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**

Form C-101 August 1, 2011

Permit 387409

Eddy

		APPLICA	ATION FOR PERMIT	TO DRILL, RE-	ENTER, DEEPE	N, PLUGBACI	K, OR ADD A	ZONE		
1. Operator Na	me and Address						2.	OGRID Number		
	WBOURNE OIL CO	)						14744		
	). Box 5270						3.	API Number		
Ho	bbs, NM 88241							30-015-56618	8	
4. Property Co			5. Property Name				6.	Well No.		
33	7292		SAN LORENZO	9/4 STATE COM				551H		
				7. Surf	ace Location					
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County	
N	9	258	28E	N	330	S	2090	W		Eddy
				8. Proposed B	ottom Hole Locatio	n				
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County	

9. Pool Information

100

550

SAN LORENZO;BONE SPRING 53600

#### **Additional Well Information**

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	2982
16. Multiple	17. Proposed Depth	18. Formation	19. Contractor	20. Spud Date
N	18907	2nd Bone Spring Sand		5/11/2025
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

⊠ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Туре	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	48	410	350	0
Int1	12.25	9.625	36	2435	530	0
Prod	8.75	7	26	8085	830	2235
Liner1	6.125	4.5	13.5	18907	1030	7885

#### **Casing/Cement Program: Additional Comments**

MOC proposed to drill & test the Bone Springs formation. H2S rule 118 does not apply because MOC has researched the area & no high concentrations were found. Will have on location & working all H2S safety equiptment before Yates formation for safety & insurance purposes. Will stimulate as needed for production.

22. Proposed Blowout Prevention Program

Туре	Working Pressure	Test Pressure	Manufacturer
Annular	5000	2500	SCHAFFER
Double Ram	5000	5000	SHCAFFER
Annular	5000	2500	SHCAFFER

knowledge and b	pelief.	true and complete to the best of my  NMAC ⊠ and/or 19.15.14.9 (B) NMAC		OIL CONSERVATIO	ON DIVISION		
Printed Name:	Electronically filed by Monty Whe	tstone	Approved By:	Ward Rikala			
Title:	Vice President Operations		Title:	Petroleum Specialist Supervi	sor		
Email Address:	fking@mewbourne.com		Approved Date:	5/20/2025	Expiration Date: 5/20/2027		
Date:	4/11/2025	Phone: 903-561-2900	Conditions of Approval Attached				

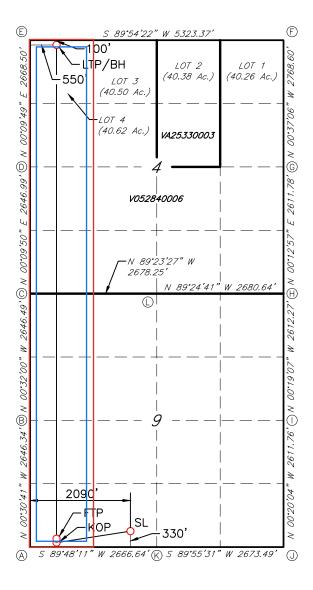
<u>C-102</u>	-	11	Ener		erals & Natur	al Resources Dep				Revised J	uly 9, 2024	
	Electronica CD Permittin			OIL	CONSERVA'	ΓΙΟΝ DIVISION				✓ Initial Submitt	tal	
										☐ Amended Rep	ort	
								1) [5]	'	☐ As Drilled		
					WELL LOCA	TION INFORMATIO	ON					
	5-56618		Pool Code	5360		Pool Name SAN	SAN LORENZO; BONE SPRING					
Property 337292	Code	Submitted   As Dorilled   As										
OGRID	No. 14'	744	Operator Na	ame	MEWBOUR	NE OIL COM	Submittal Type:    Submittal Amended Report   As Drilled   Amended Report   As Drilled   County   As Drilled   County   As Drilled   As Drilled   County   As Drilled   Cou					
Surface	Owner:	State Fee	Tribal □ Fe	ederal		Mineral Owner:	✓ State ✓ F	ee 🗌 Tribal	□Fec	leral		
					Suri	ace Location						
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Long	itude	County	
N	9	25S	28E		330 FSL	2090 FWL	32.1382	2703°N	104	.0942415°W	EDDY	
	-	!			Botton	Hole Location						
UL	Section	1 *									l -	
D	4	25S	28E	4	100 FNL	550 FWL	32.1662	2350°N	104	.0992424°W	EDDY	
D 1: 4	1.4	1 511 5 5	. 337 11	D.C. :	W/ 11 A DI	0 1 : 0		77) C 1:	1	G 1		
320	ed Acres		-	Defining	Well API	1	icing Unit (Y/I	N) Consoli	dation			
	umbers.	DEFIN.	ind				e under Comn	on Owners	hip: $\square$			
0144111	<u> </u>								1 _	<del>_</del>		
T.17		m 1.	Гъ	T .		<del></del>			-			
UL <b>M</b>	Section	1 *	"	Lot				0569NI			-	
IM	9	205	ZOL				32.1373	N.9696	104	.0992087°W	EDDI	
UL	Section	Township	Panga	Lot	1	<u> </u>	Latituda		Lana	itudo	County	
M	9	1 *		Lot				329°N	_		-	
		205					00.1010	11	101	.0002101 11		
UL	Section	Township	Range	Lot			Latitude		Long	itude	County	
D	4						1	2350°N				
			<u> </u>									
Unitized	l Area or Ar	rea of Uniform	Interest	Spacing	Unit Type 🛭 Ho	rizontal 🗌 Vertical	Gr	ound Floor	Elevati	ion: <b>3010'</b>		
OPER /	ATOR CERT	TIFICATIONS	1			SURVEYOR CER	TIFICATION	IS				
				rue and com	nlete to the best of				nlat wa	s plotted from field no	ites of actual	
my know	ledge and belie	ef, and , if the well	l is a vertical or	directional v	vell, that this	surveys made by me u	nder my supervi	sign at that	the san	e is true and correct t	to the best of	
including	the proposed	bottom hole locat	ion or has a righ	ht to drill this	s well at this	ту венеј.				in l		
interest, o	or to a volunta									4		
	y the division.						7	(19680		<u>«</u>		
consent of	of at least one l	lessee or owner of	a working inter	est or unleas	ed mineral interest		\ <u>@</u> \	$\setminus$		2		
							\iii		CUR			
Joh	in Sm	rith	04/09/2	2025				CONAL	<u> </u>			
Signature			Date			Signature and Seal of Pro	fessional Surveyor	رد				
John (	Smith					/ Robert N	1. How	ett				
Printed Na	me			· · · · · · · · · · · · · · · · · · ·		Certificate Number	Date of S	Gurvey				
john.s	mith@m	ewbourne	.com			19680		1	0/2	4/2024		
Email Add	ress				<del></del>			-	,	,		

#### ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is a directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

#### SAN LORENZO 9/4 STATE COM #551H



GEODETIC DATA
NAD 83 GRID - NM EAST

<u>SURFACE LOCATION (SL)</u> 330' FSL - 2090' FWL SEC.9 N: 414120.5 - E: 615341.8

> LAT: 32.1382703° N LONG: 104.0942415° W

<u>KICK OFF POINT (KOP)</u> 10' FSL - 550' FWL SEC.9 N: 413795.3 - E: 613805.0

LAT: 32.1373856° N LONG: 104.0992087° W

FIRST TAKE POINT (FTP) 100' FSL - 550' FWL SEC.9 N: 413885.3 - E: 613804.2

LAT: 32.1376329° N LONG: 104.0992107° W

<u>LAST TAKE POINT/BOTTOM HOLE (LTP/BH)</u> <u>100' FNL - 550' FWL SEC.4</u> N: 424290.1 - E: 613771.8

> LAT: 32.1662350° N LONG: 104.0992424° W

CORNER DATA
NAD 83 GRID - NM EAST

A: FOUND BRASS CAP "1940" N: 413783.4 - E: 613255.2

B: FOUND BRASS CAP "1940" N: 416429.1 - E: 613231.6

C: FOUND BRASS CAP "1940" N: 419074.9 - E: 613207.0

D: FOUND BRASS CAP "1940" N: 421721.3 - E: 613214.5

E: FOUND BRASS CAP "1940" N: 424389.2 - E: 613222.2

F: FOUND BRASS CAP "1940" N: 424397.9 - E: 618544.3

G: FOUND BRASS CAP "1940" N: 421630.1 - E: 618574.2

H: FOUND BRASS CAP "1940" N: 419018.9 - E: 618564.4

I: FOUND BRASS CAP "1940" N: 416407.2 - E: 618578.9

J: FOUND BRASS CAP "1940" N: 413796.1 - E: 618594.1

K: FOUND BRASS CAP "1940" N: 413792.6 - E: 615921.2

L: FOUND BRASS CAP "1940" N: 419046.4 - E: 615884.5 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

Form APD Conditions

Permit 387409

#### PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
MEWBOURNE OIL CO [14744]	30-015-56618
P.O. Box 5270	Well:
Hobbs, NM 88241	SAN LORENZO 9/4 STATE COM #551H

OCD	Condition
Reviewer	
ward.rikala	Notify the OCD 24 hours prior to casing & cement.
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing.
ward.rikala	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
ward.rikala	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.



