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 C-101
August 1, 2011

Permit 386318

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address		2. OGRID Number
MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241		14744
		3. API Number 30-015-56518
4. Property Code 337037	5. Property Name YARDBIRDS 27 34 FEE	6. Well No. 522H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
D	27	23S	28E	D	200	N	245	W	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
M	34	23S	28E	M	100	S	660	W	Eddy

9. Pool Information

CULEBRA BLUFF;BONE SPRING, SOUTH	15011

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		Private	3035
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	18483	2nd Bone Spring Sand		10/20/2024
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

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	48	450	370	0
Int1	12.25	9.625	36	2525	540	0
Prod	8.75	7	26	7651	2690	2325
Prod	8.5	4.5	13.5	18483	0	0

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

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

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:		**OIL CONSERVATION DIVISION**	
Printed Name:	Electronically filed by Monty Whetstone	Approved By:	Matthew Gomez
Title:	Vice President Operations	Title:	
Email Address:	fking@mewbourne.com	Approved Date:	4/23/2025 Expiration Date: 4/23/2027
Date:	4/14/2025 Phone: 903-561-2900	Conditions of Approval Attached	

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024 Submittal Type: ☑ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name	
30-015-56518	15011	CULEBRA BLUFF; BONE SPRING, SOUTH	
Property Code: 337037	Property Name: YARDBIRDS 27/34 FEE		Well Number: 522H
OGRID No.: 14744	Operator Name: MEWBOURNE OIL COMPANY		Ground Level Elevation: 3035'
Surface Owner: ☐ State ☑ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☐ State ☑ Fee ☐ Tribal ☐ Federal	

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	27	23S	28E		200 FNL	245 FWL	32.2828513°N	104.0829381°W	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	34	23S	28E		100 FSL	660 FWL	32.2545238°N	104.0817474°W	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
320	DEFINING		N	P
Order Numbers.			Well setbacks are under Common Ownership: ☑ Yes ☐ No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	27	23S	28E		10 FNL	660 FWL	32.2834002°N	104.0816002°W	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	27	23S	28E		100 FNL	660 FWL	32.2831529°N	104.0815982°W	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	34	23S	28E		100 FSL	660 FWL	32.2545238°N	104.0817474°W	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☑ Horizontal ☐ Vertical	Ground Floor Elevation: 3035'

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and , if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Andrew W Taylor — Signature — 3/24/2025 — Date

Andrew Taylor — Printed Name

ataylor@mewbourne.com — Email Address

SURVEYOR CERTIFICATIONS

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me under my supervision, and that the same is true and correct to the best of my belief.

ROBERT M. HOWETT NEW MEXICO 19680 PROFESSIONAL SURVEYOR

Robert M. Howett — Signature and Seal of Professional Surveyor

Certificate Number	Date of Survey
19680	01/07/2025

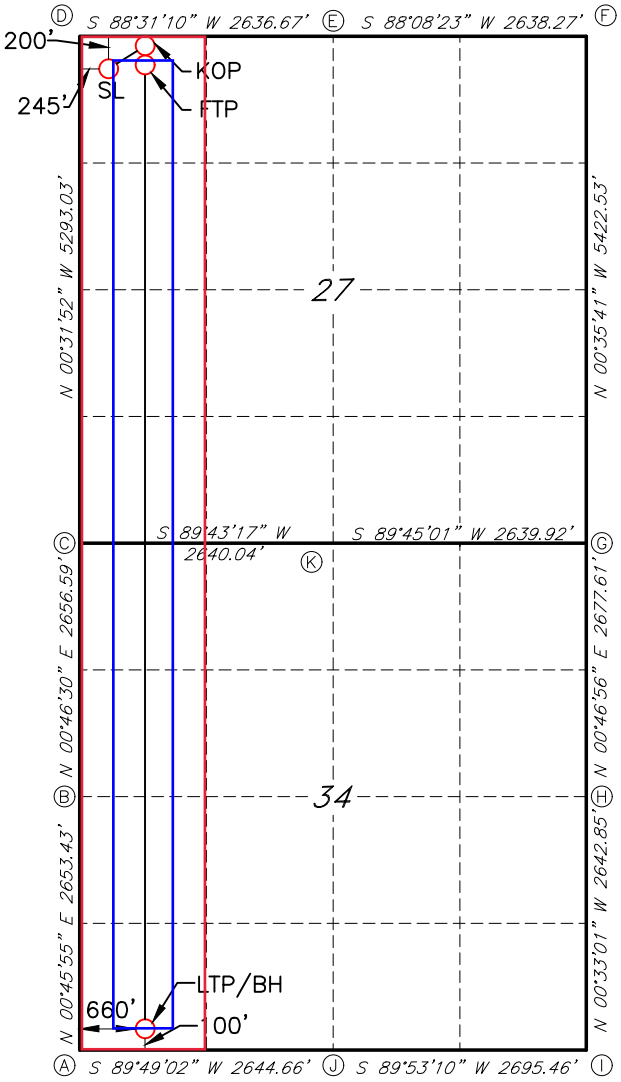
Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

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.

YARDBIRDS 27/34 FEE #522H



GEODETIC DATA
NAD 83 GRID – NM EAST

SURFACE LOCATION (SL)
N: 466724.4 – E: 618717.9
200' FNL & 245' FWL
LAT: 32.2828513° N
LONG: 104.0829381° W

KICK OFF POINT (KOP)
10' FNL & 660' FWL (SEC.27)
N: 466925.1 – E: 619130.9

LAT: 32.2834002° N
LONG: 104.0816002° W

FIRST TAKE POINT (FTP)
100' FNL & 660' FWL (SEC.27)
N: 466835.1 – E: 619131.7

LAT: 32.2831529° N
LONG: 104.0815982° W

LAST TAKE POINT/BOTTOM HOLE (LTP/BH)
N: 456420.2 – E: 619110.0
100' FNL & 660' FWL
LAT: 32.2545238° N
LONG: 104.0817474° W

CORNER DATA
NAD 83 GRID – NM EAST

A: FOUND BRASS CAP "1942"
N: 456318.1 – E: 618448.9

B: FOUND 1/2" REBAR
N: 458970.7 – E: 618484.3

C: FOUND 1/2" REBAR
N: 461626.4 – E: 618520.2

D: FOUND COTTON SPINDLE
N: 466918.0 – E: 618471.2

E: FOUND 1/2" REBAR
N: 466986.1 – E: 621106.4

F: FOUND COTTON SPINDLE
N: 467071.8 – E: 623742.7

G: FOUND 1/2" REBAR
N: 461650.7 – E: 623798.9

H: FOUND 1/2" REBAR
N: 458974.0 – E: 623762.4

I: FOUND BRASS CAP "1942"
N: 456331.9 – E: 623787.8

J: FOUND BRASS CAP "1942"
N: 456326.5 – E: 621092.9

K: FOUND 1" SMOOTH ROD
N: 461639.2 – E: 621159.6

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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 386318

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
MEWBOURNE OIL CO [14744] P.O. Box 5270 Hobbs, NM 88241	30-015-56518
	Well: YARDBIRDS 27 34 FEE #522H

OCD Reviewer	Condition
matthew.gomez	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.
matthew.gomez	Notify the OCD 24 hours prior to casing & cement.
matthew.gomez	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.
matthew.gomez	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.
matthew.gomez	Cement is required to circulate on both surface and intermediate1 strings of casing.
matthew.gomez	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
matthew.gomez	File As Drilled C-102 and a directional Survey with C-104 completion packet.
matthew.gomez	Only fresh water and air are valid drilling fluids for surface casing to prevent possible shallow ground water contamination.

MEWBOURNE OIL COMPANY

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* (5th 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.

MEWBOURNE OIL COMPANY

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.

