bond File:

NM1693 nationwide, NMB000919

Authorized Signature:

Name: Robin Terrell Title: District Manager

Date: 4-4-15