#### Mewbourne Oil Co.

#### **BOP Break Testing Variance**

Mewbourne Oil Company requests a variance from the minimum standards for well control equipment testing of 43 CFR 3172 to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) along with batch drilling & offline cementing operations. Modern rig upgrades which facilitate pad drilling allow the BOP stack to be moved between wells on a multi-well pad without breaking any BOP stack components apart. Widespread use of these technologies has led to break testing BOPE being endorsed as safe and reliable. American Petroleum Institute (API) best practices are frequently used by regulators to develop their regulations. API Standard 53, *Well Control Equipment Systems for Drilling Wells* (5<sup>th</sup> Ed., Dec. 2018) Section 5.3.7.1 states "A pressure test of the pressure containing component shall be performed following the disconnection or repair, limited to the affected component."

#### **Procedures**

- 1. Full BOPE test at first installation on the pad.
  - Full BOPE test at least every 21 days.
  - Function test BOP elements per 43 CFR 3172.
  - Contact the BLM if a well control event occurs.
- 2. After the well section is secured and the well is confirmed to be static, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad. Two breaks on the BOPE will be made (Fig. 1).
  - Connection between the flex line and the HCR valve
  - Connection between the wellhead and the BOP quick connect (Fig. 5 & 6).
- 3. A capping flange will be installed after cementing per wellhead vendor procedure & casing pressure will be monitored via wellhead valve.
- 4. The BOP will be removed and carried by a hydraulic carrier (Fig. 3 & 4).
- 5. The rig will then walk to the next well.
- 6. Confirm that the well is static and remove the capping flange.
- 7. The connection between the flex line and HCR valve and the connection between the wellhead and the BOP quick connect will be reconnected.
- 8. Install a test plug into the wellhead.
- 9. A test will then be conducted against the upper pipe rams and choke, testing both breaks (Fig. 1 & 2).
- 10. The test will be held at 250 psi low and to the high value submitted in the APD, not to exceed 5000 psi.
- 11. The annular, blind rams and lower pipe rams will then be function tested.
- 12. If a pad consists of three or more wells, steps 4 through 11 will be repeated.



13. A break test will only be conducted if the intermediate section can be drilled and cased within 21 days of the last full BOPE test.

#### **Barriers**

#### **Before Nipple Down:**

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff

#### **After Nipple Down:**

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff
- Offline cementing tool and/or cement head
- Capping flange after cementing

#### **Summary**

A variance is requested to only test broken pressure seals on the BOPE when moving between wells on a multi-well pad if the following conditions are met:

- A full BOPE test is conducted on the first well on the pad. API Standard 53 requires testing annular BOP to 70% of RWP or 100% of MASP, whichever is greater.
- If the first well on the pad is not the well with the deepest intermediate section, a full BOPE test will also be performed when moving to a deeper well.
- The hole section being drilled has a MASP under 5000 psi.
- If a well control event occurs, Mewbourne will contact BLM for permission to continue break testing.
- If significant (>50%) losses occur, full BOPE testing will be required going forward.
- Full BOPE test will be required prior to drilling the production hole.

While walking the rig, the BOP stack will be secured via hydraulic winch or hydraulic carrier. A full BOPE test will be performed at least every 21 days.



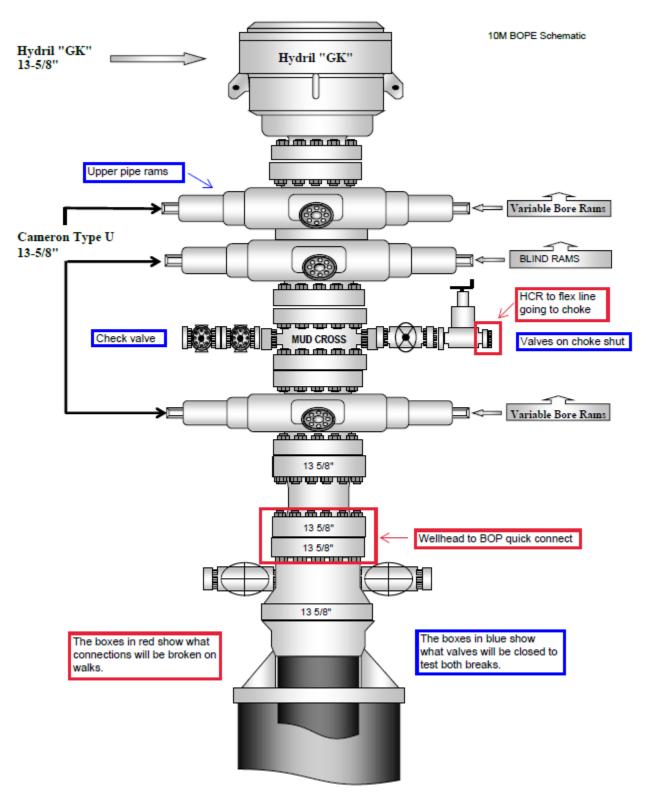


Figure 1. BOP diagram



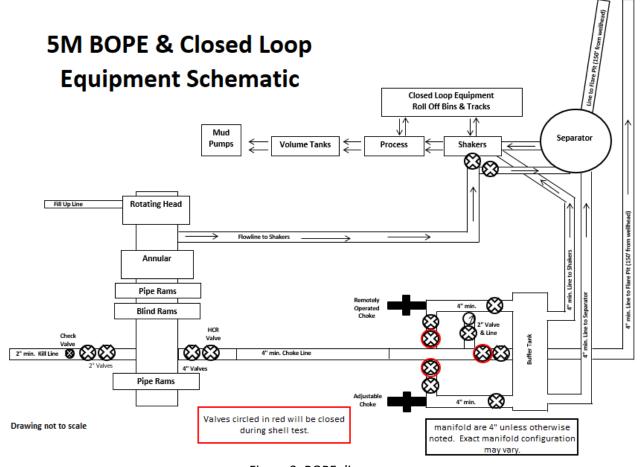


Figure 2. BOPE diagram





Figure 3. BOP handling system





Figure 4. BOP handling system



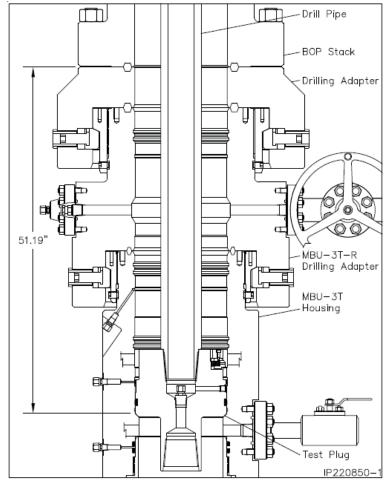


Figure 5. Cactus 5M wellhead with BOP quick connect

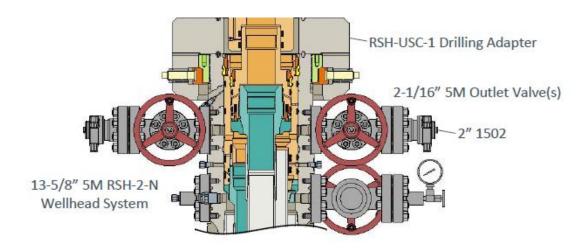


Figure 6. Vault 5M wellhead with BOP quick connect



#### Mewbourne Oil Co.

#### Surface & Intermediate Offline Cementing Variance

Mewbourne Oil Company requests a variance to perform offline cementing for surface and intermediate casing strings with the following conditions:

- Offline cementing will not be performed on production casing.
- Offline cementing will not be performed on a hole section with MASP > 5000 psi.
- Offline cementing will not be performed concurrently with offset drilling.

