• •		OCD Hobb	s	ATS	-15-975
Form 3160-3 (March 2012)		HOBB	soc	OMB NO	APPROVED 0. 1004-0137 ctober 31, 2014
UNITED STATES DEPARTMENT OF THE BUREAU OF LAND MAN	INTERIOR		6 2016	5. Lease Serial No. NMNM115421 & NM	M0359295A
APPLICATION FOR PERMIT TO	DRILL OF	REENTERC	EIVEI	6. If Indian, Allotee	or Tribe Name
la. Type of work: I DRILL REENT	ER			7. If Unit or CA Agree	ement, Name and No.
b. Type of Well: Oil Well 🗸 Gas Well Other	I Sin	ngle Zone 🗌 Multi	ple Zone	8. Lease Name and W Jennings 27 W1AP	
. Name of Operator Mewbourne Oil Company (1474)	1 -			9. API Well No.	3362
Ba. Address PO Box 5270 Hobbs, NM 88241	3b. Phone No 575-393-59	. (include area code) 905	WC	10. Field and Pool, or E	xploratory 9820
<ul> <li>Location of Well (<i>Report location clearly and in accordance with ar</i> At surface 185' FNL &amp; 580' FEL, Sec 27 T25S R32E</li> <li>At proposed prod. zone 330' FSL &amp; 450' FEL, Sec 27 T25S</li> </ul>		ents.*)		11. Sec., T. R. M. or Bl Sec 27 T25S R32E	k. and Survey or Area
<ul> <li>4. Distance in miles and direction from nearest town or post office*</li> <li>27 miles W of Jal, NM</li> </ul>	5 KJZE	LOCAT	10M	12. County or Parish Lea	13. State NM
Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		cres in lease 6421 - 80 acres 95A - 880 acres	17. Spacin 320	g Unit dedicated to this w	ell
b. Distance from proposed location <sup>*</sup> to nearest well, drilling, completed, 80' - Jennings 27 B2AP applied for, on this lease, ft. Fed Com #2H	19. Proposed 12,158' - T 16,625' - N	VD		BIA Bond No. on file 3 nationwide & NMB-0	000919
Elevations (Show whether DF, KDB, RT, GL, etc.) 3401' - GL		mate date work will sta	rt*	23. Estimated duration	
5401 - GL	24. Attac			60 days	
<ul> <li>a following, completed in accordance with the requirements of Onsho</li> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO, must be filed with the appropriate Forest Service Office).</li> </ul>		<ol> <li>Bond to cover t Item 20 above).</li> <li>Operator certifie</li> </ol>	he operatio cation	is form: ns unless covered by an e ormation and/or plans as a	
5. Signature B. B.		(Printed/Typed) ey Bishop		]	Date 09/29/2015
ile S					
James A. Amos		(Printed/Typed)			JUN 3 0 2016
tle FIELD MANAGER	Office	CAR	LSBAD F	IELD OFFICE	
pplication approval does not warrant or certify that the applicant hold nduct operations thereon. onditions of approval, if any, are attached.	ds legal or equi	table title to those right		•	title the applicant to
tle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section ates any false, fictitious or fraudulent statements on See	attached			nake to any department or	agency of the United
Continued on page 2) Controlled Water Bas	ditions of ,				uctions on page 2)
Approval Subject to General Regulrements & Special Stipulations Attashes	SE	E ATTACH	HED F	OR APPROVAL	Va
					1/ -

Kze

# 1. Geologic Formations

TVD of target	12158'	Pilot hole depth	NA
MD at TD:	16625'	Deepest expected fresh water:	275'

Basin			
Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface		
Rustler	739		
Top of Salt	1110		
Castile		Barren	
Base of Salt	4447		
Lamar	4670	Oil	
Bell Canyon	4711		
Cherry Canyon	5722		
Manzanita Marker	5873		
Brushy Canyon	7450		
Bone Spring	8712	Oil/Gas	
1 <sup>st</sup> Bone Spring Sand	9732		
2 <sup>nd</sup> Bone Spring Sand	10287		
3 <sup>rd</sup> Bone Spring Sand	11457		
Abo			
Wolfcamp	11907	Target Zone	
Devonian			
Fusselman			
Ellenburger			
Granite Wash			

