Form 3160-5 (June 2015) DI B	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT SUNDRY NOTICES AND REPORTS ON WELLS				FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018 5. Lease Serial No. NMNM0540701A		
Do not use th abandoned we	Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.					r Tribe Name	
SUBMIT IN	TRIPLICATE - Other inst	tructions on	page 2		7. If Unit or CA/Agree	ment, Name and/or No.	
1. Type of Well					8. Well Name and No.		
Oil Well Gas Well Ot 2. Name of Operator	her Contact:	JACKIE LAT	HAN		9. API Well No.		
MEWBOURNE OIL COMPAN	IY E-Mail: jlathan@m	ewbourne.com			30-015-44075-0	0-X1	
P O BOX 5270 HOBBS, NM 88241		Ph: 575-39	3-5905 CCNC		FOREHAND RA	NCH	
4. Location of Well (Footage, Sec., 1	C., R., M., or Survey Description)	ANTEOIAL	DIRICI	11. County or Parish, S	State	
Sec 32 T23S R27E SESE 18	BFSL 990FEL		MAR 1-1	2813	EDDY COUNTY	ζ, NM	
12. CHECK THE A	PPROPRIATE BOX(ES)	TO INDICA	TE NA REIG	V NOTICE,	REPORT, OR OTH	ER DATA	
TYPE OF SUBMISSION			TYPE O	FACTION			
Notice of Intent	Acidize	🗖 Dee	pen	Product	ion (Start/Resume)	UWater Shut-Off	
Subsequent Report	□ Alter Casing	🗖 Hyd	raulic Fracturing	🗖 Reclam	ation	U Well Integrity	
Einal Abandonment Notice	Casing Repair		Construction		olete	Other Change to Original A	
Thial Abaldonment Nonce	Convert to Injection	ொடு ிறையிய	Back of Fig	Water L	arity Abandon Disposal	PD	
 testing has been completed. Final Aldetermined that the site is ready for f Mewbourne Oil requests the f 1) Change 5 1/2" production cattachment. 2) Change cement to fit new c 3) Variance for use of a multiplication of a multiplication of a multiplication. 	ollowing changes to the a casing to 7" production cases bowl wellbead. See attack	pproved APC sing w/ 4 1/2" d in attachme	liner as describe	ed in SEE	ATTACHED	FOR PROVAL	
Please contact Andy Taylor w	ith any questions.	ica alagram.			Record	5	
		NTE	RED A	ccepter N	MOCD	311.19	
14. I hereby certify that the foregoing is	s true and correct. Electronic Submission # For MEWBOU nmitted to AFMSS for proce	455968 verifie RNE OIL COM essing by PRI	d by the BLM We PANY, sent to th SCILLA PEREZ o	ll Informatior e Carlsbad n 02/27/2019	n System (19PP1167SE)	1 (j	
Name (Printed/Typed) ANDY TA	YLOR		Title ENGIN	EER			
Signature (Electronic Submission)			Date 02/26/2	019	<u> </u>		
	THIS SPACE FO	DR FEDERA	L OR STATE	OFFICE U	SE		
Approved By ZOTA STEVENS	d. Approval of this notice does uitable title to those rights in the act operations thereon.	not warrant or subject lease	TitlePETROLE	UM ENGINI	EER	Date 03/05/2019	
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent	U.S.C. Section 1212, make it a statements or representations as	crime for any pe to any matter w	rson knowingly and ithin its jurisdiction.	willfully to ma	ake to any department or	agency of the United	
(Instructions on page 2) ** BLM REV	ISED ** BLM REVISED	D ** BLM RE	EVISED ** BLN	I REVISED) ** BLM REVISE) **	



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11" 5K TS-S

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Casing Program

Hole	Casing Interval		Csg.	Weight	Grade	Conn.	SF	SF	SF
Size	From	То	Size	(lbs)			Collapse	Burst	Tension
17.5"	0'	400'	13.375"	48	H40	STC	4.11	9.24	16.77
12.25"	0'	2025'	9.625"	36	J55	LTC	1.92	3.34	6.21
8.75"	0'	10,100'	7"	26	P110	LTC	1.51	2.03	2.47
6.125"	9414'	17,145'	4.5"	13.5	P110	LTC	2.05	2.39	3.24
BLM Minimum Safety Factor 1.125					l l	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 justification (loading assumptions, casing design criteria).	Y
Will the intermediate 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?	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?	

Cementing Program

Casing	# Sks	Wt. lb/	Yld ft3/	H ₂ 0 gal/	500# Comp.	Slurry Description	
		gal .	sack	sk	Strength		
				L	(hours)		
Surf	140	-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.	270	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	
Prod.	410	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 T	'ool @ 3000'	
Prod.	60	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender	
Stg 2	100	14.8	1.34	6.3	8	Tail: Class C + Retarder	
Liner	315	11.2	2.97	17	16	Class H + 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	1825'	25%
Liner	9414'	25%

Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре		-	Tested to:
			Ann	ular	X	2500#
			Blind Ram		X	
12-1/4"	13-5/8"	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	Forma On Ex greate accord	ation integrity test will be performed per Onshore Order #2. ploratory wells or on that portion of any well approved for a 5M BOPE system or r, a pressure integrity test of each casing shoe shall be performed. Will be tested in lance with Onshore Oil and Gas Order #2 III.B.1.i.				
	A vari	ance is requested for the use of a flexible choke line from the BOP to Choke				
Y	Manifold. See attached for specs and hydrostatic test chart.					
	N	Are anchors required by manufacturer?				
Ŷ	A mul	tibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after				
	install	ation 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.

Drilling Plan

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL CO.
LEASE NO.:	NMNM0540701A
WELL NAME & NO.:	VIPER 32 29 W2PI FED COM 1H
SURFACE HOLE FOOTAGE:	188' FSL & 990' FEL
BOTTOM HOLE FOOTAGE	2310' FSL & 990' FEL
LOCATION:	Section 32, T. 23 S., R 27 E., NMPM
COUNTY:	Eddy County, New Mexico

COA

All previous COAs still apply expect the following:

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H2S	∩ Yes	r No	
Potash	None	C Secretary	⊂ R-111-P
Cave/Karst Potential	C Low	• Medium	High High
Variance	∩ _{None}	• Flex Hose	C Other
Wellhead	Conventional	Multibowl	C Both
Other	✓ 4 String Area	Capitan Reef	F WIPP
Other	Fluid Filled	Cement Squeeze	Pilot Hole
Special Requirements	✓ Water Disposal	I COM	└ Unit

A. HYDROGEN SULFIDE

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.

B. CASING

- 1. The 13-3/8 inch surface casing shall be set at approximately 400 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - 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 will be a minimum of <u>8</u> <u>hours</u> or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

GENERAL 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)
 - Chaves and Roosevelt Counties Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201. During office hours call (575) 627-0272. After office hours call (575)
 - Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

🔀 Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

- 1. 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.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).

b. When the operator proposes to set surface casing with Spudder Rig

- Notify the BLM when moving in and removing the Spudder Rig.
- Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
- BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. 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 are located, this does not include the dog house or stairway area.

- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- B. 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. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: 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.
- 3. 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.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. 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

C. 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.

D. 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.

ZS 030519