#### **Surface Casing Order of Operations:**

- 1. Run 13 3/8" surface casing as per normal operations (TPGS and float collar).
- 2. Perform negative pressure test to confirm integrity of float equipment while running casing.
- 3. Confirm well is static.
- 4. Make up 13 %" wellhead or wellhead landing ring assembly and land on 20" conductor.
- 5. Fill pipe, circulate casing capacity and confirm float(s) are still holding.
- 6. Confirm well is static.
- 7. Back out landing joint and pull to rig floor. Lay down landing joint.
- 8. Walk rig to next well on pad with cement crew standing by to rig up.
- 9. Make up offline cement tool with forklift per wellhead manufacturer (Fig. 1 & 2).
- 10. Make up cement head on top of offline cement tool with forklift.
- 11. Commence cement operations.
- 12. If cement circulates, confirm well is static and proceed to step 16.
- 13. If cement does not circulate, notify the appropriate BLM office, wait a minimum of six hours, and run a temperature survey to determine the top of cement.
- 14. Use 1" pipe for remedial cement job until the surface casing is cemented to surface.
- 15. Confirm well is static.
- 16. Once cement job is complete, the cement head and offline cementing tool are removed. The wellhead technician returns to cellar to install wellhead/valves.
- 17. Install wellhead capping flange.

#### **Barriers**

#### **Before Walk:**

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus



#### After Walk:

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Offline cementing tool tested to 5000 psi and cement head
- Capping flange after cementing

#### 20" Surface Casing Order of Operations (4 string area):

- 1. Run 20" surface casing as per normal operations (TPGS and float collar).
- 2. Perform negative pressure test to confirm integrity of float equipment while running casing.
- 3. Fill pipe, circulate casing capacity and confirm float(s) are still holding.
- 4. Confirm well is static.
- 5. Back out landing joint and pull to rig floor. Lay down landing joint.
- 6. Make up cement head.
- 7. Walk rig to next well on pad with cement crew standing by to rig up.
- 8. Commence cement operations.
- 9. If cement circulates, confirm well is static and proceed to step 13.
- 10. If cement does not circulate, notify the appropriate BLM office, wait a minimum of six hours, and run a temperature survey to determine the top of cement.
- 11. Use 1" pipe for remedial cement job until the surface casing is cemented to surface.
- 12. Confirm well is static.
- 13. Once cement job is complete, remove cement head and install cap.

#### **Barriers**

#### **Before Walk:**

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Cement Head

#### After Walk:

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Cement head
- Capping flange after cementing



#### **Intermediate Casing Order of Operations:**

- 1. Run casing as per normal operations (float shoe and float collar).
- 2. Perform negative pressure test to confirm integrity of float equipment while running casing.
- 3. Confirm well is static (if running SBM).
- 4. Land casing.
- 5. Fill pipe, circulate casing capacity and confirm floats are still holding.
- 6. Confirm well is static.
- 7. Back out landing joint and pull to rig floor. Lay down landing joint. Install packoff & test.
- 8. Nipple down BOP.
- 9. Walk rig to next well on pad with cement crew standing by to rig up.
- 10. Make up offline cement tool using forklift per wellhead manufacturer (Fig. 3 8).
- 11. Make up cement head on top of offline cement tool.
- 12. Commence cement operations.
- 13. If cement circulates, confirm well is static and proceed to step 16.
- 14. If cement does not circulate (when required), notify the appropriate BLM office, wait a minimum of six hours, and run a temperature survey to determine the top of cement.
- 15. Pump remedial cement job if required.
- 16. Confirm well is static.
- 17. Remove cement head and offline cementing tool.
- 18. Install wellhead capping flange and test.

#### **Barriers**

#### **Before Nipple Down:**

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff

#### **After Nipple Down:**

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff
- Offline cementing tool tested to 5000 psi and cement head
- Capping flange after cementing



#### **Risks:**

- Pressure build up in annulus before cementing
  - o Contact BLM if a well control event occurs.
  - o Rig up 3<sup>rd</sup> party pump or rig pumps to pump down casing and kill well.
  - Returns will be taken through the wellhead valves to a choke manifold (Fig 9 & 10).
  - Well could also be killed through the wellhead valves down the annulus.

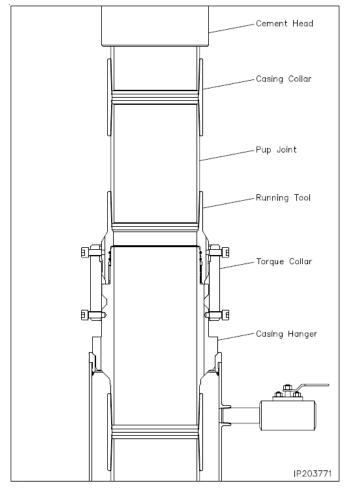


Figure 1. Cactus 13 3/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 13 3/8" pup joint and casing.



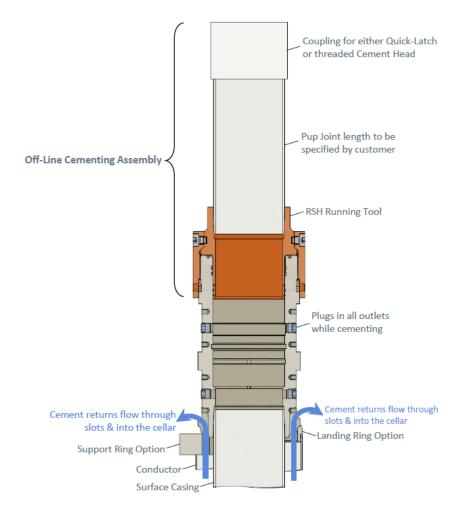


Figure 2. Vault 13 3/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 13 3/8" pup joint and casing.



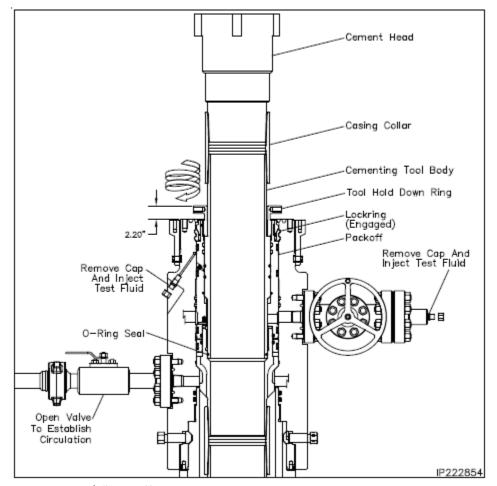


Figure 3. Cactus 9 5/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 9 5/8" pup joint and casing.



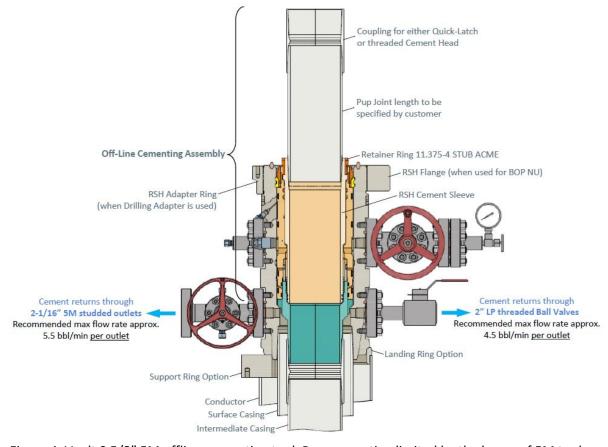


Figure 4. Vault 9 5/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 9 5/8" pup joint and casing.