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

# 2. Casing Program

See COA

Hole	Casing	g Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF
Size	From	To ,	Size	(lbs)	a starting		Collapse	Burst	Tension
17.5"	0'	765 850	13.375"	48	H40	STC	1.86	4.35	8.77
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.67
12.25"	3453'	4393'	9.625"	40	J55	LTC	1.13	1.73	11.43
12.25"	4393'	4590'	9.625"	40	N80	LTC	1.29	2.41	93.61
8.75"	0'	11535'	7"	26	HCP110	LTC	1.30	1.66	2.14
8.75"	11535'	12429'	7"	26	HCP110	BTC	1.24	1.58	35.71
6.125"	11535'	16625'	4.5"	13.5	P110	LTC	1.69	1.96	4.90
		1		BLM Min	imum Safet	ty 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?	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?	

	Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H <sub>2</sub> 0 gal/ sk	500# Comp. Strength (hours)	Slurry Description
	Surf.	380	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
_	Inter.	725	12.5	2.12	11	10	Lead: Class C (35:65:4) + 5% Sodium Chloride +5#/sl LCM +0.25lb/sk Cello-Flake
Je	ecoff	200	14.8	1.34	6.3	8	Tail: Class C + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
	Prod.	495	12.5	2.12	11	9	Lead: 60:40:0 Class C + 15.00 lb/sk BA-90 + 4.00% MPS-5 + 3.00% SMS + 5.00% A-10 + 1.00% BA-10A + 0.80% ASA-301 + 2.90% R-21 + 8.00 lb/sk LCM-1 + 0.005 lb/sk Static Free
		400	15.6	1.18	5.2	10	Tail: Class H + 0.65% FL-52 + 0.10% R-3 + 0.005 lb/sk Static Free
0	Liner	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

3. Cementing Program

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	4390'	25%
Liner	11535'	25%

#### 4. Pressure Control Equipment

Variance: None

BOP installed and tested before drilling which hole?	Size?	System Rated WP	Туре	-	Tested to:
			Annular	X	1500#
			Blind Ram		
12-1/4"	13-5/8"	3M	Pipe Ram		
			Double Ram		
			Other*		
			Annular	X	2500#
	11"	5M	Blind Ram	X	
8-3/4"			Pipe Ram	X	5000#
			Double Ram		5000#
			Other*		
			Annular	X	2500#
			Blind Ram	X	
6-1/8"	11"	5M	Pipe Ram	X	5000#
			Double Ram		5000#
			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.

	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.						
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

Depth From To		Туре	Weight (ppg)	Viscosity	Water Loss
				No. Contraction	
0	765 850	FW Gel	8.6-8.8	28-34	N/C
765	4590	Saturated Brine	10.0	28-34	N/C
4590	11535	Cut Brine	8.6-9.5	28-34	N/C
11535	16625	OBM	10.0-13.0	30-40	<10cc

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	Pason/PVT/Visual Monitoring
of fluid?	

# 6. Logging and Testing Procedures

Logg	Logging, Coring and Testing.							
X	Will run GR/CNL from KOP (11535') 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
Х	Gamma Ray	11535'(KOP) to TD
	Density	
	CBL	in the second
	Mud log	5. C. S. M. M.
	PEX	

#### 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5265 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers in surface hole. Weighted mud for possible over-pressure in Wolfcamp formation.