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OIL COMPANY

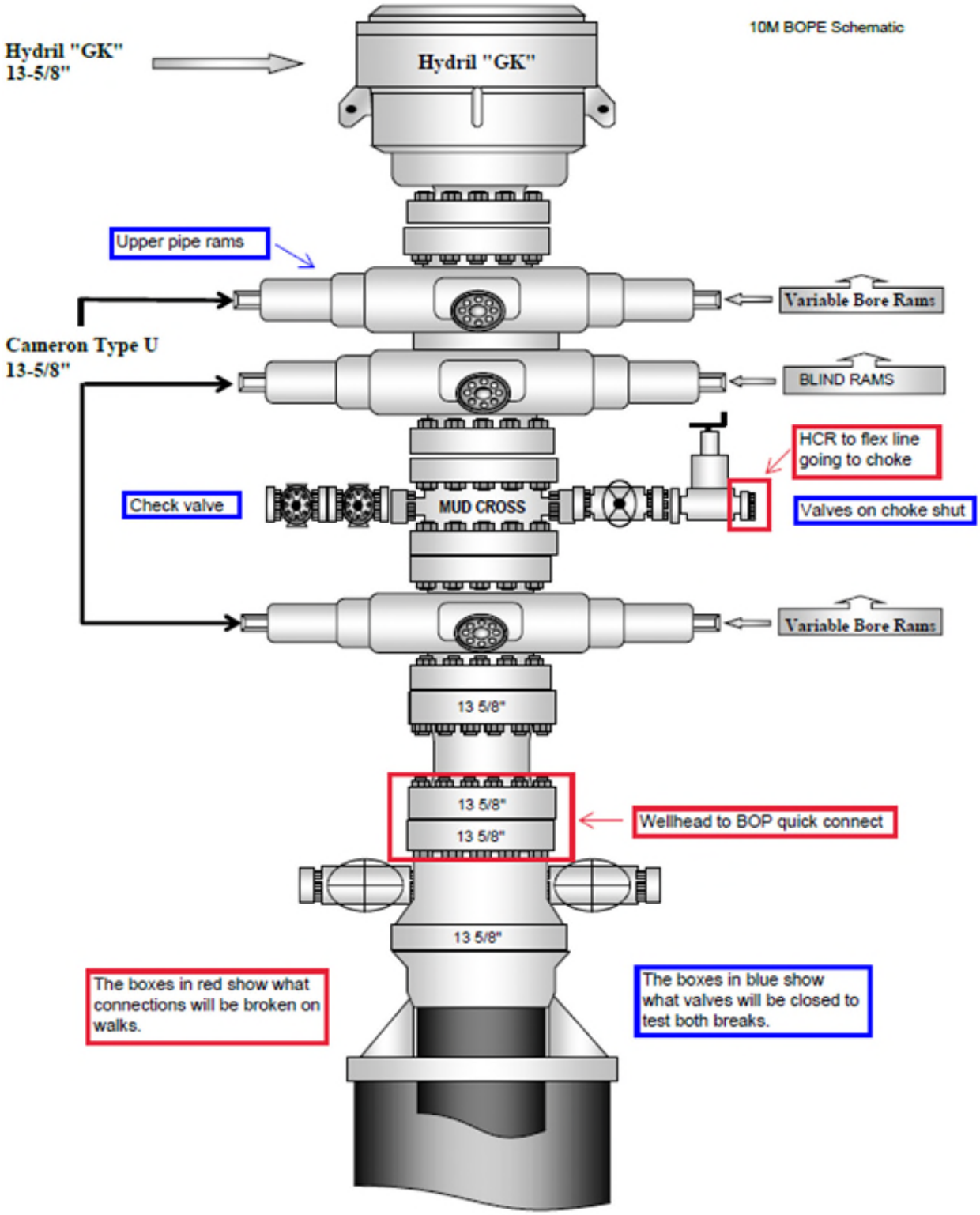

Figure 1. BOP diagram

MEWBOURNE
OIL COMPANY

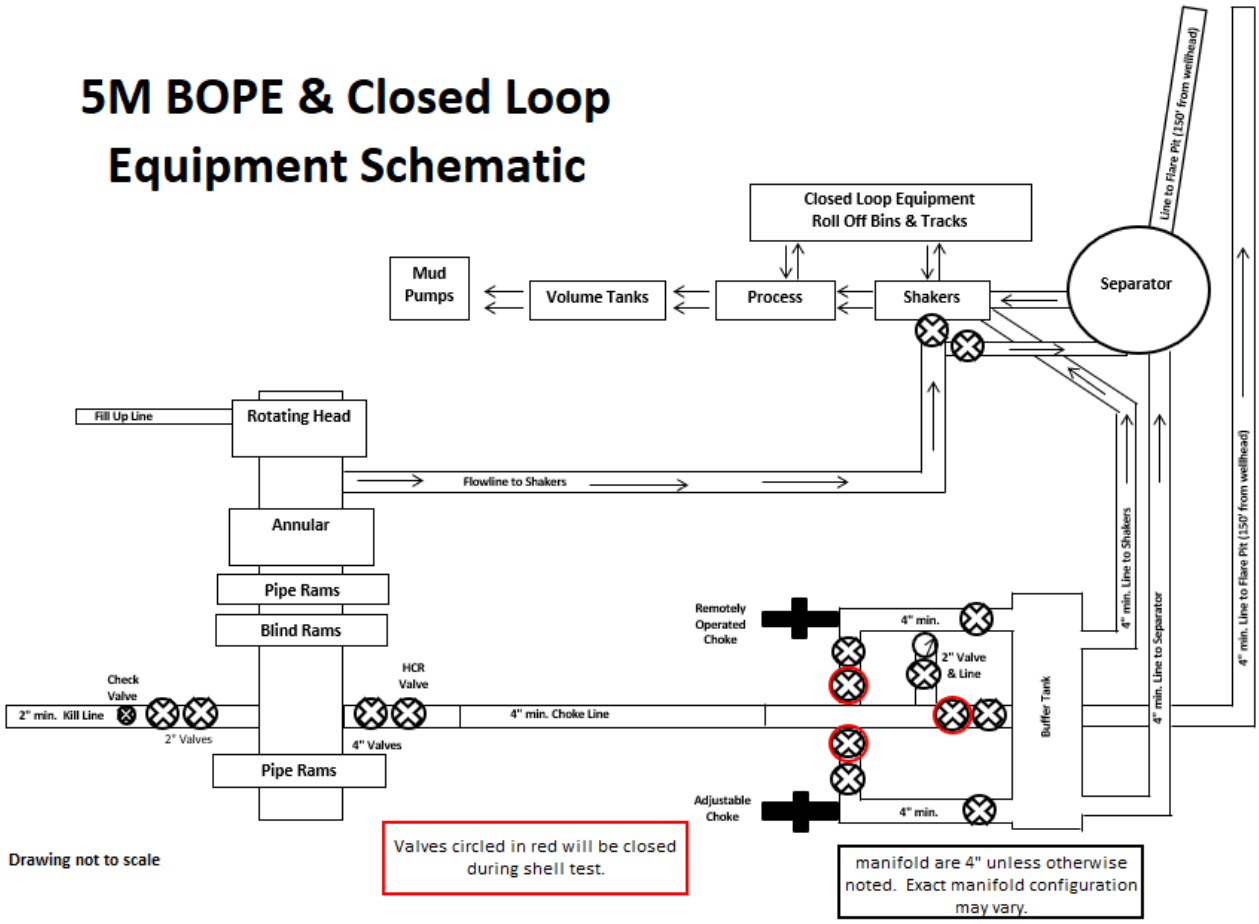

Figure 2. BOPE diagram

MEWBOURNE
OIL COMPANY

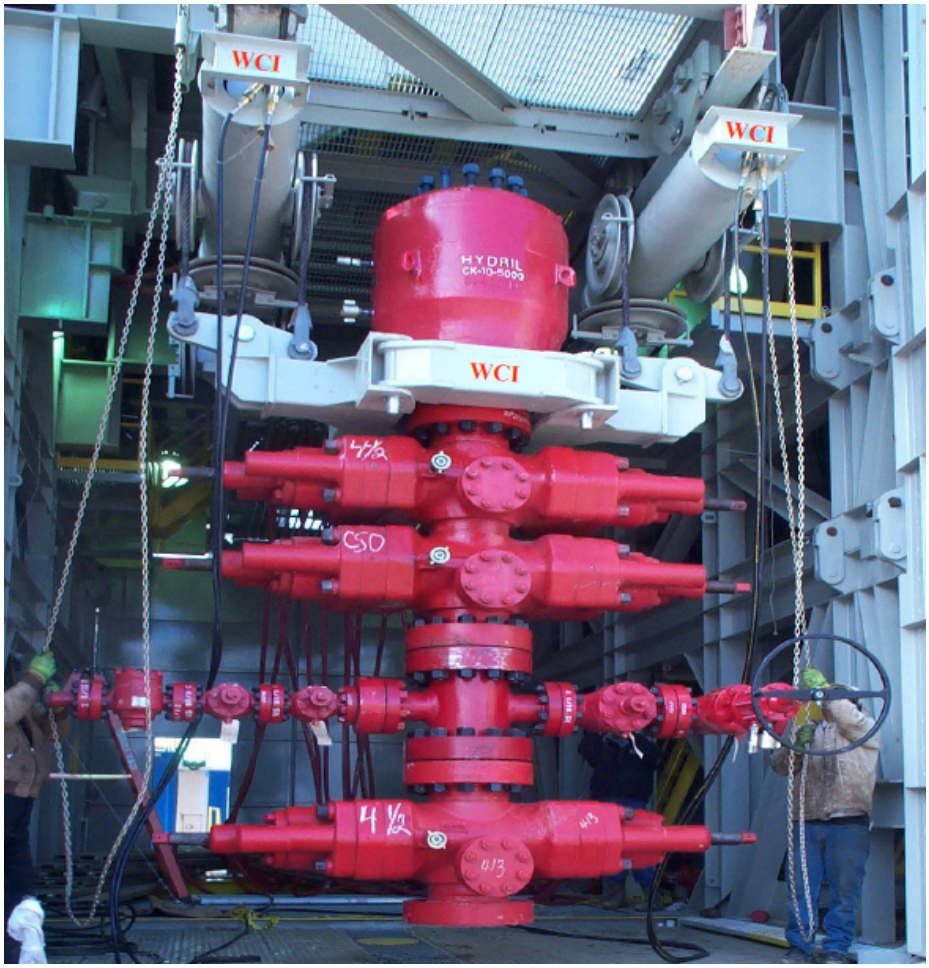

Figure 3. BOP handling system

MEWBOURNE
OIL COMPANY

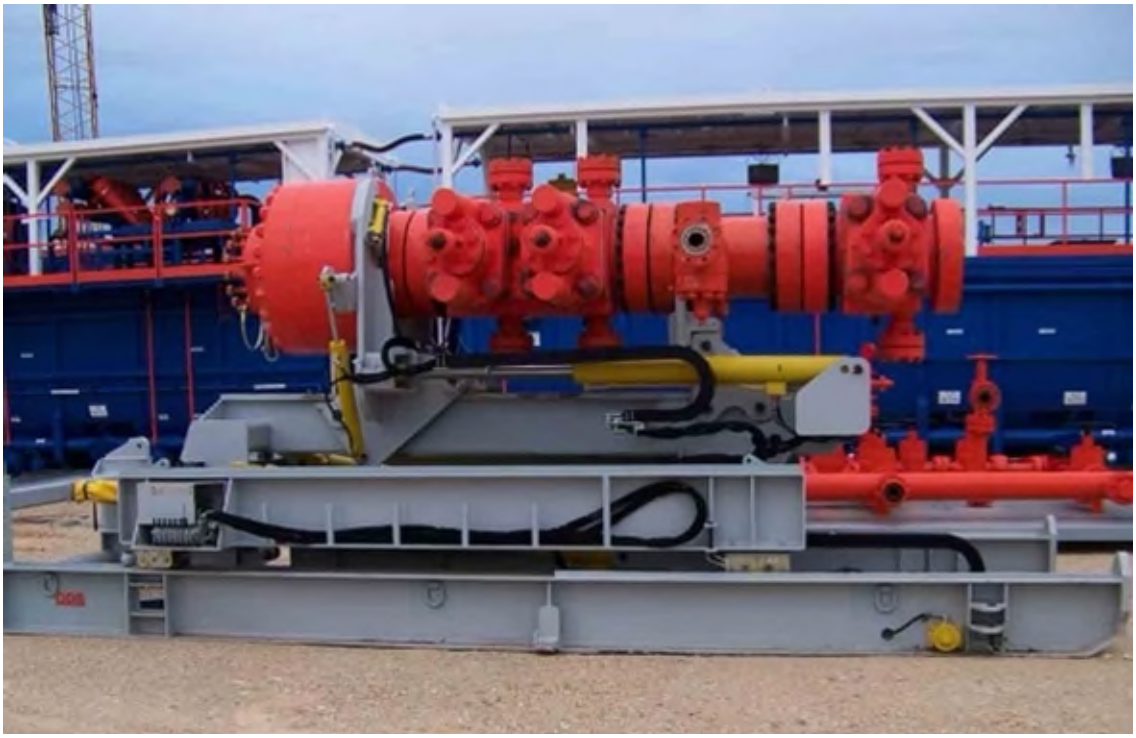

Figure 4. BOP handling system

MEWBOURNE
OIL COMPANY

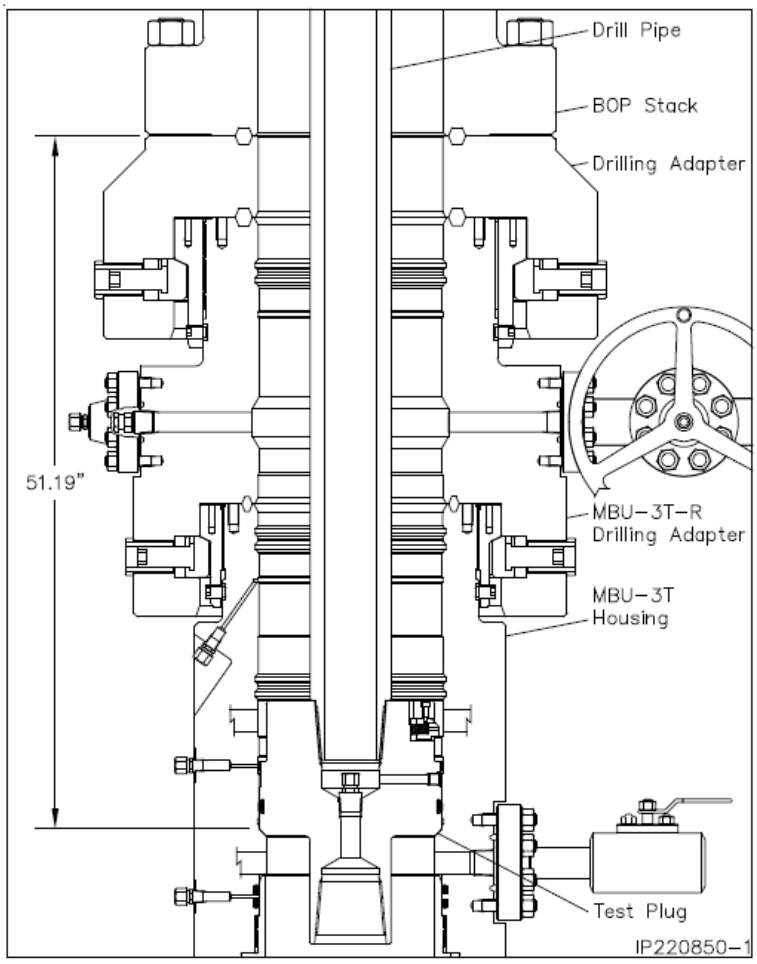

Figure 5. Cactus 5M wellhead with BOP quick connect

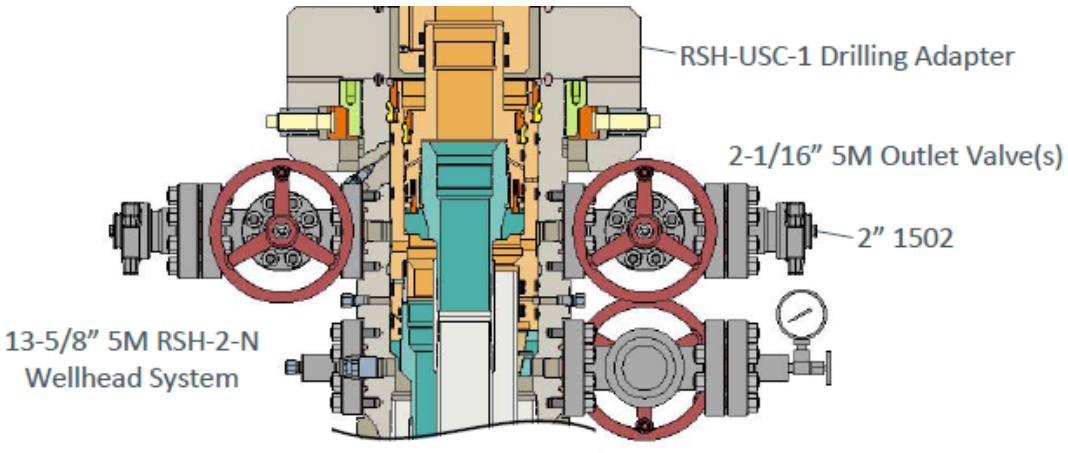

Figure 6. Vault 5M wellhead with BOP quick connect

MEWBOURNE OIL COMPANY

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 ⅝" 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