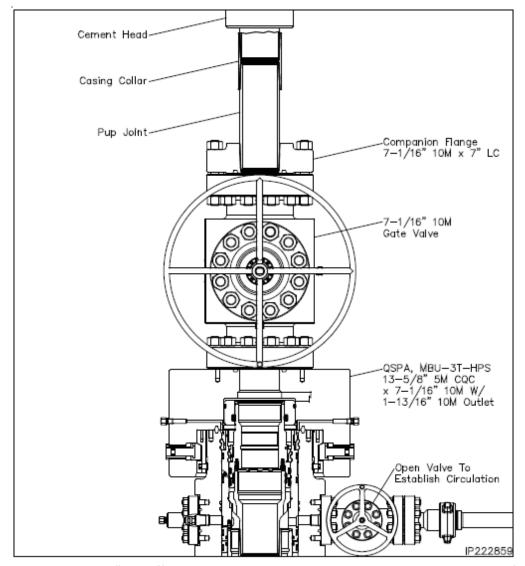


Figure 5. Cactus 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.



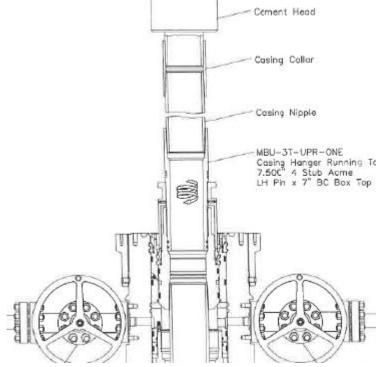


Figure 6. Cactus 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.



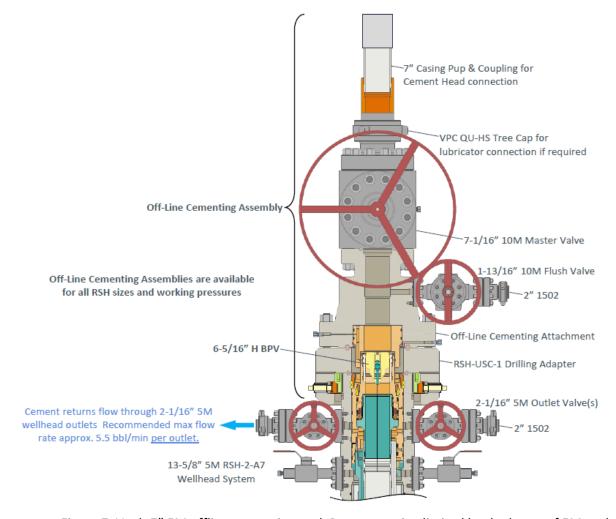
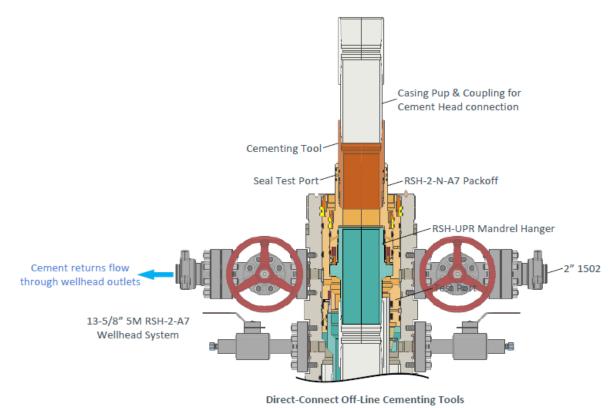


Figure 7. Vault 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.





for production casing are available for all RSH Systems

Figure 8. Vault 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.



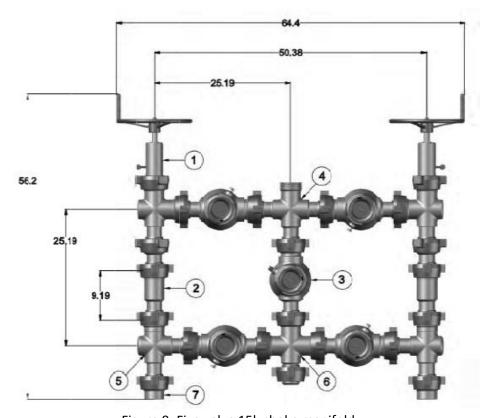


Figure 9. Five valve 15k choke manifold.

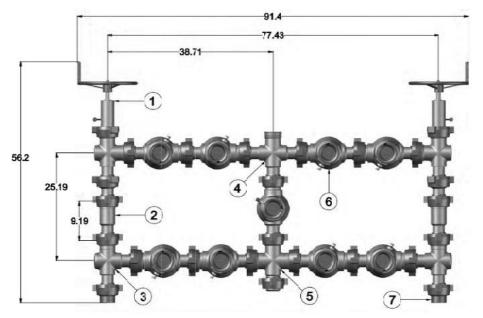


Figure 10. Nine valve 15k choke manifold.

## **Mewbourne Oil Company**

Eddy County, New Mexico NAD 83 San Lorenzo 9/4 State Com #551H

Sec 09, T25S, R28E

SHL: 330' FSL & 2090' FWL (Sec 9) BHL: 100' FNL & 550' FWL (Sec 4)

Plan: Design #1

## **Standard Planning Report**

09 April, 2025

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: San Lorenzo 9/4 State Com #551H

Well: Sec 09, T25S, R28E

Wellbore: BHL: 100' FNL & 550' FWL (Sec 4)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Site San Lorenzo 9/4 State Com #551H WELL @ 3010.0usft (Original Well Elev) WELL @ 3010.0usft (Original Well Elev)

Grid

Minimum Curvature

Project Eddy County, New Mexico NAD 83

Map System: Geo Datum: Map Zone: US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone System Datum:

Ground Level

Site San Lorenzo 9/4 State Com #551H

 Site Position:
 Northing:
 414,120.50 usft of 15,341.80 usft of 1

Position Uncertainty: 0.0 usft Slot Radius: 13-3/16 "

Well Sec 09, T25S, R28E

 Well Position
 +N/-S
 0.0 usft
 Northing:
 414,120.50 usft
 Latitude:
 32.1382702

 +E/-W
 0.0 usft
 Easting:
 615,341.80 usft
 Longitude:
 -104.0942414

Position Uncertainty

0.0 usft Easting: 615,341.80 usft Longitude: -104.0942414

Residence: 615,341.80 usft Longitude: -104.0942414

Condition Uncertainty 0.0 usft Wellhead Elevation: 3,010.0 usft Ground Level: 2,982.0 usft

Grid Convergence: 0.13 °

Wellbore BHL: 100' FNL & 550' FWL (Sec 4)

 Magnetics
 Model Name
 Sample Date
 Declination (°)
 Dip Angle (°)
 Field Strength (nT)

 IGRF2010
 12/31/2014
 7.38
 59.93
 48,132.22067597

Design Design #1

**Audit Notes:** 

Version:Phase:PROTOTYPETie On Depth:0.0

 Vertical Section:
 Depth From (TVD) (usft)
 +N/-S +E/-W (usft)
 Direction (usft)

 0.0
 0.0
 0.0
 351.22

Plan Survey Tool Program

**Date** 4/9/2025

Depth From Depth To

(usft) (usft) Survey (Wellbore) Tool Name Remarks

1 0.0 0.0 Design #1 (BHL: 100' FNL & 550'

**Plan Sections** Vertical Build Measured Dogleg Turn Depth Inclination **Azimuth** Depth +N/-S +E/-W Rate Rate Rate **TFO** (°/100usft) (°/100usft) (°/100usft) (usft) (usft) (°) (°) (usft) (usft) (°) **Target** 0.0 0.00 0.00 0.0 0.00 0.00 0.00 0.00 0.0 0.0

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: San Lorenzo 9/4 State Com #551H