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

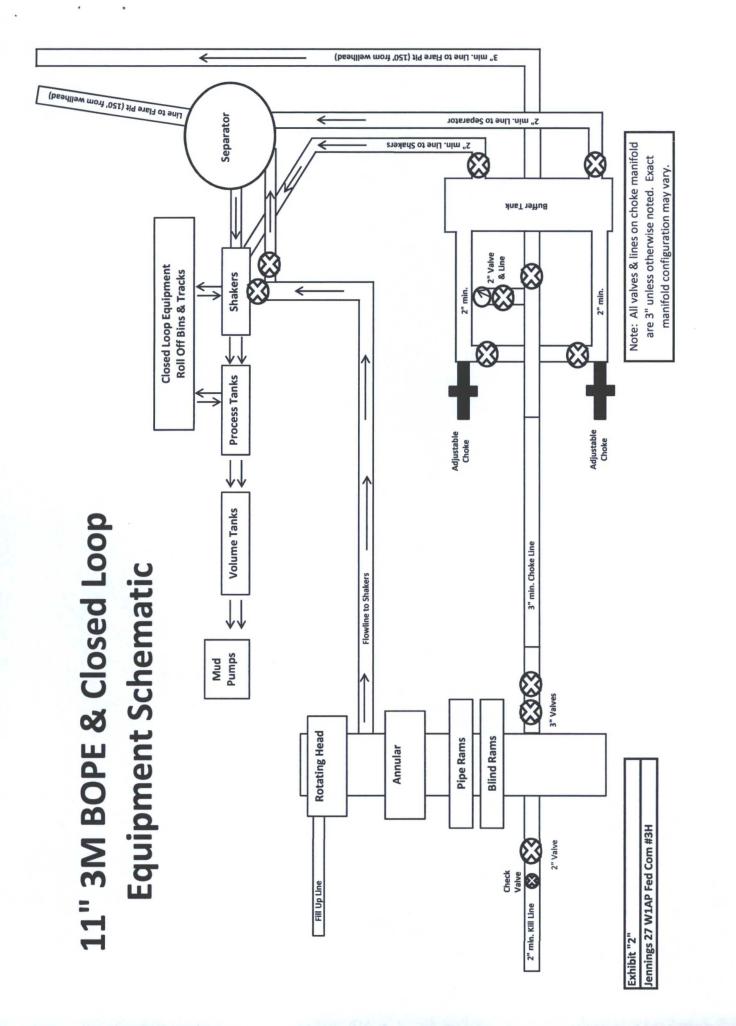
Is this a walking operation? If yes, describe. No Will be pre-setting casing? If yes, describe. No

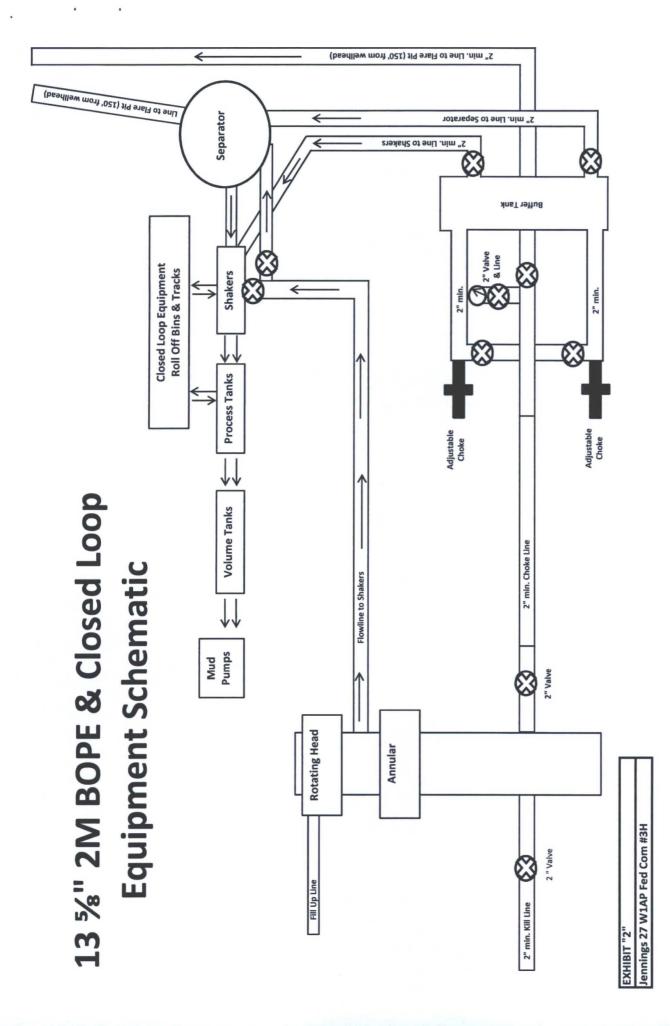
Attachments Directional Plan Other, describe

