Form 3160-5 (June 2019)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR

OMB No. 1004-0137 Expires: October 31, 2021	
e Serial No.	

EAU OF LAND MANAGEMENT 5	. Lease S	eri

BORDITO OF EFFICE WITH VIOLENCE VI			
SUNDRY NOTICES AND REPORTS ON V Do not use this form for proposals to drill or to abandoned well. Use Form 3160-3 (APD) for su	o re-enter an	6. If Indian, Allottee or	Tribe Name
SUBMIT IN TRIPLICATE - Other instructions on page	ge 2	7. If Unit of CA/Agreen	nent, Name and/or No.
1. Type of Well	•	-	
Oil Well Gas Well Other		8. Well Name and No.	
2. Name of Operator		9. API Well No.	
3a. Address 3b. Phone No.	(include area code)	10. Field and Pool or Ex	ploratory Area
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		11. Country or Parish, S	tate
12. CHECK THE APPROPRIATE BOX(ES) TO IN	DICATE NATURE OF NOT	TICE, REPORT OR OTHE	ER DATA
TYPE OF SUBMISSION	TYPE OF AC	CTION	
	raulic Fracturing Rec	duction (Start/Resume)	Water Shut-Off Well Integrity
Subsequent Report		complete nporarily Abandon	Other
		ter Disposal	
completed. Final Abandonment Notices must be filed only after all requiremen is ready for final inspection.)	ts, including reclamation, have	ve been completed and the	e operator has detennined that the site
4. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	Title		
Signature	Date		
THE SPACE FOR FED	ERAL OR STATE OF	FICE USE	
Approved by			
	Title	Da	ite
Conditions of approval, if any, are attached. Approval of this notice does not warrar certify that the applicant holds legal or equitable title to those rights in the subject leads to 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 a uny false, fictitious or fraudulent statements or representations as to any matter with		llfully to make to any depart	artment or agency of the United States

(Instructions on page 2)

#### **GENERAL INSTRUCTIONS**

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

#### SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

#### **NOTICES**

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

(Form 3160-5, page 2)

#### **Additional Information**

#### **Location of Well**

0. SHL: NWSW / 1400 FSL / 205 FWL / TWSP: 18S / RANGE: 29E / SECTION: 31 / LAT: 32.701258 / LONG: -104.12122 ( TVD: 0 feet, MD: 0 feet )

PPP: NWSW / 1840 FSL / 100 FWL / TWSP: 18S / RANGE: 29E / SECTION: 31 / LAT: 32.702474 / LONG: -104.1215578 ( TVD: 8168 feet, MD: 8203 feet )

PPP: NWSW / 1840 FSL / 0 FWL / TWSP: 18S / RANGE: 29E / SECTION: 32 / LAT: 32.702356 / LONG: -104.1054919 ( TVD: 8512 feet, MD: 13237 feet )

PPP: NWSW / 1840 FSL / 0 FWL / TWSP: 18S / RANGE: 29E / SECTION: 33 / LAT: 32.7022276 / LONG: -104.088337 ( TVD: 8606 feet, MD: 18515 feet )

PPP: NESW / 1840 FSL / 1319 FWL / TWSP: 18S / RANGE: 29E / SECTION: 33 / LAT: 32.7021952 / LONG: -104.0840459 ( TVD: 8629 feet, MD: 19835 feet )

BHL: NESE / 1840 FSL / 100 FEL / TWSP: 18S / RANGE: 29E / SECTION: 33 / LAT: 32.7020994 / LONG: -104.0715027 ( TVD: 8698 feet, MD: 23694 feet )

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462 State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

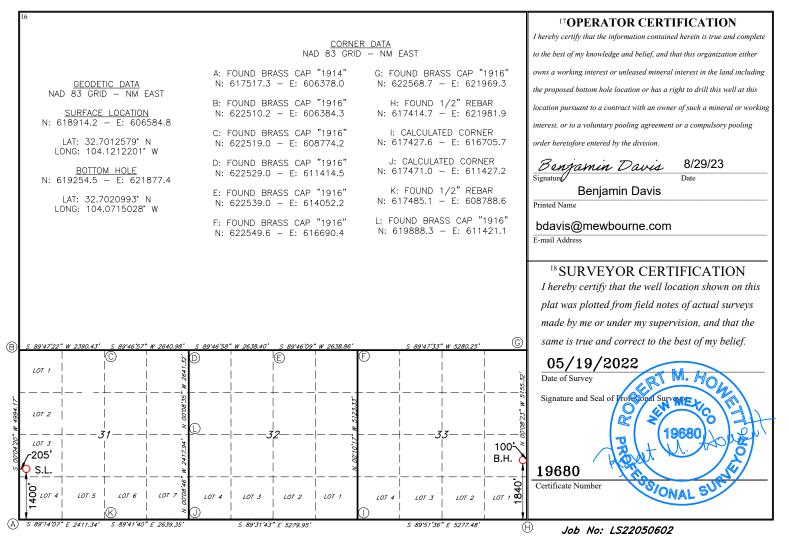
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