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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

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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

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Risks:

- Pressure build up in annulus before cementing
  - Contact BLM if a well control event occurs.
  - Rig up 3rd 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.

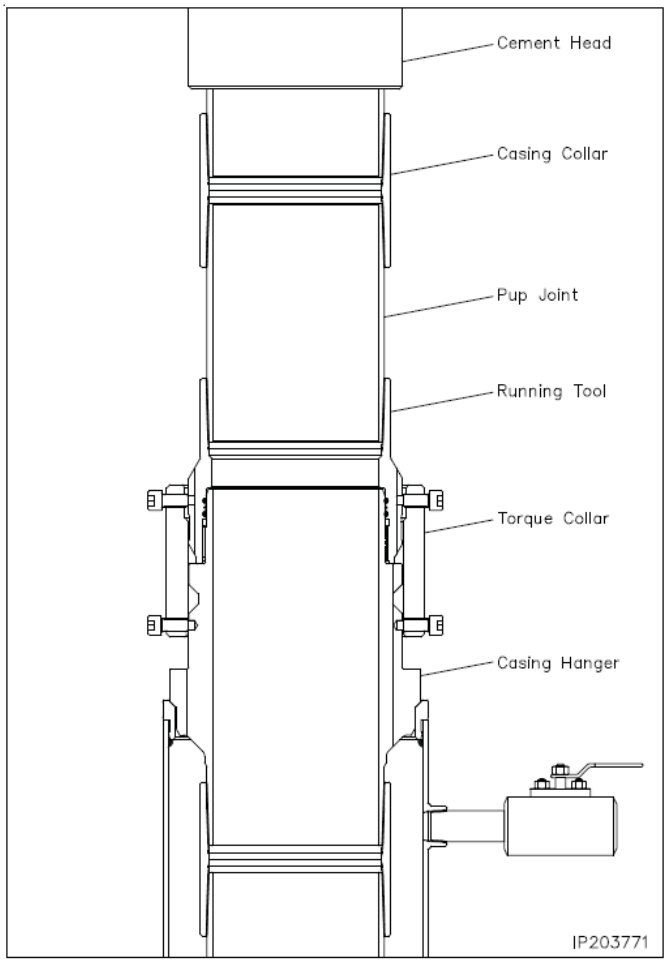

Figure 1. Cactus 13 3/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 13 3/8" pup joint and casing.

MEWBOURNE
OIL COMPANY

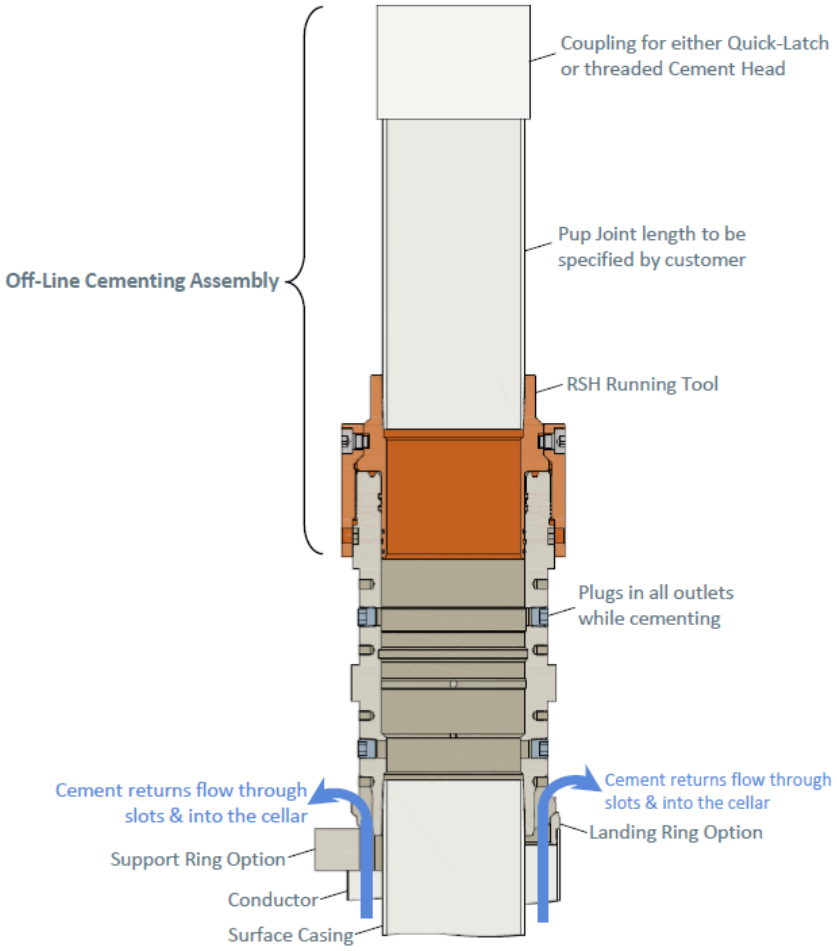

Figure 2. Vault 13 3/8” 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 13 3/8” pup joint and casing.