Well: Sec 09, T25S, R28E

Wellbore: BHL: 100' FNL & 550' FWL (Sec 4)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Site San Lorenzo 9/4 State Com #551H WELL @ 3010.0usft (Original Well Elev) WELL @ 3010.0usft (Original Well Elev)

gn:	Design #1								
nned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	' FSL & 2090' F								
100.0 200.0 300.0 400.0	0.00	0.00 0.00 0.00 0.00	100.0 200.0 300.0 400.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
450.0 500.0 600.0 700.0 800.0	1.00 3.00 5.00	0.00 258.05 258.05 258.05 258.05	450.0 500.0 599.9 699.7 799.1	0.0 -0.1 -0.8 -2.3 -4.4	0.0 -0.4 -3.8 -10.7 -20.9	0.0 0.0 -0.2 -0.6 -1.2	0.00 2.00 2.00 2.00 2.00	0.00 2.00 2.00 2.00 2.00	0.00 0.00 0.00 0.00 0.00
900.0 1,000.0 1,099.5 1,200.0 1,300.0	9.00 11.00 5 12.99 12.99	258.05 258.05 258.05 258.05 258.05	898.2 996.6 1,093.9 1,191.9 1,289.3	-7.3 -10.9 -15.2 -19.9 -24.5	-34.5 -51.5 -71.7 -93.8 -115.8	-2.0 -2.9 -4.1 -5.3 -6.6	2.00 2.00 2.00 0.00 0.00	2.00 2.00 2.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
1,400.0 1,500.0 1,600.0 1,700.0 1,800.0	12.99 12.99 12.99 12.99	258.05 258.05 258.05 258.05 258.05 258.05	1,386.8 1,484.2 1,581.6 1,679.1 1,776.5	-24.5 -29.2 -33.8 -38.5 -43.1 -47.8	-113.8 -137.8 -159.8 -181.8 -203.8 -225.8	-7.8 -9.0 -10.3 -11.5 -12.8	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
1,900.0 2,000.0 2,100.0 2,200.0 2,300.0	12.99 12.99 12.99	258.05 258.05 258.05 258.05 258.05	1,874.0 1,971.4 2,068.8 2,166.3 2,263.7	-52.4 -57.1 -61.7 -66.4 -71.0	-247.8 -269.7 -291.7 -313.7 -335.7	-14.0 -15.3 -16.5 -17.7 -19.0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
2,400.0 2,500.0 2,600.0 2,700.0 2,800.0	12.99 12.99 12.99 12.99	258.05 258.05 258.05 258.05 258.05	2,361.2 2,458.6 2,556.1 2,653.5 2,750.9	-75.7 -80.3 -85.0 -89.7 -94.3	-357.7 -379.7 -401.7 -423.7 -445.7	-20.2 -21.5 -22.7 -24.0 -25.2	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
2,900.0 3,000.0 3,100.0 3,200.0 3,300.0	12.99 12.99 12.99 12.99	258.05 258.05 258.05 258.05 258.05	2,848.4 2,945.8 3,043.3 3,140.7 3,238.1	-99.0 -103.6 -108.3 -112.9 -117.6	-467.7 -489.6 -511.6 -533.6 -555.6	-26.4 -27.7 -28.9 -30.2 -31.4	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
3,400.0 3,500.0 3,600.0 3,700.0 3,800.0	12.99 12.99 12.99 12.99	258.05 258.05 258.05 258.05 258.05	3,335.6 3,433.0 3,530.5 3,627.9 3,725.3	-122.2 -126.9 -131.5 -136.2 -140.8	-577.6 -599.6 -621.6 -643.6 -665.6	-32.7 -33.9 -35.2 -36.4 -37.6	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
3,900.0 4,000.0 4,100.0 4,200.0 4,300.0	12.99 12.99 12.99 12.99	258.05 258.05 258.05 258.05 258.05	3,822.8 3,920.2 4,017.7 4,115.1 4,212.6	-145.5 -150.1 -154.8 -159.5 -164.1	-687.6 -709.6 -731.5 -753.5 -775.5	-38.9 -40.1 -41.4 -42.6 -43.9	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
4,400.0 4,500.0 4,600.0 4,700.0 4,800.0	12.99 12.99 12.99 12.99	258.05 258.05 258.05 258.05 258.05	4,310.0 4,407.4 4,504.9 4,602.3 4,699.8	-168.8 -173.4 -178.1 -182.7 -187.4	-797.5 -819.5 -841.5 -863.5 -885.5	-45.1 -46.3 -47.6 -48.8 -50.1	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
4,900.0 5,000.0 5,100.0	12.99 12.99	258.05 258.05 258.05	4,797.2 4,894.6 4,992.1	-192.0 -196.7 -201.3	-907.5 -929.5 -951.4	-51.3 -52.6 -53.8	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00

Database: Company:

Hobbs

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 San Lorenzo 9/4 State Com #551H

Well:

Project:

Site:

Sec 09, T25S, R28E

Wellbore: BHL: 100' FNL & 550' FWL (Sec 4)

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: **Survey Calculation Method:**  Site San Lorenzo 9/4 State Com #551H WELL @ 3010.0usft (Original Well Elev) WELL @ 3010.0usft (Original Well Elev)

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,200.0	12.99	258.05	5,089.5	-206.0	-973.4	-55.1	0.00	0.00	0.00
5,300.0	12.99	258.05	5,187.0	-210.6	-995.4	-56.3	0.00	0.00	0.00
5,400.0	12.99	258.05	5,284.4	-215.3	-1,017.4	-57.5	0.00	0.00	0.00
5,500.0	12.99	258.05	5,381.8	-219.9	-1,039.4	-58.8	0.00	0.00	0.00
5,600.0	12.99	258.05	5,479.3	-224.6	-1,061.4	-60.0	0.00	0.00	0.00
5,700.0	12.99	258.05	5,576.7	-229.3	-1,083.4	-61.3	0.00	0.00	0.00
5,800.0	12.99	258.05	5,674.2	-233.9	-1,105.4	-62.5	0.00	0.00	0.00
5,900.0	12.99	258.05	5,771.6	-238.6	-1,127.4	-63.8	0.00	0.00	0.00
6,000.0	12.99	258.05	5,869.1	-243.2	-1,149.4	-65.0	0.00	0.00	0.00
6,100.0	12.99	258.05	5,966.5	-247.9	-1,171.3	-66.2	0.00	0.00	0.00
6,200.0	12.99	258.05	6,063.9	-252.5	-1,193.3	-67.5	0.00	0.00	0.00
6,300.0	12.99	258.05	6,161.4	-257.2	-1,215.3	-68.7	0.00	0.00	0.00
6,400.0	12.99	258.05	6,258.8	-261.8	-1,237.3	-70.0	0.00	0.00	0.00
6,500.0	12.99	258.05	6,356.3	-266.5	-1,259.3	-71.2	0.00	0.00	0.00
6,600.0	12.99	258.05	6,453.7	-271.1	-1,281.3	-72.5	0.00	0.00	0.00
6,700.0	12.99	258.05	6,551.1	-275.8	-1,303.3	-73.7	0.00	0.00	0.00
6,800.0	12.99	258.05	6,648.6	-280.4	-1,325.3	-75.0	0.00	0.00	0.00
6,900.0	12.99	258.05	6,746.0	-285.1	-1,347.3	-76.2	0.00	0.00	0.00
7,000.0	12.99	258.05	6,843.5	-289.7	-1,369.3	-77.4	0.00	0.00	0.00
7,100.0	12.99	258.05	6,940.9	-294.4	-1,391.2	-78.7	0.00	0.00	0.00
7,200.0	12.99	258.05	7,038.3	-299.1	-1,413.2	-79.9	0.00	0.00	0.00
7,300.0	12.99	258.05	7,135.8	-303.7	-1,435.2	-81.2	0.00	0.00	0.00
7,400.0	12.99	258.05	7,233.2	-308.4	-1,457.2	-82.4	0.00	0.00	0.00
7,435.8	12.99	258.05	7,268.1	-310.0	-1,465.1	-82.9	0.00	0.00	0.00
7,500.0	11.70	258.05	7,330.8	-312.9	-1,478.5	-83.6	2.00	-2.00	0.00
7,600.0	9.70	258.05	7,429.1	-316.7	-1,496.7	-84.6	2.00	-2.00	0.00
7,700.0	7.70	258.05	7,527.9	-319.8	-1,511.5	-85.5	2.00	-2.00	0.00
7,800.0 7,900.0 8,000.0 8,085.2	5.70 3.70 1.70 0.00 SL & 550' FW	258.05 258.05 258.05 0.00	7,627.2 7,726.9 7,826.8 7,912.0	-322.3 -324.0 -324.9 -325.2	-1,522.9 -1,530.9 -1,535.6 -1,536.8	-86.1 -86.6 -86.8 -86.9	2.00 2.00 2.00 2.00	-2.00 -2.00 -2.00 -2.00	0.00 0.00 0.00 0.00
8,100.0	1.48	359.82	7,926.8	-325.0	-1,536.8	-86.7	10.00	10.00	0.00
8,150.0	6.48	359.82	7,976.6	-321.5	-1,536.8	-83.3	10.00	10.00	0.00
8,200.0	11.48	359.82	8,026.0	-313.7	-1,536.8	-75.6	10.00	10.00	0.00
8,250.0	16.48	359.82	8,074.5	-301.7	-1,536.9	-63.7	10.00	10.00	0.00
8,300.0	21.47	359.82	8,121.8	-285.4	-1,536.9	-47.6	10.00	10.00	0.00
8,350.0	26.47	359.82	8,167.4	-265.1	-1,537.0	-27.5	10.00	10.00	0.00
8,400.0 8,410.7 FTP: 100'	31.47 32.55 FSL <b>&amp; 550' FW</b>	359.82 359.82	8,211.2 8,220.3	-240.9 -235.2	-1,537.1 -1,537.1	-3.6 2.1	10.00 10.00	10.00 10.00	0.00 0.00
8,450.0	36.47	359.82	8,252.6	-213.0	-1,537.2	24.1	10.00	10.00	0.00
8,500.0	41.47	359.82	8,291.5	-181.5	-1,537.3	55.1	10.00	10.00	0.00
8,550.0	46.47	359.82	8,327.5	-146.8	-1,537.4	89.5	10.00	10.00	0.00
8,600.0	51.47	359.82	8,360.3	-109.1	-1,537.5	126.7	10.00	10.00	0.00
8,650.0	56.47	359.82	8,389.7	-68.7	-1,537.6	166.7	10.00	10.00	0.00
8,700.0	61.47	359.82	8,415.4	-25.9	-1,537.7	209.1	10.00	10.00	0.00
8,750.0	66.47	359.82	8,437.4	19.1	-1,537.9	253.5	10.00	10.00	0.00
8,800.0	71.47	359.82	8,455.3	65.7	-1,538.0	299.6	10.00	10.00	0.00
8,850.0	76.47	359.82	8,469.1	113.8	-1,538.2	347.1	10.00	10.00	0.00
8,900.0	81.47	359.82	8,478.7	162.8	-1,538.3	395.6	10.00	10.00	0.00
8,950.0	86.47	359.82	8,483.9	212.5	-1,538.5	444.8	10.00	10.00	0.00
8,984.7	89.94	359.82	8,485.0	247.2	-1,538.6	479.1	10.00	10.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: San Lorenzo 9/4 State Com #551H