		2001111011111	TIETELITEE BEBIEFITIETT ETT		
1 API Number 2 Pool Code		<sup>3</sup> Pool Name			
30-015-54089 49553		49553	PALMILLO; BONE SPRINGS, EAST		
<sup>4</sup> Property Code	•		operty Name	6 Well Number	
334612	PAVO MACHO		MACHO 31/33 FED COM		
7 OGRID NO.	8 Operator		perator Name	9Elevation	
14744	MEWBOURNE OIL COMPANY			3393'	
14744			face Location	0000	

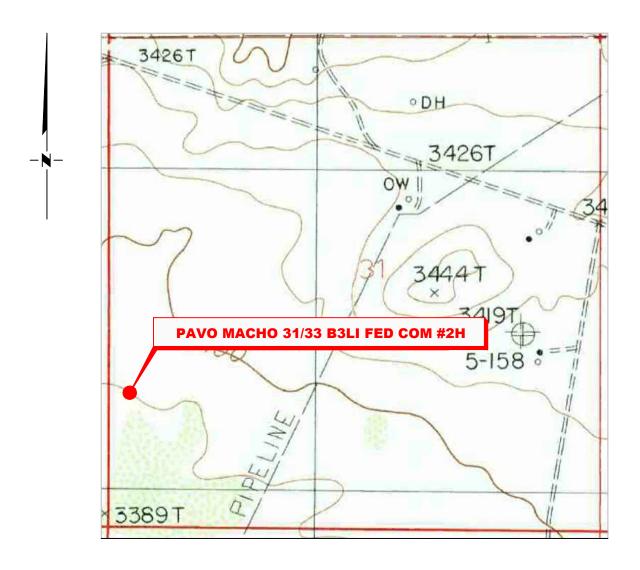
UL or lot no. Lot Idn North/South line Feet From the East/West line Section Township Range Feet from the County 3 31 **18S** 29E 1400 SOUTH 205 WEST **EDDY** <sup>11</sup> Bottom Hole Location If Different From Surface UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County 33 **18S** 29E 1840 SOUTH 100 EAST **EDDY** 12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No.

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



## LOCATION VERIFICATION MAP

NOT TO SCALE



SECTION 31, TWP. 18 SOUTH, RGE. 29 EAST, N. M. P. M., EDDY CO., NEW MEXICO

OPERATOR: Mewbourne Oil Company LEASE: Pavo Macho 31/33 B3LI Fed Com CONTOUR INTERVAL: 10'

WELL NO.: 2H

ELEVATION: 3393'

LOCATION: 1400' FSL & 205 FWL

USGS TOPO. SOURCE MAP:

Illinois Camp NE, N.M. (1985)

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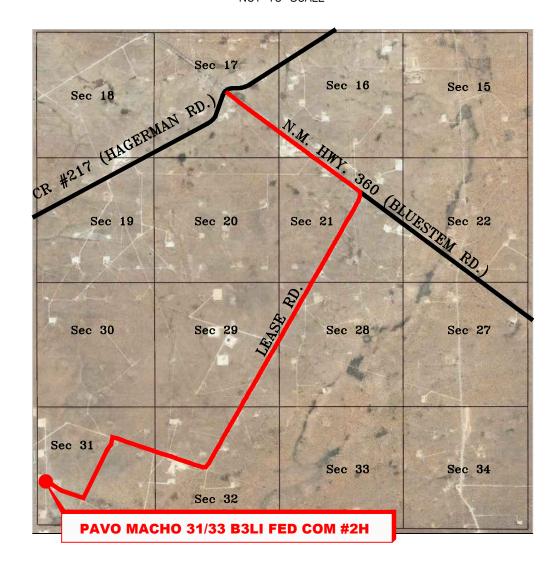
NO. | REVISION | DATE JOB NO.: LS22050602 DWG. NO.: 22050602-2



701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200 SCALE: N. T. S. DATE: 05/19/2022 SURVEYED BY: ML/AB DRAWN BY: RQ APPROVED BY: RMH SHEET: 1 OF 1

## VICINITY MAP

NOT TO SCALE



SECTION 31, TWP. 18 SOUTH, RGE. 29 EAST, N. M. P. M., EDDY CO., NEW MEXICO

LEASE: Pavo Macho 31/33 B3LI Fed Com ELEVATION: 3393'