MEWBOURNE
OIL COMPANY

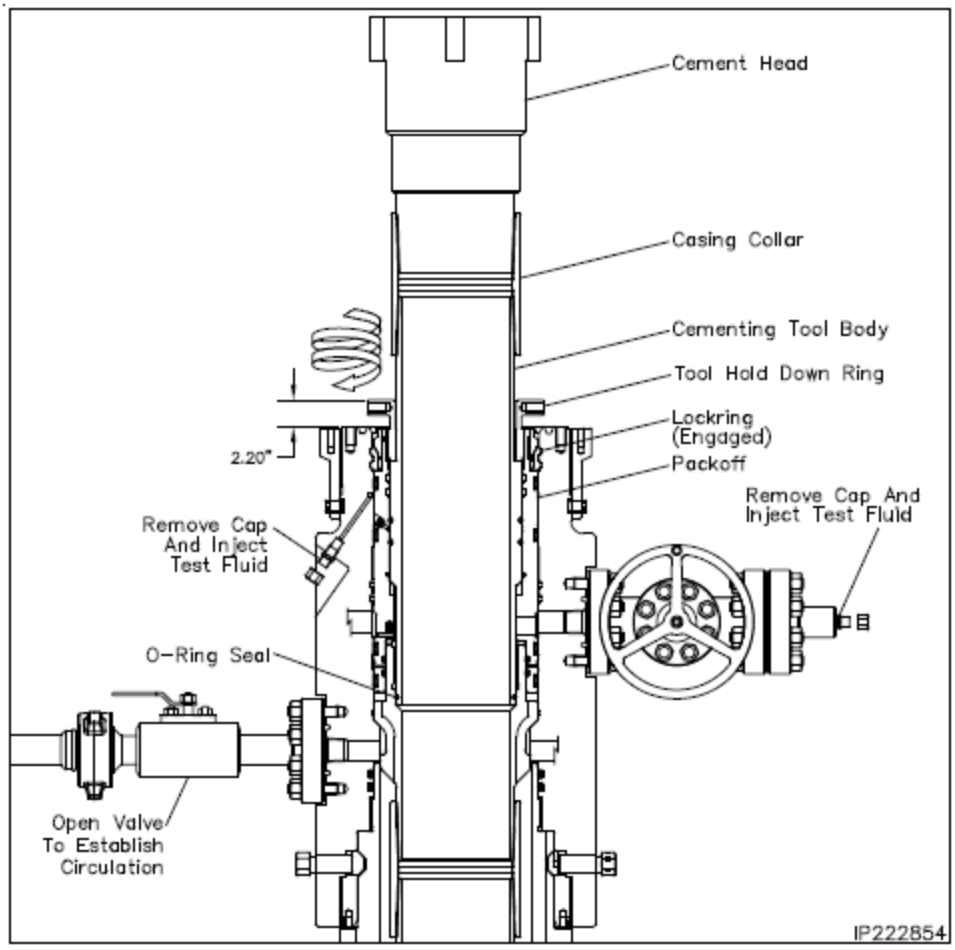

Figure 3. Cactus 9 5/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 9 5/8" pup joint and casing.

MEWBOURNE
OIL COMPANY

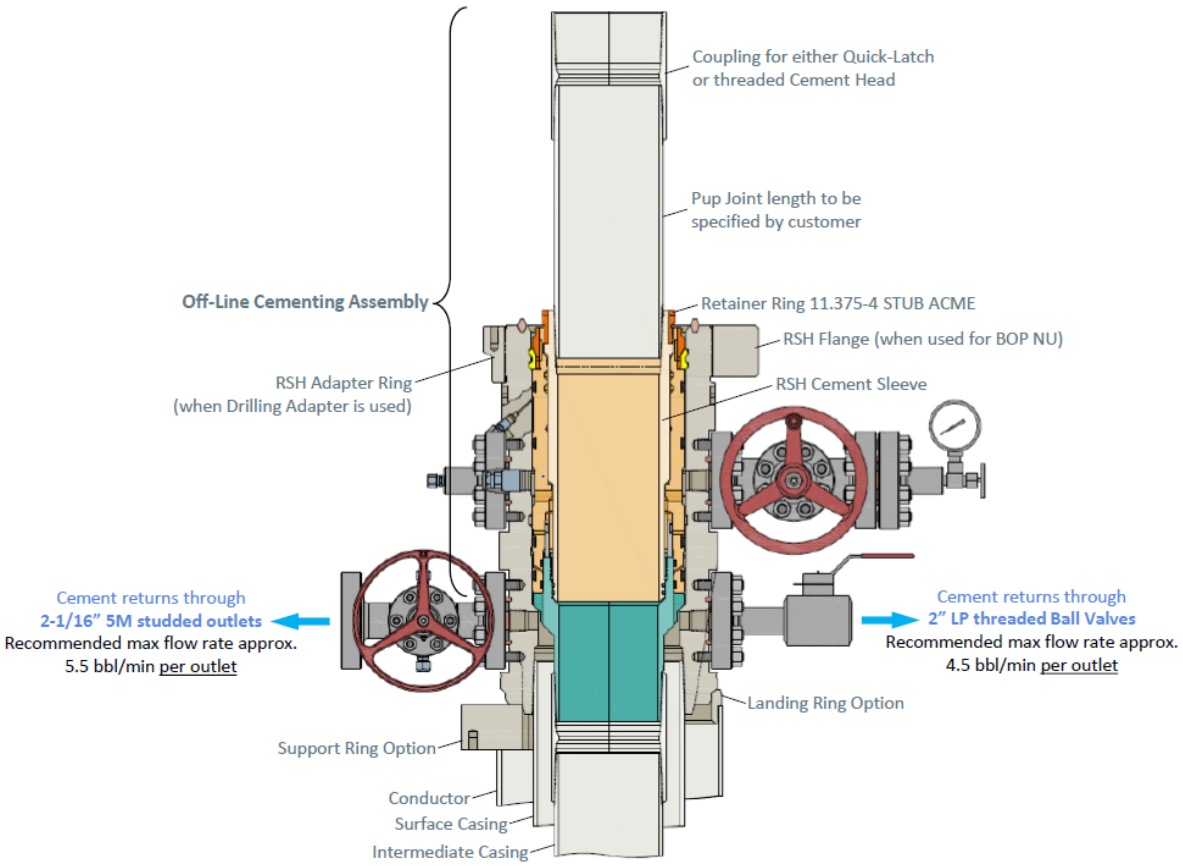

Figure 4. Vault 9 5/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 9 5/8" pup joint and casing.

MEWBOURNE
OIL COMPANY

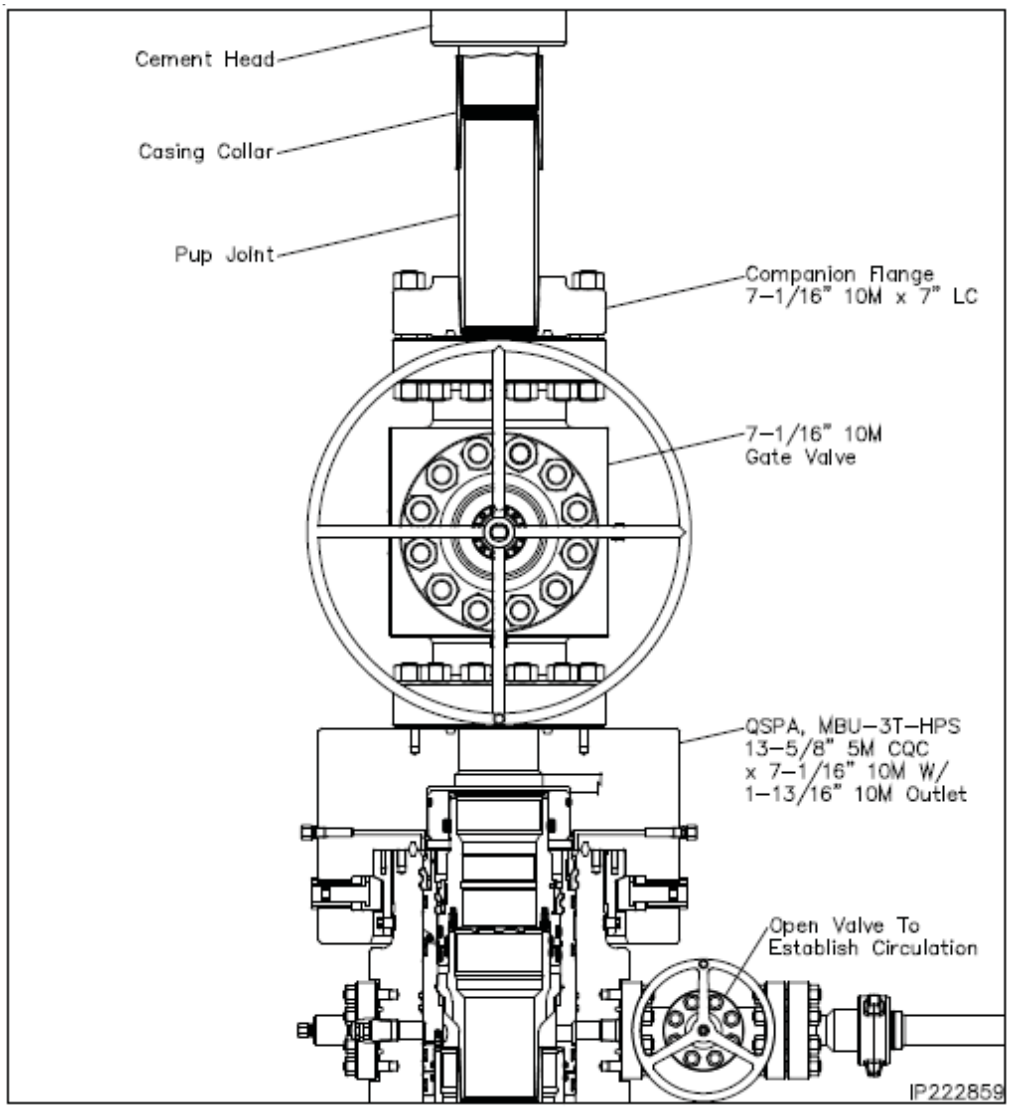

Figure 5. Cactus 7” 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7” pup joint and casing.