Well: Sec 09, T25S, R28E

Wellbore: BHL: 100' FNL & 550' FWL (Sec 4)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Site San Lorenzo 9/4 State Com #551H WELL @ 3010.0usft (Original Well Elev) WELL @ 3010.0usft (Original Well Elev)

Grid

ed Survey									
eu Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
I D. 583' I	SL & 550' FWL	(Sec 9)							
9,000.0		359.82	8,485.0	262.5	-1,538.7	494.2	0.00	0.00	0.00
9,100.0						593.1	0.00		0.00
9,100.0		359.82 359.82	8,485.1 8,485.2	362.5 462.5	-1,539.0 -1,539.3	691.9	0.00	0.00 0.00	0.00
9,300.0		359.82	8,485.3	562.5	-1,539.6	790.8	0.00	0.00	0.00
9,400.0		359.82	8,485.4	662.5	-1,539.9	889.7	0.00	0.00	0.00
9,500.0		359.82	8,485.5	762.5	-1,540.2	988.6	0.00	0.00	0.00
9,600.0	89.94	359.82	8,485.6	862.5	-1,540.6	1,087.4	0.00	0.00	0.00
9,700.0		359.82	8,485.7	962.5	-1,540.9	1,186.3	0.00	0.00	0.00
9,800.0		359.82	8,485.8	1,062.5	-1,541.2	1,285.2	0.00	0.00	0.00
9,900.0		359.82	8,485.9	1,162.5	-1,541.5	1,384.1	0.00	0.00	0.00
10,000.0		359.82	8,486.0	1,262.5	-1,541.8	1,483.0	0.00	0.00	0.00
10,100.0		359.82	8,486.1	1,362.5	-1,542.1 1,542.5	1,581.8	0.00	0.00	0.00
10,200.0 10,300.0		359.82 359.82	8,486.2 8,486.3	1,462.5 1,562.5	-1,542.5 -1,542.8	1,680.7 1,779.6	0.00 0.00	0.00 0.00	0.00 0.00
10,400.0		359.82	8,486.4	1,662.5	-1,543.1	1,878.5	0.00	0.00	0.00
10,500.0		359.82	8,486.5	1,762.5	-1,543.4	1,977.3	0.00	0.00	0.00
10,600.0	89.94	359.82	8,486.6	1,862.5	-1,543.7	2,076.2	0.00	0.00	0.00
10,700.0		359.82	8,486.7	1,962.5	-1,544.0	2,175.1	0.00	0.00	0.00
10,800.0		359.82	8,486.8	2,062.5	-1,544.4	2,274.0	0.00	0.00	0.00
10,900.0		359.82	8,486.9	2,162.5	-1,544.7	2,372.8	0.00	0.00	0.00
11,000.0		359.82	8,487.0	2,262.5	-1,545.0	2,471.7	0.00	0.00	0.00
11,100.0		359.82	8,487.1	2,362.5	-1,545.3	2,570.6	0.00	0.00	0.00
11,200.0 11,300.0		359.82 359.82	8,487.2 8,487.3	2,462.5 2,562.5	-1,545.6 -1,545.9	2,669.5 2,768.4	0.00 0.00	0.00 0.00	0.00 0.00
11,400.0		359.82	8,487.4	2,662.5	-1,546.3	2,766.4	0.00	0.00	0.00
11,500.0		359.82	8,487.5	2,762.5	-1,546.6	2,966.1	0.00	0.00	0.00
11,600.0	89.94	359.82	8,487.6	2,862.5	-1,546.9	3,065.0	0.00	0.00	0.00
11,700.0		359.82	8,487.7	2,962.5	-1,547.2	3,163.9	0.00	0.00	0.00
11,800.0		359.82	8,487.8	3,062.5	-1,547.5	3,262.7	0.00	0.00	0.00
11,900.0 12,000.0		359.82 359.82	8,487.9 8,488.0	3,162.5 3,262.5	-1,547.8 -1,548.1	3,361.6 3,460.5	0.00 0.00	0.00 0.00	0.00 0.00
•			•			•			
12,100.0 12,200.0		359.82 359.82	8,488.1 8,488.2	3,362.5 3,462.5	-1,548.5 -1,548.8	3,559.4 3,658.2	0.00 0.00	0.00 0.00	0.00 0.00
12,200.0		359.82	8,488.3	3,562.5	-1,549.1	3,757.1	0.00	0.00	0.00
12,400.0		359.82	8,488.4	3,662.5	-1,549.4	3,856.0	0.00	0.00	0.00
12,500.0		359.82	8,488.5	3,762.5	-1,549.7	3,954.9	0.00	0.00	0.00
12,600.0		359.82	8,488.6	3,862.5	-1,550.0	4,053.8	0.00	0.00	0.00
12,700.0		359.82	8,488.7	3,962.5	-1,550.4	4,152.6	0.00	0.00	0.00
12,800.0		359.82	8,488.8	4,062.5	-1,550.7	4,251.5	0.00	0.00	0.00
12,900.0		359.82	8,488.9	4,162.5	-1,551.0	4,350.4	0.00	0.00	0.00
13,000.0		359.82	8,489.0	4,262.5	-1,551.3	4,449.3	0.00	0.00	0.00
13,100.0 13,200.0	89.94 89.94	359.82 359.82	8,489.1 8,489.2	4,362.5 4,462.5	-1,551.6 -1,551.9	4,548.1 4,647.0	0.00 0.00	0.00 0.00	0.00 0.00
13,200.0		359.82	8,489.3	4,462.5	-1,552.3	4,745.9	0.00	0.00	0.00
13,400.0		359.82	8,489.4	4,662.5	-1,552.6	4,844.8	0.00	0.00	0.00
13,500.0		359.82	8,489.6	4,762.5	-1,552.9	4,943.6	0.00	0.00	0.00
13,600.0		359.82	8,489.7	4,862.5	-1,553.2	5,042.5	0.00	0.00	0.00
13,700.0		359.82	8,489.8	4,962.5	-1,553.5	5,141.4	0.00	0.00	0.00
13,800.0		359.82	8,489.9	5,062.5	-1,553.8	5,240.3	0.00	0.00	0.00
13,900.0 14,000.0		359.82	8,490.0	5,162.5 5,262.5	-1,554.2 -1,554.5	5,339.2	0.00 0.00	0.00 0.00	0.00 0.00
•		359.82	8,490.1			5,438.0			
14,100.0	89.94	359.82	8,490.2	5,362.5	-1,554.8	5,536.9	0.00	0.00	0.00