#### Notes Regarding Blowout Preventer Mewbourne Oil Company Jennings 27 W1AP Fed Com #3H 185' FNL & 580' FEL (SHL) Sec 27-T25S-R32E Lea County, New Mexico

- I. Drilling nipple (bell nipple) to be constructed so that it can be removed without the use of a welder through the opening of the rotary table, with minimum internal diameter equal to blowout preventer bore.
- II. Blowout preventer and all fittings must be in good condition with a minimum 3000 psi working pressure on 9 5/8" and 7" casing.
- III. Safety valve must be available on the rig floor at all times with proper connections to install in the drill string. Valve must be full bore with minimum 3000 psi working pressure.
- IV. Equipment through which bit must pass shall be at least as large as internal diameter of the casing.
- V. A kelly cock shall be installed on the kelly at all times.

Blowout preventer closing equipment to include and accumulator of at least 40 gallon capacity, two independent sources of pressure on closing unit, and meet all other API specifications.





# **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 29 day of 544., 2015.

Name: Robin Terrell

Signature: B. Point Poin

E-mail: rterrell@mewbourne.com

### **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 115421 & NMNM 0359295 Legal Description of Land: Section 27, T-25S, R-32E Lea County, New Mexico. Location @ 185' FNL & 580' FEL. Formation (if applicable): Upper Wolfcamp Shale Bond Coverage: \$150,000 BLM Bond File: NM1693 nationwide, NMB000919

Name: Robin Terrell Title: District Manager Date: 9.29.15

Authorized Signature:

#### Form NM 8140-9 (March 2008) United States Department of the Interior Bureau of Land Management New Mexico State Office

#### Permian Basin Cultural Resource Mitigation Fund

The company shown below has agreed to contribute funding to the Permian Basin Cultural Resource Fund in lieu of being required to conduct a Class III survey for cultural resources associated with their project. This form verifies that the company has elected to have the Bureau of Land Management (BLM) follow the procedures specified within the Memorandum of Agreement (MOA) concerning improved strategies for managing historic properties within the Permian Basin, New Mexico, for the undertaking rather than the Protocol to meet the agency's Section 106 obligations.

Company Name:	Mewbourne Oil Company			
Address:	PO Box 5270			
	Hobbs, NM 88241			
Project description:				
Location & Lease road for Jennings 27 W1AP Fed Com #3H				

T. 25S, R. 32E, Section 27 NMPM, Lea County, New Mexico

Amount of contribution: \$ 1,599.00

#### Provisions of the MOA:

A. No new Class III inventories are required of industry within the Project Area for those projects where industry elects to contribute to the mitigation fund.

B. The amount of funds contributed was derived from the rate schedule established within Appendix B of the MOA. The amount of the funding contribution acknowledged on this form reflects those rates.

C. The BLM will utilize the funding to carry out a program of mitigation at high-priority sites whose study is needed to answer key questions identified within the Regional Research Design.

D. Donating to the fund is voluntary. Industry acknowledges that it is aware it has the right to pay for Class III survey rather than contributing to the mitigation fund, and that it must avoid or fund data recovery at those sites already recorded that are eligible for nomination to the National Register or whose eligibility is unknown and that any such payments are independent of the mitigation funds established by this MOA.

E. Previously recorded archeological sites determined eligible for nomination to the National Register or whose eligibility remains undetermined must be avoided or mitigated.

F. If any skeletal remains that might be human or funerary objects are discovered by any activities, the land-use applicant will cease activities in the area of discovery, protect the remains, and notify the BLM within 24 hours. The BLM will determine the appropriate treatment of the remains in consultation with culturally affiliated Indian Tribe(s) and lineal descendents. Applicants will be required to pay for treatment of the cultural items independent and outside of the mitigation fund.

Company-Authorized Officer

9-29-15

Date

**BLM-Authorized** Officer

Date