MEWBOURNE
OIL COMPANY

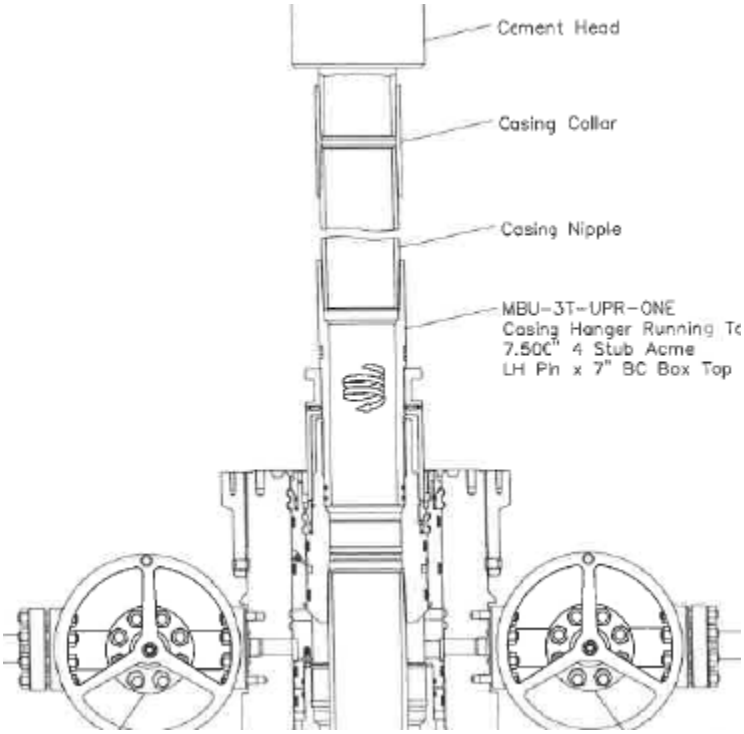

Figure 6. Cactus 7” 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7” pup joint and casing.

MEWBOURNE OIL COMPANY

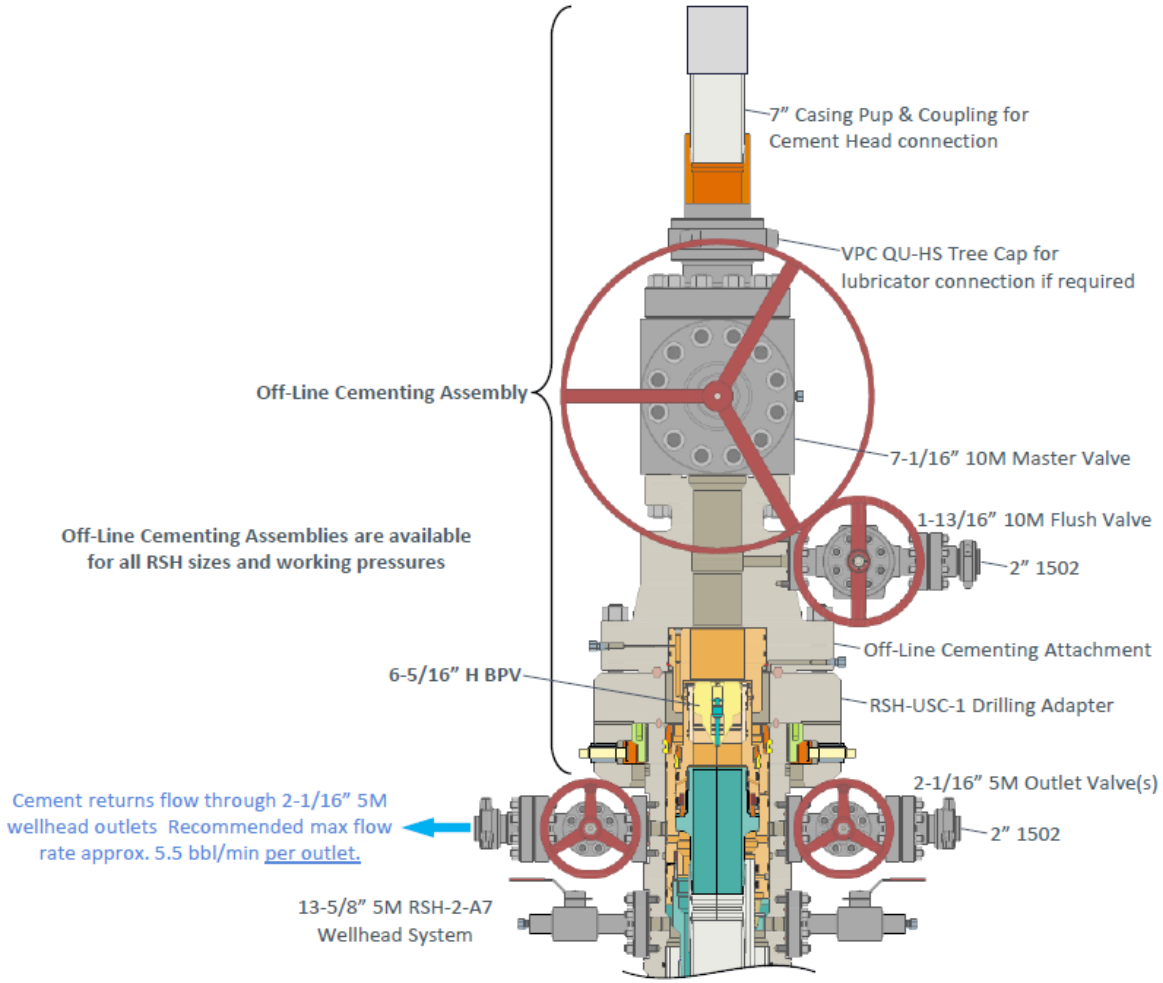

Figure 7. Vault 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.

MEWBOURNE
OIL COMPANY

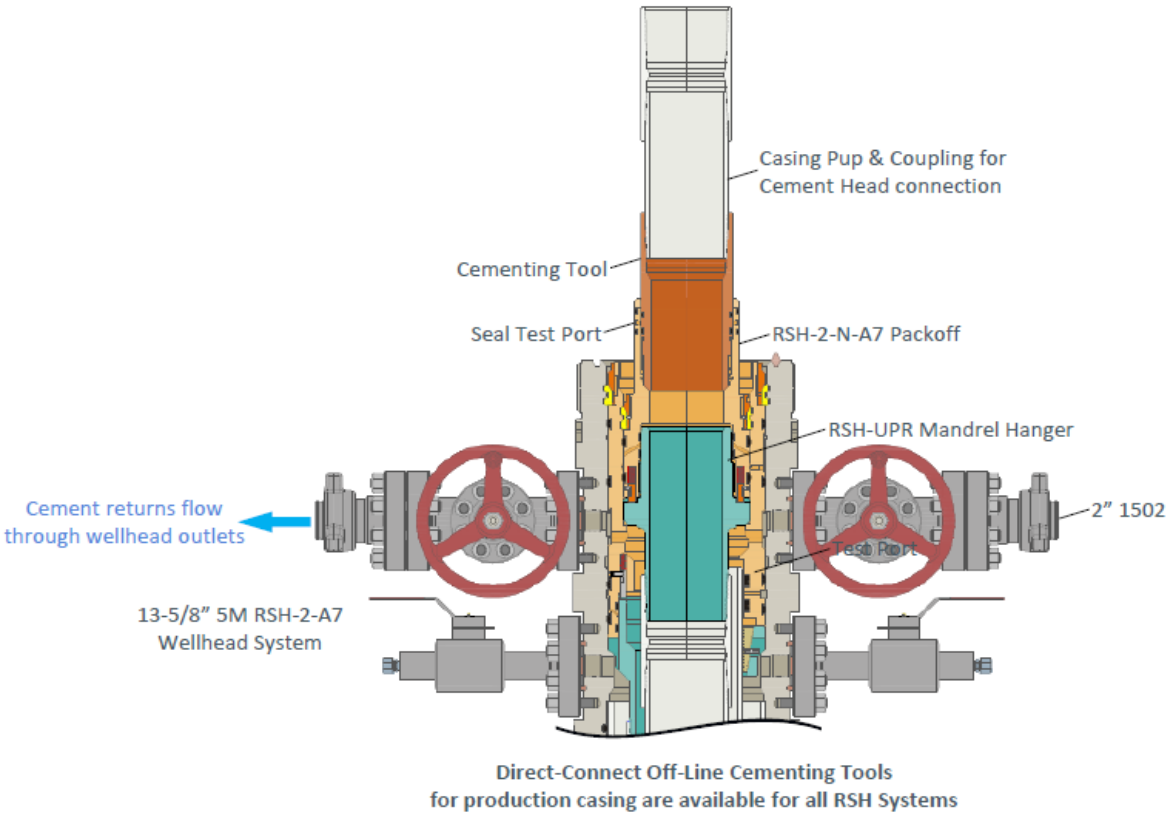

Figure 8. Vault 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.