Database: Company:

Project:

Site:

Hobbs

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 San Lorenzo 9/4 State Com #551H

Well: Sec 09, T25S, R28E

Wellbore: BHL: 100' FNL & 550' FWL (Sec 4)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Site San Lorenzo 9/4 State Com #551H WELL @ 3010.0usft (Original Well Elev) WELL @ 3010.0usft (Original Well Elev)

Grid

ned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,200.0	89.94	359.82	8,490.3	5,462.5	-1,555.1	5,635.8	0.00	0.00	0.00
14,300.0 14,400.0	89.94 89.94	359.82 359.82	8,490.4 8,490.5	5,562.5 5,662.5	-1,555.4 -1,555.7	5,734.7 5,833.5	0.00 0.00	0.00 0.00	0.00 0.00
14,500.0	89.94	359.82	8,490.6	5,762.5	-1,555. <i>1</i> -1,556.1	5,932.4	0.00	0.00	0.00
14,600.0	89.94	359.82	8,490.7	5,862.5	-1.556.4	6,031.3	0.00	0.00	0.00
14,700.0	89.94	359.82	8.490.8	5,962.5	-1.556.7	6,130.2	0.00	0.00	0.00
14.800.0	89.94	359.82	8,490.9	6,062.5	-1,557.0	6,229.0	0.00	0.00	0.00
14,900.0	89.94	359.82	8,491.0	6,162.5	-1,557.3	6,327.9	0.00	0.00	0.00
15,000.0	89.94	359.82	8,491.1	6,262.5	-1,557.6	6,426.8	0.00	0.00	0.00
15,100.0	89.94	359.82	8,491.2	6,362.5	-1,558.0	6,525.7	0.00	0.00	0.00
15,200.0	89.94	359.82	8,491.3	6,462.5	-1,558.3	6,624.6	0.00	0.00	0.00
15,300.0	89.94	359.82	8,491.4	6,562.5	-1,558.6	6,723.4	0.00	0.00	0.00
15,400.0	89.94	359.82	8,491.5	6,662.5	-1,558.9	6,822.3	0.00	0.00	0.00
15,500.0	89.94	359.82	8,491.6	6,762.5	-1,559.2	6,921.2	0.00	0.00	0.00
15.600.0	89.94	359.82	8,491.7	6,862.5	-1.559.5	7,020.1	0.00	0.00	0.00
15,700.0	89.94	359.82	8,491.8	6,962.5	-1,559.9	7,118.9	0.00	0.00	0.00
15,800.0	89.94	359.82	8,491.9	7,062.5	-1,560.2	7,217.8	0.00	0.00	0.00
15,900.0	89.94	359.82	8,492.0	7,162.5	-1,560.5	7,316.7	0.00	0.00	0.00
16,000.0	89.94	359.82	8,492.1	7,262.5	-1,560.8	7,415.6	0.00	0.00	0.00
16,100.0	89.94	359.82	8,492.2	7,362.5	-1,561.1	7,514.4	0.00	0.00	0.00
16,200.0	89.94	359.82	8,492.3	7,462.5	-1,561.4	7,613.3	0.00	0.00	0.00
16,300.0	89.94	359.82	8,492.4	7,562.5	-1,561.8	7,712.2	0.00	0.00	0.00
16,400.0	89.94	359.82	8,492.5	7,662.5	-1,562.1	7,811.1	0.00	0.00	0.00
16,500.0	89.94	359.82	8,492.6	7,762.5	-1,562.4	7,910.0	0.00	0.00	0.00
16,600.0	89.94	359.82	8,492.7	7,862.5	-1,562.7	8,008.8	0.00	0.00	0.00
16,700.0	89.94	359.82	8,492.8	7,962.5	-1,563.0	8,107.7	0.00	0.00	0.00
16,800.0	89.94	359.82	8,492.9	8,062.5	-1,563.3	8,206.6	0.00	0.00	0.00
16,900.0	89.94	359.82	8,493.0	8,162.5	-1,563.7	8,305.5	0.00	0.00	0.00
17,000.0	89.94	359.82	8,493.1	8,262.5	-1,564.0	8,404.3	0.00	0.00	0.00
17,100.0	89.94	359.82	8,493.2	8,362.5	-1,564.3	8,503.2	0.00	0.00	0.00
17,200.0	89.94	359.82	8,493.3	8,462.5	-1,564.6	8,602.1	0.00	0.00	0.00
17,300.0	89.94	359.82	8,493.4	8,562.4	-1,564.9	8,701.0	0.00	0.00	0.00
17,400.0	89.94	359.82 359.82	8,493.5	8,662.4	-1,565.2	8,799.8	0.00	0.00	0.00
17,500.0	89.94		8,493.6	8,762.4	-1,565.5	8,898.7	0.00	0.00	0.00
17,600.0	89.94	359.82	8,493.7	8,862.4	-1,565.9	8,997.6	0.00	0.00	0.00
17,700.0	89.94	359.82	8,493.8	8,962.4	-1,566.2	9,096.5	0.00	0.00	0.00
17,800.0	89.94	359.82	8,493.9	9,062.4	-1,566.5	9,195.4	0.00	0.00	0.00
17,900.0	89.94	359.82	8,494.0	9,162.4	-1,566.8	9,294.2	0.00	0.00	0.00
18,000.0	89.94	359.82	8,494.1	9,262.4	-1,567.1	9,393.1	0.00	0.00	0.00
18,100.0	89.94	359.82	8,494.2	9,362.4	-1,567.4	9,492.0	0.00	0.00	0.00
18,200.0	89.94	359.82	8,494.3	9,462.4	-1,567.8	9,590.9	0.00	0.00	0.00
18,300.0	89.94	359.82	8,494.4	9,562.4	-1,568.1	9,689.7	0.00	0.00	0.00
18,400.0	89.94	359.82	8,494.5	9,662.4	-1,568.4 1,569.7	9,788.6	0.00	0.00	0.00
18,500.0	89.94	359.82	8,494.6	9,762.4	-1,568.7	9,887.5	0.00	0.00	0.00
18,600.0	89.94	359.82	8,494.7	9,862.4	-1,569.0	9,986.4	0.00	0.00	0.00
18,700.0	89.94	359.82	8,494.8	9,962.4	-1,569.3	10,085.2	0.00	0.00	0.00
18,800.0	89.94	359.82	8,494.9	10,062.4	-1,569.7	10,184.1	0.00	0.00	0.00
18,907.2	89.94	359.82	8,495.0	10,169.6	-1,570.0	10,290.1	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: San Lorenzo 9/4 State Com #551H

Well: Sec 09, T25S, R28E

Wellbore: BHL: 100' FNL & 550' FWL (Sec 4)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Site San Lorenzo 9/4 State Com #551H WELL @ 3010.0usft (Original Well Elev) WELL @ 3010.0usft (Original Well Elev)

Grid

Design Targets									
Target Name - hit/miss target	ip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL: 330' FSL & 2090 - plan hits target cer - Point	0.00 nter	0.00	0.0	0.0	0.0	414,120.50	615,341.80	32.1382702	-104.0942414
KOP: 10' FSL & 550' F - plan hits target cer - Point	0.00 nter	0.00	7,912.0	-325.2	-1,536.8	413,795.30	613,805.00	32.1373855	-104.0992087
FTP: 100' FSL & 550' - plan hits target cer - Point	0.00 nter	0.00	8,220.3	-235.2	-1,537.1	413,885.30	613,804.72	32.1376329	-104.0992090
LP: 583' FSL & 550' F - plan hits target cer - Point	0.00 nter	0.00	8,485.0	247.2	-1,538.6	414,367.72	613,803.19	32.1389591	-104.0992105
BHL: 100' FNL & 550' - plan hits target cer - Point	0.00 nter	0.00	8,495.0	10,169.6	-1,570.0	424,290.10	613,771.80	32.1662351	-104.0992422