WELL NO.: 2H

OPERATOR: Mewbourne Oil Company LOCATION: 1400' FSL & 205' FWL

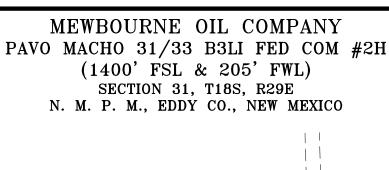
Copyright 2016 - All Rights Reserved

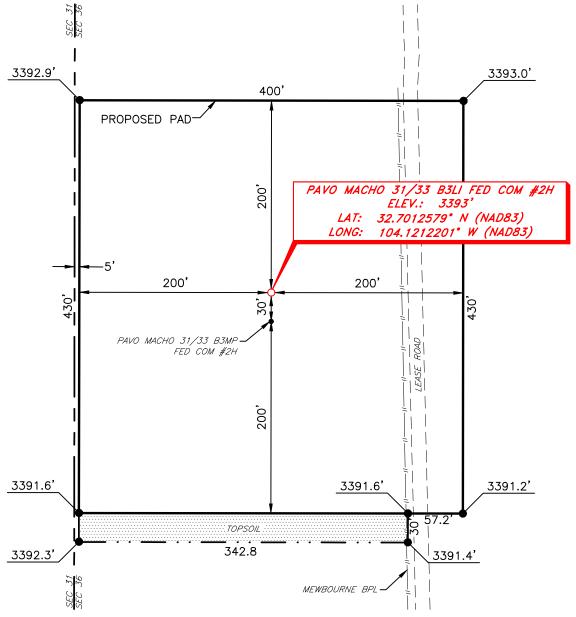
REVISION DATE JOB NO.: LS22050602 DWG. NO.: 22050602-3



701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

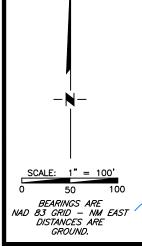
SCALE: N. T. S. DATE: 05/19/2022 SURVEYED BY: ML/AB DRAWN BY: RQ APPROVED BY: RMH SHEET: 1 OF 1





#### DIRECTIONS TO LOCATION

From the intersection of CR #217 (Hagerman Rd.) & N.M. Hwy. 360 (Bluestem Rd.);
Go Southeast on N.M. Hwy. 360 approx. 1.3 miles to a lease road on the right;
Turn right and go Southwest approx. 3.9 miles, road turns right;
Turn right and go Northwest approx. 0.8 miles to a lease road on the left;
Turn left and go Southwest approx. 0.5 miles to a lease road on the right;
Turn right and go Northwest approx. 0.3 miles to a lease road on the left;
Turn left and go South approx. 0.1 miles to location on the left.



I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett NM PS 19680

NO. REVISION DATE

JOB NO.: LS22050602

DWG. NO.: 22050602-4

RRC ENERGY SERVICES LLC.

701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 100'

DATE: 05/19/2022

SURVEYED BY: ML/AB

DRAWN BY: RQ

APPROVED BY: RMH

SHEET: 1 OF 1

ONAL

M. HOL

## Mewbourne Oil Company, Pavo Macho 31/33 Fed Com 616H Sec 31, T18S, R29E

SHL: 1400' FSL & 205' FWL (Sec 31) BHL: 1840' FSL & 100' FEL (Sec 33)

Casing Program

Hole Size	From	To	Csg. Size	Weight	Grade	Conn.	SF	SF Burst	SF Jt	SF Body
Hole Size	FIOIII	10	Csg. Size	(lbs)	Grade	Com.	Collapse	or buist	Tension	Tension
17.5 in	0'	300'	13.375 in	48.0	H40	STC	4.94	11.09	22.36	37.57
12.25 in	0'	3139'	9.625 in	36.0	J55	LTC	1.13	1.96	3.79	4.72
12.25 in	3139'	3300'	9.625 in	40.0	J55	LTC	1.36	2.09	80.79	97.88
8.750 in	0'	8778'	7.0 in	26.0	P110	LTC	1.18	1.89	3.04	3.64
8.500 in	8778'	23695'	5.500 in	20.0	P110	LTC	1.88	2.15	1.84	2.15
				BLM Minimum Safety Factor		1.125	1.0	1.6 Dry	1.6 Dry	
							1.125	1.0	1.8 Wet	1.8 Wet

Cement Program

Casing		# Sacks	Wt. lb/gal	Yield cu.ft/sack	тос	Slurry Description
13,375 in	LEAD	80	12.5	2.12	0	Salt, Gel, Extender, LCM
15.575 III	TAIL	200	14.8	1.34	•	Retarder
9.625 in	LEAD	490	12.5	2.12	0	Salt, Gel, Extender, LCM
7.025 III	TAIL	200	14.8	1.34		Retarder
	LEAD	280	12.5	2.12	6000	Salt, Gel, Extender, LCM, Defoamer
7 in	TAIL	400	15.6	1.18	6278	Retarder, Fluid Loss, Defoamer
5.5 in	LEAD	2310	13.5	1.85	8778	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