MEWBOURNE
OIL COMPANY

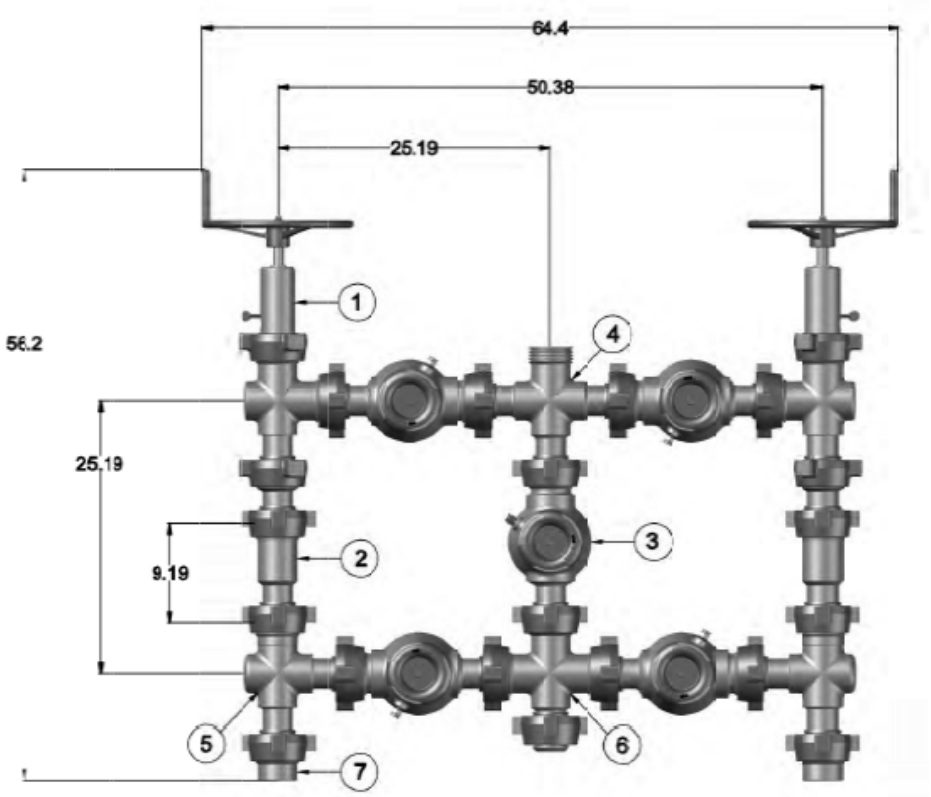

Figure 9. Five valve 15k choke manifold.

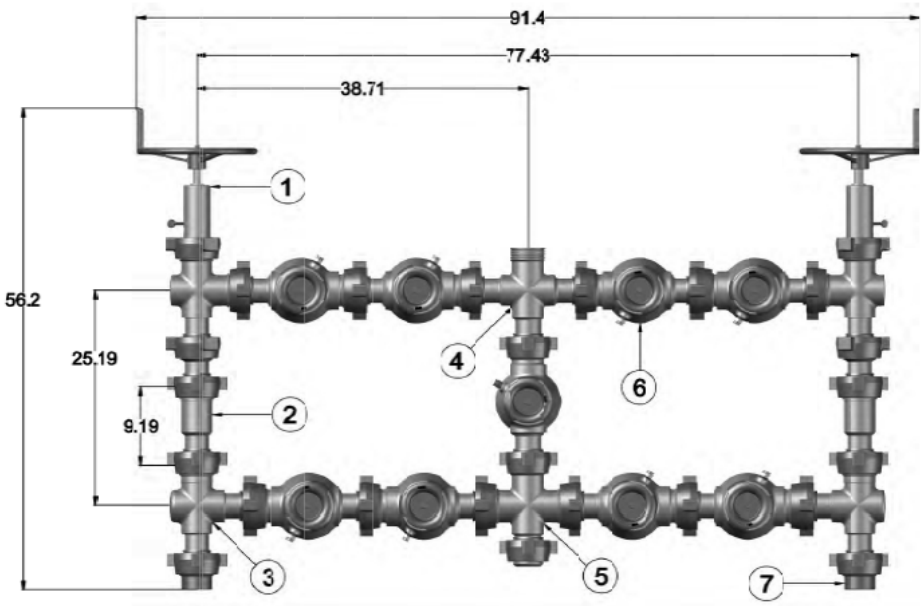

Figure 10. Nine valve 15k choke manifold.

Mewbourne Oil Company

Eddy County, New Mexico NAD 83
Yardbirds 27/34 Fee #522H
Sec 27, T23S, R28E
SHL: 200' FNL & 245' FWL, Sec 27
BHL: 100' FSL & 660' FWL, Sec 34

Plan: Design #1

Standard Planning Report

21 March, 2025

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Yardbirds 27/34 Fee #522H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3063.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3063.0usft (Original Well Elev)
Site:	Yardbirds 27/34 Fee #522H	**North Reference:**	Grid
Well:	Sec 27, T23S, R28E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FSL & 660' FWL, Sec 34		
Design:	Design #1		

Project Eddy County, New Mexico NAD 83

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

Site Yardbirds 27/34 Fee #522H

Site Position:		**Northing:**	466,724.40 usft	**Latitude:**	32.2828513
From:	Map	**Easting:**	618,717.90 usft	**Longitude:**	-104.0829381
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well Sec 27, T23S, R28E

Well Position	**+N/-S**	0.0 usft	**Northing:**	466,724.40 usft	**Latitude:**	32.2828513
	+E/-W	0.0 usft	**Easting:**	618,717.90 usft	**Longitude:**	-104.0829381
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	3,063.0 usft	**Ground Level:**	3,035.0 usft
Grid Convergence:		0.13 °				

Wellbore BHL: 100' FSL & 660' FWL, Sec 34

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/31/2014	7.39	60.07	48,219.93225841

Design Design #1

Audit Notes:

Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	177.82

Plan Survey Tool Program **Date** 3/21/2025

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	18,483.3	Design #1 (BHL: 100' FSL & 660'		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,450.0	0.00	0.00	2,450.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,717.0	5.34	64.08	2,716.6	5.4	11.2	2.00	2.00	0.00	64.08	
7,384.5	5.34	64.08	7,363.8	195.3	401.8	0.00	0.00	0.00	0.00	
7,651.4	0.00	0.00	7,630.4	200.7	413.0	2.00	-2.00	0.00	180.00	KOP: 10' FNL & 660' I
8,553.2	90.23	180.11	8,203.0	-374.2	411.9	10.01	10.01	0.00	-179.89	
18,483.3	90.23	180.11	8,163.0	-10,304.2	392.1	0.00	0.00	0.00	0.00	BHL: 100' FSL & 660'

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Yardbirds 27/34 Fee #522H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3063.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3063.0usft (Original Well Elev)
Site:	Yardbirds 27/34 Fee #522H	**North Reference:**	Grid
Well:	Sec 27, T23S, R28E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FSL & 660' FWL, Sec 34		
Design:	Design #1		

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL: 200' FNL & 245' FWL (27)									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,450.0	0.00	0.00	2,450.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	1.00	64.08	2,500.0	0.2	0.4	-0.2	2.00	2.00	0.00
2,600.0	3.00	64.08	2,599.9	1.7	3.5	-1.6	2.00	2.00	0.00
2,700.0	5.00	64.08	2,699.7	4.8	9.8	-4.4	2.00	2.00	0.00
2,717.0	5.34	64.08	2,716.6	5.4	11.2	-5.0	2.00	2.00	0.00
2,800.0	5.34	64.08	2,799.3	8.8	18.1	-8.1	0.00	0.00	0.00
2,900.0	5.34	64.08	2,898.8	12.9	26.5	-11.9	0.00	0.00	0.00
3,000.0	5.34	64.08	2,998.4	16.9	34.9	-15.6	0.00	0.00	0.00
3,100.0	5.34	64.08	3,098.0	21.0	43.2	-19.4	0.00	0.00	0.00
3,200.0	5.34	64.08	3,197.5	25.1	51.6	-23.1	0.00	0.00	0.00
3,300.0	5.34	64.08	3,297.1	29.1	60.0	-26.8	0.00	0.00	0.00
3,400.0	5.34	64.08	3,396.7	33.2	68.3	-30.6	0.00	0.00	0.00
3,500.0	5.34	64.08	3,496.2	37.3	76.7	-34.3	0.00	0.00	0.00
3,600.0	5.34	64.08	3,595.8	41.3	85.1	-38.1	0.00	0.00	0.00
3,700.0	5.34	64.08	3,695.3	45.4	93.5	-41.8	0.00	0.00	0.00
3,800.0	5.34	64.08	3,794.9	49.5	101.8	-45.6	0.00	0.00	0.00
3,900.0	5.34	64.08	3,894.5	53.5	110.2	-49.3	0.00	0.00	0.00
4,000.0	5.34	64.08	3,994.0	57.6	118.6	-53.1	0.00	0.00	0.00
4,100.0	5.34	64.08	4,093.6	61.7	126.9	-56.8	0.00	0.00	0.00
4,200.0	5.34	64.08	4,193.2	65.8	135.3	-60.6	0.00	0.00	0.00
4,300.0	5.34	64.08	4,292.7	69.8	143.7	-64.3	0.00	0.00	0.00
4,400.0	5.34	64.08	4,392.3	73.9	152.0	-68.0	0.00	0.00	0.00
4,500.0	5.34	64.08	4,491.9	78.0	160.4	-71.8	0.00	0.00	0.00
4,600.0	5.34	64.08	4,591.4	82.0	168.8	-75.5	0.00	0.00	0.00
4,700.0	5.34	64.08	4,691.0	86.1	177.1	-79.3	0.00	0.00	0.00
4,800.0	5.34	64.08	4,790.6	90.2	185.5	-83.0	0.00	0.00	0.00
4,900.0	5.34	64.08	4,890.1	94.2	193.9	-86.8	0.00	0.00	0.00
5,000.0	5.34	64.08	4,989.7	98.3	202.3	-90.5	0.00	0.00	0.00

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Yardbirds 27/34 Fee #522H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3063.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3063.0usft (Original Well Elev)
Site:	Yardbirds 27/34 Fee #522H	**North Reference:**	Grid
Well:	Sec 27, T23S, R28E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FSL & 660' FWL, Sec 34		
Design:	Design #1		