#### State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

#### NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.								
			1 – Plan Deffective May 25,					
I. Operator: Mew	bourne (	Oil Co.	OGRID:	14744	Dat	e:4	/11/25	
II. Type: 🗶 Original 🗆	Amendment	due to □ 19.15.27	.9.D(6)(a) NMA	C □ 19.15.27.9.D(	(6)(b) NMAC [	☐ Other.		
If Other, please describe:								
III. Well(s): Provide the be recompleted from a sin					wells proposed	to be dr	illed or proposed to	
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Gas MCF/D Produced Wa		Anticipated Produced Water BBL/D	
SAN LORENZO 9/4 STATE COM 551	Н	N 9 25S 28E	330' FSL x 2090' F	√L 1500	5000		1000	
<ul><li>IV. Central Delivery Po</li><li>V. Anticipated Schedule proposed to be recomplet</li></ul>	e: Provide the						27.9(D)(1) NMAC] osed to be drilled or	
Well Name	API	Spud Date	TD Reached Date	Completion Commencement		ll Flow k Date	First Production Date	
SAN LORENZO 9/4 STATE COM 551	н	5/11/25	6/11/25	7/11/25	7/2	26/25	7/31/25	
VI. Separation Equipment:   Attach a complete description of how Operator will size separation equipment to optimize gas capture.  VII. Operational Practices:   Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.  VIII. Best Management Practices:   Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.								

#### Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

🗴 Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

#### IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF
V. Nietwood Coo Coth wine Septem (NA	3.00)		

#### X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. $\square$ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the
production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of
the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system $\square$ will $\square$ will not have capacity to gather 100% of the anticipated n	atural gas
production volume from the well prior to the date of first production.	

XIII. Line Pressure. Operator $\square$ does $\square$ does not anticipate that its existing well(s) connected to the same segment, o	r portion,	of the
natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the	he new we	ell(s).

<b>1 1 1 1 1</b>	1 4	1 4' '	4 41 '	1.1"
Attach Operator's 1	olan to manage	production in rest	onse to the increas	sea iine pressure

XIV.	Confidentiality:	Operator assert	ts confidentiality	pursuant to	Section	71-2-8	NMSA	1978	for the	information	provided	in
Section	n 2 as provided in	Paragraph (2) of S	Subsection D of 1	19.15.27.9 NI	MAC, and	d attache	es a full	descri	ption o	f the specific	information	on
for wh	ich confidentiality	is asserted and th	e basis for such	assertion.								

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## Section 3 - Certifications Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal: 🖾 Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or ☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following: Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or Venting and Flaring Plan. 

Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including: power generation on lease; (a) power generation for grid; (b) compression on lease; (c) liquids removal on lease: (d) reinjection for underground storage; (e) reinjection for temporary storage; **(f)** 

- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

#### **Section 4 - Notices**

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	Bradley Bishop
Printed Name:	BRADLEY BISHOP
Title:	REGULATORY MANAGER
E-mail Address:	BBISHOP@MEWBOURNE.COM
Date:	4/11/25
Phone:	575-393-5905
	OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:	
Title:	
Approval Date:	
Conditions of Ap	proval:

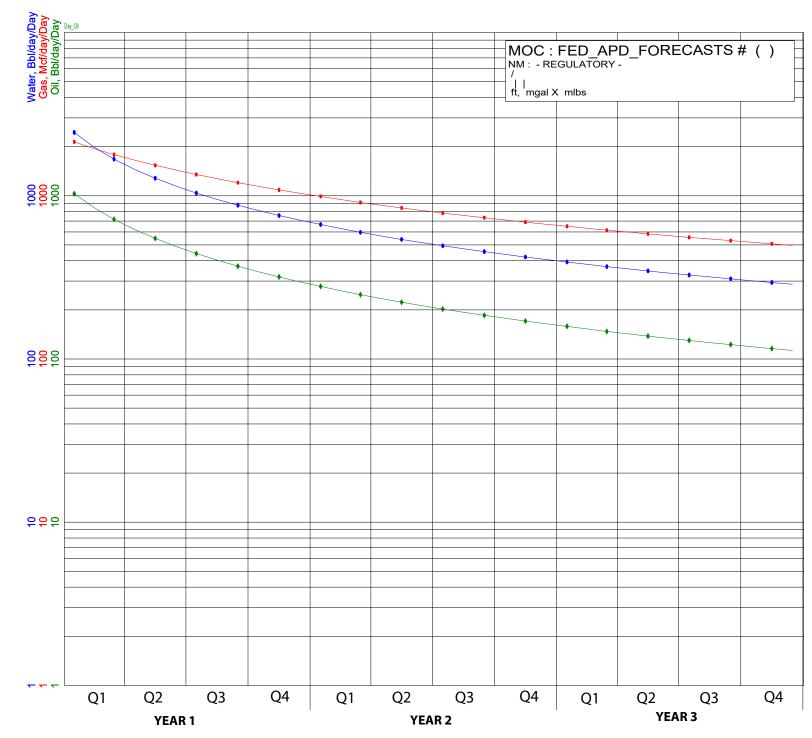
#### Mewbourne Oil Company

#### Natural Gas Management Plan – Attachment

- VI. Separation equipment will be sized by construction engineering staff based on stated manufacturer daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs, and VRUs will be sized utilizing ProMax modelling software to ensure adequate capacity for anticipated production volumes and conditions.
- VII. Mewbourne Oil Company (MOC) will take following actions to comply with the regulations listed in 19.15.27.8:
  - A. MOC will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. MOC will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas. If there is no adequate takeaway for the gas, well(s) will be shut in until the natural gas gathering system is available.
  - B. All drilling operations will be equipped with a rig flare located at least 100 ft from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency venting or flaring the volumes will be estimated and reported appropriately.
  - C. During completion operations any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flow will be directed to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. It is not anticipated that gas will not meet pipeline standards. However, if natural gas does not meet gathering pipeline quality specifications, MOC will flare the natural gas for 60 days or until the natural gas meets the pipeline quality specifications, whichever is sooner. MOC will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas sample will analyzed twice per week and the gas will be routed into a gathering system as soon as pipeline specifications are met.
  - D. Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D.(1) through (4). If there is no adequate takeaway for the separator gas, well(s) will be shut in until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be estimated and reported appropriately.
  - E. MOC will comply with the performance standards requirements and provisions listed in 19.15.27.8 E.(1) through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs in order to minimize the waste. Production storage tanks constructed after May 25, 2021 will be equipped with automatic gauging system. Flares constructed after May 25, 2021 will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. MOC will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.
  - F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared or beneficially used during production operations, will be measured or estimated. MOC will install equipment to measure

the volume of natural gas flared from existing process piping or a flowline piped from equipment such as high pressure separators, heater treaters, or vapor recovery units associated with a well or facility associated with a well authorized by an APD issued after May 25, 2021 that has an average daily production greater than 60 Mcf/day. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, MOC will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

VIII. For maintenance activities involving production equipment and compression, venting will be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production and compression equipment the associated producing wells will be shut in to eliminate venting. For maintenance of VRUs all gas normally routed to the VRU will be routed to flare to eliminate venting.



Oil, Bbl/day◆ Qual= EDDYBS2.0 Ref= 1/2025 Cum= 321735 321735 Rem= EUR= 3.000 Yrs= Qi= 1150.0 0.950000 b= De= 75.000000 Df= 23.952479 QabGas, Mcf/day
Qual= EDDYBS2.0
1/2025
0 Qab= 111.3 Cum= 1038057 Rem= 1038057 3.000 2250.0 EUR= Yrs= Qi= b= 1.050000 55.000000 De= Df= 20.108832 Qab= 491.6 Water, Bbl/d • Qual= EDDYBS2.0 Ref= 1/2025 0 Cum= 771323 771323 3.000 2750.0 Rem= EUR= Yrs= Qi= 1.050000 b= De= 75.000000 22.260386 Df= Qab= 283.6