	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.	N
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?	Y
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	N
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	- 11
h yes, are two surject two strings venicated to surject.  (For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
to 2 and many a just to detect commission of	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Formation	Est. Top (TVD)	Mineral Resources
Rustler		
Castile		
Salt Top Salt Base Yates Seven Rivers Queen Capitan	417 682 872 1216 1796	None None Oil/Natural Gas Oil/Natural Gas Oil/Natural Gas
Grayburg	2154	None
San Andres Glorieta Yeso Delaware (Lamar) Bell Canyon Cherry Canyon Manzanita Marker	2634	Oil/Natural Gas
Basal Brushy Canyon		
Bone Spring	3274	Oil/Natural Gas
1st Bone Spring	6528	Oil/Natural Gas
2nd Bone Spring	7208	Oil/Natural Gas
3rd Bone Spring Wolfcamp	8273	Oil/Natural Gas

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:
WELL NAME & NO.:
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
SURFACE LOCATION:
COUNTY:
MEWBOURNE OIL COMPANY
PAVO MACHO 31/33 FED COM 616H
1400'/S & 205'/W
1840'/S & 100'/E
Section 31, T.18 S., R.29 E. NMP.
Eddy County, New Mexico

COA

$H_2S$	• Yes	C No	
Potash	None	© Secretary	© R-111-P
Cave/Karst Potential	• Low	C Medium	C High
Cave/Karst Potential	Critical		
Variance	O None	© Flex Hose	Other Other
Wellhead	Conventional	<ul><li>Multibowl</li></ul>	C Both
Other	□ 4 String	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Special Requirements	☐ Water Disposal	<b>☑</b> COM	□ Unit

#### SEE THE ORIGINAL COAS FOR ALL OTHER REQUIREMENTS.

The previous name of this well was PAVO MACHO 31/33 B3LI FED COM 2H.

#### A. CASING

#### **Casing Design:**

- 1. The 13-3/8 inch surface casing shall be set at approximately 300 ft. (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 feet above the salt.
  - 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 <u>500</u> psi compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours

- after bringing cement to surface or 500 psi compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 9-5/8 in. intermediate casing shall be set at approximately 3,300 ft. The minimum required fill of cement behind the 9-5/8 in. intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
- 3. The minimum required fill of cement behind the 7 in. x 5-1/2 in. tapered production casing is:

Option 1 (Single Stage): Cement should tie-back at least 200 feet into previous casing string. (Cement must reach to 3,100 ft.) If cement does not circulate see B.1.a, c-d above.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or Capitan reef.

<u>Option 2 (Two-stage):</u> Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
  - Cement should tie-back at least 200 feet into previous casing string. (Cement must reach to 3,100 ft.) If cement does not circulate, contact the appropriate BLM office.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or Capitan reef.

Note: The Operator has provided a cement program for 7 in. x 5-1/2 in. tapered production casing as separate entities. The operator should ensure that the specific cement volume, dedicated to 5-1/2" string, is included in the first cementing stage of tapered production casing.

#### **B. PRESSURE CONTROL**

1. Variance approved to use **flex line** from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

- 2. Operator has proposed a **multi-bowl wellhead** assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000** (**5M**) psi. Before drilling out surface casing shoe, the BOP stack and related equipment shall be pressure tested to 250 psi low / 5,000 psi high. The annular preventer shall be pressure tested to 250 psi low / 2,500 psi high in accordance with 43 CFR 3172.
  - 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. 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.
  - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

#### **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)
  - Eddy County
     Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
  - ☑ Lea CountyCall the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)689-5981
- 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 2<sup>nd</sup> 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 43 CFR part 3170 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 doghouse or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. 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. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 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 43 CFR part 3170 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: The flex line must meet the requirements of API 16C. 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 43 CFR 3172.6(b)(9) 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 plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. In potash areas, 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. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
  - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR 3170 subpart 3172 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
  - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
  - e. The results of the test shall be reported to the appropriate BLM office.

- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3170 subpart 3172.

#### 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.

#### SA 08/29/2023

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

### **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 259921

#### **CONDITIONS**

Operator:  MEWBOURNE OIL CO	OGRID: 14744
P.O. Box 5270 Hobbs, NM 88241	Action Number: 259921
	Action Type: [C-103] NOI Change of Plans (C-103A)
CONDITIONS	

Created By		Condition Date
ward.rikala	None	7/11/2025