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)
5,100.0	5.34	64.08	5,089.3	102.4	210.6	-94.3	0.00	0.00	0.00
5,200.0	5.34	64.08	5,188.8	106.4	219.0	-98.0	0.00	0.00	0.00
5,300.0	5.34	64.08	5,288.4	110.5	227.4	-101.8	0.00	0.00	0.00
5,400.0	5.34	64.08	5,388.0	114.6	235.7	-105.5	0.00	0.00	0.00
5,500.0	5.34	64.08	5,487.5	118.6	244.1	-109.3	0.00	0.00	0.00
5,600.0	5.34	64.08	5,587.1	122.7	252.5	-113.0	0.00	0.00	0.00
5,700.0	5.34	64.08	5,686.7	126.8	260.8	-116.7	0.00	0.00	0.00
5,800.0	5.34	64.08	5,786.2	130.8	269.2	-120.5	0.00	0.00	0.00
5,900.0	5.34	64.08	5,885.8	134.9	277.6	-124.2	0.00	0.00	0.00
6,000.0	5.34	64.08	5,985.4	139.0	285.9	-128.0	0.00	0.00	0.00
6,100.0	5.34	64.08	6,084.9	143.0	294.3	-131.7	0.00	0.00	0.00
6,200.0	5.34	64.08	6,184.5	147.1	302.7	-135.5	0.00	0.00	0.00
6,300.0	5.34	64.08	6,284.1	151.2	311.1	-139.2	0.00	0.00	0.00
6,400.0	5.34	64.08	6,383.6	155.2	319.4	-143.0	0.00	0.00	0.00
6,500.0	5.34	64.08	6,483.2	159.3	327.8	-146.7	0.00	0.00	0.00
6,600.0	5.34	64.08	6,582.8	163.4	336.2	-150.5	0.00	0.00	0.00
6,700.0	5.34	64.08	6,682.3	167.4	344.5	-154.2	0.00	0.00	0.00
6,800.0	5.34	64.08	6,781.9	171.5	352.9	-158.0	0.00	0.00	0.00
6,900.0	5.34	64.08	6,881.5	175.6	361.3	-161.7	0.00	0.00	0.00
7,000.0	5.34	64.08	6,981.0	179.6	369.6	-165.4	0.00	0.00	0.00
7,100.0	5.34	64.08	7,080.6	183.7	378.0	-169.2	0.00	0.00	0.00
7,200.0	5.34	64.08	7,180.2	187.8	386.4	-172.9	0.00	0.00	0.00
7,300.0	5.34	64.08	7,279.7	191.8	394.8	-176.7	0.00	0.00	0.00
7,384.5	5.34	64.08	7,363.8	195.3	401.8	-179.8	0.00	0.00	0.00
7,400.0	5.03	64.08	7,379.3	195.9	403.1	-180.4	2.00	-2.00	0.00
7,500.0	3.03	64.08	7,479.0	199.0	409.4	-183.2	2.00	-2.00	0.00
7,600.0	1.03	64.08	7,579.0	200.5	412.6	-184.7	2.00	-2.00	0.00
7,651.4	0.00	0.00	7,630.4	200.7	413.0	-184.9	2.00	-2.00	0.00
KOP: 10' FNL & 660' FWL (27)									
7,700.0	4.86	180.11	7,678.9	198.6	413.0	-182.8	10.01	10.01	0.00
7,750.0	9.86	180.11	7,728.5	192.2	413.0	-176.4	10.01	10.01	0.00
7,800.0	14.87	180.11	7,777.3	181.5	413.0	-165.7	10.01	10.01	0.00
7,850.0	19.87	180.11	7,825.0	166.6	412.9	-150.8	10.01	10.01	0.00
7,900.0	24.87	180.11	7,871.2	147.6	412.9	-131.8	10.01	10.01	0.00
7,950.0	29.88	180.11	7,915.6	124.6	412.8	-108.8	10.01	10.01	0.00
7,982.4	33.11	180.11	7,943.2	107.7	412.8	-91.9	10.01	10.01	0.00
FTP: 100' FNL & 660' FWL (27)									
8,000.0	34.88	180.11	7,957.8	97.8	412.8	-82.1	10.01	10.01	0.00
8,050.0	39.88	180.11	7,997.6	67.5	412.7	-51.7	10.01	10.01	0.00
8,100.0	44.89	180.11	8,034.5	33.8	412.7	-18.1	10.01	10.01	0.00
8,150.0	49.89	180.11	8,068.3	-3.0	412.6	18.7	10.01	10.01	0.00
8,200.0	54.89	180.11	8,098.8	-42.6	412.5	58.2	10.01	10.01	0.00
8,250.0	59.89	180.11	8,125.8	-84.7	412.4	100.3	10.01	10.01	0.00
8,300.0	64.90	180.11	8,148.9	-129.0	412.3	144.6	10.01	10.01	0.00
8,350.0	69.90	180.11	8,168.1	-175.1	412.3	190.7	10.01	10.01	0.00
8,400.0	74.90	180.11	8,183.2	-222.8	412.2	238.3	10.01	10.01	0.00
8,450.0	79.91	180.11	8,194.1	-271.6	412.1	287.0	10.01	10.01	0.00
8,500.0	84.91	180.11	8,200.7	-321.1	412.0	336.5	10.01	10.01	0.00
8,553.2	90.23	180.11	8,203.0	-374.2	411.9	389.6	10.01	10.01	0.00
LP: 584' FNL & 660' FWL (27)									
8,600.0	90.23	180.11	8,202.8	-421.0	411.8	436.4	0.00	0.00	0.00
8,700.0	90.23	180.11	8,202.4	-521.0	411.6	536.3	0.00	0.00	0.00
8,800.0	90.23	180.11	8,202.0	-621.0	411.4	636.2	0.00	0.00	0.00

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Yardbirds 27/34 Fee #522H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3063.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3063.0usft (Original Well Elev)
Site:	Yardbirds 27/34 Fee #522H	**North Reference:**	Grid
Well:	Sec 27, T23S, R28E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FSL & 660' FWL, Sec 34		
Design:	Design #1		

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)
8,900.0	90.23	180.11	8,201.6	-721.0	411.2	736.1	0.00	0.00	0.00
9,000.0	90.23	180.11	8,201.2	-821.0	411.0	836.1	0.00	0.00	0.00
9,100.0	90.23	180.11	8,200.8	-921.0	410.8	936.0	0.00	0.00	0.00
9,200.0	90.23	180.11	8,200.4	-1,021.0	410.6	1,035.9	0.00	0.00	0.00
9,300.0	90.23	180.11	8,200.0	-1,121.0	410.4	1,135.8	0.00	0.00	0.00
9,400.0	90.23	180.11	8,199.6	-1,221.0	410.2	1,235.7	0.00	0.00	0.00
9,500.0	90.23	180.11	8,199.2	-1,321.0	410.0	1,335.7	0.00	0.00	0.00
9,600.0	90.23	180.11	8,198.8	-1,421.0	409.8	1,435.6	0.00	0.00	0.00
9,700.0	90.23	180.11	8,198.4	-1,521.0	409.6	1,535.5	0.00	0.00	0.00
9,800.0	90.23	180.11	8,198.0	-1,621.0	409.4	1,635.4	0.00	0.00	0.00
9,900.0	90.23	180.11	8,197.6	-1,721.0	409.2	1,735.3	0.00	0.00	0.00
10,000.0	90.23	180.11	8,197.2	-1,821.0	409.0	1,835.3	0.00	0.00	0.00
10,100.0	90.23	180.11	8,196.8	-1,921.0	408.8	1,935.2	0.00	0.00	0.00
10,200.0	90.23	180.11	8,196.4	-2,021.0	408.6	2,035.1	0.00	0.00	0.00
10,300.0	90.23	180.11	8,196.0	-2,121.0	408.4	2,135.0	0.00	0.00	0.00
10,400.0	90.23	180.11	8,195.6	-2,221.0	408.2	2,234.9	0.00	0.00	0.00
10,500.0	90.23	180.11	8,195.2	-2,321.0	408.0	2,334.8	0.00	0.00	0.00
10,600.0	90.23	180.11	8,194.8	-2,421.0	407.8	2,434.8	0.00	0.00	0.00
10,700.0	90.23	180.11	8,194.4	-2,521.0	407.6	2,534.7	0.00	0.00	0.00
10,800.0	90.23	180.11	8,193.9	-2,621.0	407.4	2,634.6	0.00	0.00	0.00
10,900.0	90.23	180.11	8,193.5	-2,721.0	407.2	2,734.5	0.00	0.00	0.00
11,000.0	90.23	180.11	8,193.1	-2,821.0	407.0	2,834.4	0.00	0.00	0.00
11,100.0	90.23	180.11	8,192.7	-2,921.0	406.8	2,934.4	0.00	0.00	0.00
11,200.0	90.23	180.11	8,192.3	-3,021.0	406.6	3,034.3	0.00	0.00	0.00
11,300.0	90.23	180.11	8,191.9	-3,121.0	406.4	3,134.2	0.00	0.00	0.00
11,400.0	90.23	180.11	8,191.5	-3,221.0	406.2	3,234.1	0.00	0.00	0.00
11,500.0	90.23	180.11	8,191.1	-3,321.0	406.0	3,334.0	0.00	0.00	0.00
11,600.0	90.23	180.11	8,190.7	-3,421.0	405.8	3,434.0	0.00	0.00	0.00
11,700.0	90.23	180.11	8,190.3	-3,521.0	405.6	3,533.9	0.00	0.00	0.00
11,800.0	90.23	180.11	8,189.9	-3,621.0	405.4	3,633.8	0.00	0.00	0.00
11,900.0	90.23	180.11	8,189.5	-3,721.0	405.2	3,733.7	0.00	0.00	0.00
12,000.0	90.23	180.11	8,189.1	-3,821.0	405.0	3,833.6	0.00	0.00	0.00
12,100.0	90.23	180.11	8,188.7	-3,921.0	404.8	3,933.6	0.00	0.00	0.00
12,200.0	90.23	180.11	8,188.3	-4,021.0	404.6	4,033.5	0.00	0.00	0.00
12,300.0	90.23	180.11	8,187.9	-4,121.0	404.4	4,133.4	0.00	0.00	0.00
12,400.0	90.23	180.11	8,187.5	-4,221.0	404.2	4,233.3	0.00	0.00	0.00
12,500.0	90.23	180.11	8,187.1	-4,321.0	404.0	4,333.2	0.00	0.00	0.00
12,600.0	90.23	180.11	8,186.7	-4,421.0	403.8	4,433.2	0.00	0.00	0.00
12,700.0	90.23	180.11	8,186.3	-4,521.0	403.6	4,533.1	0.00	0.00	0.00
12,800.0	90.23	180.11	8,185.9	-4,621.0	403.4	4,633.0	0.00	0.00	0.00
12,900.0	90.23	180.11	8,185.5	-4,721.0	403.2	4,732.9	0.00	0.00	0.00
13,000.0	90.23	180.11	8,185.1	-4,821.0	403.0	4,832.8	0.00	0.00	0.00
13,100.0	90.23	180.11	8,184.7	-4,921.0	402.8	4,932.7	0.00	0.00	0.00
13,200.0	90.23	180.11	8,184.3	-5,021.0	402.6	5,032.7	0.00	0.00	0.00
13,300.0	90.23	180.11	8,183.9	-5,121.0	402.4	5,132.6	0.00	0.00	0.00
13,400.0	90.23	180.11	8,183.5	-5,221.0	402.2	5,232.5	0.00	0.00	0.00
13,500.0	90.23	180.11	8,183.1	-5,321.0	402.0	5,332.4	0.00	0.00	0.00
13,600.0	90.23	180.11	8,182.7	-5,421.0	401.8	5,432.3	0.00	0.00	0.00
13,700.0	90.23	180.11	8,182.3	-5,521.0	401.6	5,532.3	0.00	0.00	0.00
13,800.0	90.23	180.11	8,181.9	-5,621.0	401.4	5,632.2	0.00	0.00	0.00
13,900.0	90.23	180.11	8,181.5	-5,721.0	401.2	5,732.1	0.00	0.00	0.00
14,000.0	90.23	180.11	8,181.1	-5,821.0	401.0	5,832.0	0.00	0.00	0.00
14,100.0	90.23	180.11	8,180.7	-5,921.0	400.8	5,931.9	0.00	0.00	0.00
14,200.0	90.23	180.11	8,180.3	-6,021.0	400.6	6,031.9	0.00	0.00	0.00

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Yardbirds 27/34 Fee #522H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3063.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3063.0usft (Original Well Elev)
Site:	Yardbirds 27/34 Fee #522H	**North Reference:**	Grid
Well:	Sec 27, T23S, R28E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FSL & 660' FWL, Sec 34		
Design:	Design #1		

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)
14,300.0	90.23	180.11	8,179.9	-6,121.0	400.4	6,131.8	0.00	0.00	0.00
14,400.0	90.23	180.11	8,179.4	-6,221.0	400.2	6,231.7	0.00	0.00	0.00
14,500.0	90.23	180.11	8,179.0	-6,321.0	400.0	6,331.6	0.00	0.00	0.00
14,600.0	90.23	180.11	8,178.6	-6,421.0	399.8	6,431.5	0.00	0.00	0.00
14,700.0	90.23	180.11	8,178.2	-6,521.0	399.6	6,531.5	0.00	0.00	0.00
14,800.0	90.23	180.11	8,177.8	-6,621.0	399.4	6,631.4	0.00	0.00	0.00
14,900.0	90.23	180.11	8,177.4	-6,721.0	399.2	6,731.3	0.00	0.00	0.00
15,000.0	90.23	180.11	8,177.0	-6,821.0	399.0	6,831.2	0.00	0.00	0.00
15,100.0	90.23	180.11	8,176.6	-6,921.0	398.8	6,931.1	0.00	0.00	0.00
15,200.0	90.23	180.11	8,176.2	-7,021.0	398.6	7,031.0	0.00	0.00	0.00
15,300.0	90.23	180.11	8,175.8	-7,121.0	398.4	7,131.0	0.00	0.00	0.00
15,400.0	90.23	180.11	8,175.4	-7,221.0	398.2	7,230.9	0.00	0.00	0.00
15,500.0	90.23	180.11	8,175.0	-7,321.0	398.0	7,330.8	0.00	0.00	0.00
15,600.0	90.23	180.11	8,174.6	-7,421.0	397.8	7,430.7	0.00	0.00	0.00
15,700.0	90.23	180.11	8,174.2	-7,521.0	397.6	7,530.6	0.00	0.00	0.00
15,800.0	90.23	180.11	8,173.8	-7,621.0	397.4	7,630.6	0.00	0.00	0.00
15,900.0	90.23	180.11	8,173.4	-7,721.0	397.2	7,730.5	0.00	0.00	0.00
16,000.0	90.23	180.11	8,173.0	-7,821.0	397.0	7,830.4	0.00	0.00	0.00
16,100.0	90.23	180.11	8,172.6	-7,921.0	396.8	7,930.3	0.00	0.00	0.00
16,200.0	90.23	180.11	8,172.2	-8,021.0	396.6	8,030.2	0.00	0.00	0.00
16,300.0	90.23	180.11	8,171.8	-8,121.0	396.4	8,130.2	0.00	0.00	0.00
16,400.0	90.23	180.11	8,171.4	-8,221.0	396.2	8,230.1	0.00	0.00	0.00
16,500.0	90.23	180.11	8,171.0	-8,321.0	396.0	8,330.0	0.00	0.00	0.00
16,600.0	90.23	180.11	8,170.6	-8,421.0	395.8	8,429.9	0.00	0.00	0.00
16,700.0	90.23	180.11	8,170.2	-8,521.0	395.6	8,529.8	0.00	0.00	0.00
16,800.0	90.23	180.11	8,169.8	-8,621.0	395.4	8,629.8	0.00	0.00	0.00
16,900.0	90.23	180.11	8,169.4	-8,720.9	395.2	8,729.7	0.00	0.00	0.00
17,000.0	90.23	180.11	8,169.0	-8,820.9	395.1	8,829.6	0.00	0.00	0.00
17,100.0	90.23	180.11	8,168.6	-8,920.9	394.9	8,929.5	0.00	0.00	0.00
17,200.0	90.23	180.11	8,168.2	-9,020.9	394.7	9,029.4	0.00	0.00	0.00
17,300.0	90.23	180.11	8,167.8	-9,120.9	394.5	9,129.3	0.00	0.00	0.00
17,400.0	90.23	180.11	8,167.4	-9,220.9	394.3	9,229.3	0.00	0.00	0.00
17,500.0	90.23	180.11	8,167.0	-9,320.9	394.1	9,329.2	0.00	0.00	0.00
17,600.0	90.23	180.11	8,166.6	-9,420.9	393.9	9,429.1	0.00	0.00	0.00
17,700.0	90.23	180.11	8,166.2	-9,520.9	393.7	9,529.0	0.00	0.00	0.00
17,800.0	90.23	180.11	8,165.8	-9,620.9	393.5	9,628.9	0.00	0.00	0.00
17,900.0	90.23	180.11	8,165.3	-9,720.9	393.3	9,728.9	0.00	0.00	0.00
18,000.0	90.23	180.11	8,164.9	-9,820.9	393.1	9,828.8	0.00	0.00	0.00
18,100.0	90.23	180.11	8,164.5	-9,920.9	392.9	9,928.7	0.00	0.00	0.00
18,200.0	90.23	180.11	8,164.1	-10,020.9	392.7	10,028.6	0.00	0.00	0.00
18,300.0	90.23	180.11	8,163.7	-10,120.9	392.5	10,128.5	0.00	0.00	0.00
18,400.0	90.23	180.11	8,163.3	-10,220.9	392.3	10,228.5	0.00	0.00	0.00
18,483.3	90.23	180.11	8,163.0	-10,304.2	392.1	10,311.7	0.00	0.00	0.00
BHL: 100' FSL & 660' FWL (34)									

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Yardbirds 27/34 Fee #522H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3063.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3063.0usft (Original Well Elev)
Site:	Yardbirds 27/34 Fee #522H	**North Reference:**	Grid
Well:	Sec 27, T23S, R28E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FSL & 660' FWL, Sec 34		
Design:	Design #1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL: 200' FNL & 245' FV - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	466,724.40	618,717.90	32.2828513	-104.0829381
KOP: 10' FNL & 660' FW - plan hits target center - Point	0.00	0.00	7,630.4	200.7	413.0	466,925.10	619,130.90	32.2834003	-104.0816002
FTP: 100' FNL & 660' FV - plan hits target center - Point	0.00	0.00	7,943.2	107.7	412.8	466,832.10	619,130.72	32.2831447	-104.0816015
BHL: 100' FSL & 660' FV - plan hits target center - Point	0.00	0.00	8,163.0	-10,304.2	392.1	456,420.20	619,110.00	32.2545240	-104.0817475
LP: 584' FNL & 660' FWI - plan hits target center - Point	0.00	0.00	8,203.0	-374.2	411.9	466,350.20	619,129.76	32.2818200	-104.0816082

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.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Mewbourne Oil Co. **OGRID:** 14744 **Date:** 3/25/25

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
YARDBIRDS 27-34 FEE 522H		D 27 23S 28E	200' FNL x 245' FWL	1500	5000	1000
				Y1-400 Y2-300 Y3-200	Y1-1500 Y2-100 Y3-700	Y1-300 Y2-200 Y3-150

IV. Central Delivery Point Name: YARDBIRDS 27-34 FEE 522H [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
YARDBIRDS 27-34 FEE 522H		4/25/25	5/25/25	6/25/25	7/7/25	7/12/25

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

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. ☐ 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 ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

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

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

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:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(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.

Page 8

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:	3/25/25
Phone:	575-393-5905

OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

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 pressureventing 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 thediversion 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.